



IISD

INTERNATIONAL INSTITUTE FOR
SUSTAINABLE DEVELOPMENT
INSTITUT INTERNATIONAL DU
DÉVELOPPEMENT DURABLE

Annual Report 1998-1999

International Institute for Sustainable Development

A Global Perspective

Although its corporate headquarters is located in Winnipeg, the capital of Manitoba and the geographic centre of Canada, the International Institute for Sustainable Development is truly an international organization—its directors, staff, partners and projects are distributed around the globe.

Using the Internet for online conferences, discussions and shared interactive databases, IISD has forged knowledge networks with like-minded organizations in Africa, Asia, Europe and the Americas, strengthening international efforts to address the many challenges in the journey toward sustainable development.

IISD employs rigorous research as the foundation for policy recommendations, and by brokering knowledge gained through collaborative projects with its partners, the Institute disseminates scholarship to different regions of the world, creating a global perspective on sustainable development issues. The result is enriched research for all, capacity building in developing countries and a better dialogue and understanding between North and South.

To carry out its mission, IISD has six programs, each focusing on different dimensions of the sustainable development puzzle. Although each program has a particular audience and group of stakeholders, they are mutually reinforcing. They benefit from the cross-fertilization of ideas and collaboration on projects that unifies the knowledge of a diverse group of specialists. IISD's goal is to become a champion for innovation, a promoter of sustainable development.

Our vision: Better living for all—sustainably.

Our mission: To champion innovation, enabling societies to live sustainably.

Our role: IISD promotes the transition toward a sustainable future. We seek to demonstrate how human ingenuity can be applied to improve the well-being of the environment, economy and society.

Our tools are policy research, information exchange, analysis and advocacy.

Our products are action recommendations based on careful analysis, knowledge networks to build the capacity of civil society and other organizations in both South and North, and timely reporting of international negotiations critical to the sustainability of the planet.

Our audiences are government, business and civil society.

Our style is to increase our influence by working collaboratively with other institutions—building long-term strategic alliances, while retaining the institutional agility necessary to confront the challenges of sustainable development.

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IISD is a not-for-profit corporation located in Winnipeg, Manitoba, Canada and directed by an independent, international Board. It is registered as a charity in Canada, and has 501(c)(3) status in the USA.

Chair's Message

Board of Directors

Jim MacNeill (Chair), Canada
Jacqueline Aloisi de Lardere, France
Manuel Arango, Mexico
Edward Ayensu, Ghana
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Arthur Hanson,* Canada
Aban Marker Kabraji, Pakistan
Ashok Khosla, India
Allan Kupcis, Canada
Rosemarie Kuptana, Canada
Jack MacLeod, Canada
Elizabeth May, Canada
Ken McCready, Canada
Ingrid Munro,* Sweden
Jonathon Porritt,* United Kingdom
Hartley Richardson, Canada
David Runnalls
(Interim President), Canada

* *No longer Directors
at March 31, 1999*

This past year has marked a series of important transitions for IISD. In October, Dr. Art Hanson, the Institute's President for the past seven years, announced that he was stepping down to return to scientific research, his first love. I would like to express my gratitude and that of the Board to Art for his excellent leadership as our President. When he took up the post, IISD was still in its formative stages, preparing for its role in the 1992 Earth Summit. Now it is one of the pre-eminent institutions of its kind in the world. Art deserves much of the credit for that. I am delighted that he will remain with IISD as its Distinguished Fellow and Senior Scientist, where he will ensure that the Institute's work is underpinned by robust science.

David Runnalls, the Director of the Institute's Trade and Sustainable Development program, was appointed Interim President and was able to step into the role almost immediately. I am grateful to Maureen O'Neil, the President of the International Development Research Centre, David's other employer, for releasing him from his obligations to IDRC on such short notice.

The Institute will celebrate its 10th birthday in the year 2000 and our current programming cycle will come to an end, along with the second period of funding from the Government of Canada. The Board undertook a number of actions to prepare IISD for its second decade. The Institute has grown dramatically, with revenue likely to reach \$10 million in the next fiscal year. And, along with its Winnipeg headquarters, IISD now has offices in Calgary, New York, Ottawa and Geneva. Such growth must inevitably lead to changes in management structures. Outside consulting firms were engaged to conduct an organizational review and to develop a new approach to fundraising. The resulting recommendations are now being implemented.

The Board and staff of the Institute have worked together to develop a new strategic plan for IISD which will be presented at the Board meeting in June 1999. The first fruits of this planning process are our new vision and mission statements, approved by the Board in January 1999. Our vision: Better living for all—sustainably. Our mission: To champion innovation, enabling societies to live sustainably. I feel that this new vision and mission and the strategic directions that flow from them will serve the Institute well as it enters the next millennium.

The last of this year's transitions will take place in June when I step down as the Chair of the Board and Dian Cohen, the other founding member of the original Board, also leaves the Institute.

Establishing IISD was, of course, one of Canada's responses to *Our Common Future*, the 1987 report of the Brundtland Commission. As Secretary General of that Commission, I was pleased on my return to Canada to be one of three invited by the Governments of Canada and Manitoba to sign the founding articles of incorporation.

After more than nine years on the Board and Executive Committee, five of them as Chair, I leave with much regret but also with a sense of great pride in our accomplishments, a pride in which every member of the Board, management and staff, past and present, can share. It is always exciting to be present at the birth of an institution, and rewarding when it becomes a vigorous, growing body with a strong record of achievement.

When the Board first met in Vancouver on March 21, 1990, IISD was only a name. We gave it a vision, a mandate and its first few strategic directions. Our leading position today on issues of sustainable development and trade, Great Plains agriculture, measurements and indicators, knowledge networks and climate change, as well as the success of the *Earth Negotiations Bulletin* and the post-Rio streams of international negotiations, stem directly from those early choices.

And, quite frankly, it stems from something else: the series of birthing and budgetary crises and a couple of near-death experiences that marked the Institute's early life. Each of these crises inspired the Board, management and staff to new heights of leadership and determination, and from each the Institute emerged stronger and more vigorous than ever. I am extremely proud of that.

I am also proud of the excellence of the Board, management and staff of IISD. I leave many friends and colleagues but I leave confident that they will continue to guide and maintain the Institute as a leader in the urgently needed global transition to sustainable development.



Jim MacNeill
Chair

Friends of the Institute

Gro Harlem Brundtland
José Goldemberg
Sir Shridath Ramphal

Advisory Participants

Norm Brandson,
Deputy Minister,
Manitoba Environment

John Fraser,
Chairman, Pacific Fisheries
Resource Conservation Council

Len Good,
Deputy Minister, Environment
Canada

Huguette Labelle,
President, Canadian International
Development Agency

Donald Leitch,
Clerk of the Executive Council,
Province of Manitoba

Maureen O'Neil,
President, International
Development Research Centre

Mary Simon,
Ambassador for Circumpolar
Affairs

President's Message

I have spent much of my working life with institutions like IISD, dating as far back as the 1972 United Nations Conference on the Human Environment in Stockholm, the first major international meeting on the environment. Most of my career since then has been spent trying to persuade decision-makers that unprecedented policy shifts are needed if we are to survive the twin crises of environmental degradation and widespread global poverty. It was often a time when success was measured by the distribution of a few thousand copies of a book or policy paper.

I am therefore constantly reassured and encouraged by the success of IISD in reaching hundreds of thousands through the Internet. During the Buenos Aires climate change negotiations in November 1998, our Web site regularly received 30,000 to 50,000 requests a day for the *Earth Negotiations Bulletin*. The *ENB*, with its staff providing coverage for a record 32 conferences and meetings in 1998-99, has now become the paper of record for the continuing series of international discussions on sustainable development.

We are also beginning to reach the private sector through our Business and Sustainable Development Web site. After a number of years of development, the site was launched in 1998 and continues to grow in content and scope. It is already logging up to 4,000 visitors a month, many of whom are from large companies throughout the world.

We are now bringing these skills in electronic communications to bear on our research activities. Following the recommendations of Maurice Strong and his colleagues in *Connecting with the World*, IISD is building a series of knowledge networks with more than two dozen institutions around the globe. Each network focuses on policy research that leads to action, with IISD providing the electronic sinews which bind the networks together and enable Southern institutions to build and maintain their own Web sites to disseminate research.

Although knowledge networks provide an effective way to link research institutions around a common theme, IISD has long struggled to find an effective way to help poor communities articulate their visions of the future, which they in turn can make known to decision-makers. A technique known as appreciative inquiry may provide that key. Originally developed as a business management tool at Case Western Reserve University, our Community Adaptation and Sustainable Livelihoods program is using it to help poor villages seek out and build upon their strengths, so that they can be the agents of change in their own communities.

Over the years, IISD has developed programs and offices in Calgary, Ottawa and New York, along with its headquarters in Winnipeg. Recently, much of the intellectual and financial leadership in sustainable development has come from Europe. We have therefore established a small office in Geneva, headed by Mark Halle, who, for many years, was the Director of Global Policy for IUCN, the World Conservation Union. We have further strengthened our European presence with the appointment of Keith Bezanson, the Director of the Institute of Development Studies at the University of Sussex, as a Senior Fellow of IISD. Working closely with the Trade and Sustainable Development program, the Geneva office organized our highly effective participation in the recent WTO High-Level Symposium on Trade and Environment. Mark has also been working to bolster IISD's presence in the Francophone world. At the request of the office of Prime Minister Lionel Jospin, IISD established a task force to develop a new initiative on sustainable development in France, the result of which has been a report that has been submitted to the French Government.

Despite these achievements, IISD remains a small institution in an increasingly complex world. As consulting firms and even universities build partnerships to remain relevant, so must IISD. We are now beginning to talk with similar institutes in Europe, the United States and the developing world about how we might combine efforts to keep the message of sustainable development at the forefront of international discussions.



David Runnalls
Interim President

A New Strategic Plan

The staff and Board have carried out extensive work to re-examine the Institute's vision and mission and to begin developing a new strategic plan. The result is a sharper focus and clear priorities for action.

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Our Strategic Priorities

Over the next five years, IISD intends to:

1. Promote government expenditure and taxation policies that encourage the transition to sustainable development;
2. Design and advocate trade and investment policies that advance sustainable development;
3. Develop and promote creative responses to climate change and its impacts; and
4. Encourage more sustainable forms of agriculture and other natural resource use through the development of incentives and increased community participation in decision-making.

These strategic intentions will be supported by our leading-edge work on the development and use of sustainability measurements and indicators.

We will mobilize our expertise in electronic communications to support the Institute's programs through the following activities:

- we will carry out research and development on the principles, protocols and means of operating effective knowledge networks;
- we will broaden the scope of IISD's Reporting Services by creating products consistent with the Institute's strategic objectives; and
- we will communicate the messages of the Institute through cutting-edge information and communication technologies.

What is Sustainable Development?

Over the past 200 years, the world has experienced tremendous advances in technology. While this has led to unparalleled affluence for some, it has also led to increased inequity between peoples of the world, unprecedented population growth, and threats to the stability of the global environment.

The challenge at the core of IISD's mission is to improve people's lives while making development sustainable. The essence of this challenge is embodied in our vision statement: Better living for all—sustainably. As the World Commission on Environment and Development (WCED) explained in 1987, "Sustainable development . . . meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."

A simple way to understand the concept of sustainability is to think of your bank account. If you keep withdrawing money each week in an amount that exceeds any deposits or interest, eventually you'll have a zero balance. Your bank card will no longer work, and you may get an unpleasant call from your bank manager or creditors. And depleting your account now means that you will not have any money to leave to your children and grandchildren.

On a global scale, this is precisely what we are doing with many of the world's resources. And we are receiving some nasty wake-up calls.

A poignant example is provided by the Canadian East Coast fishery, once one of the richest fishing grounds in the world. We caught fish more rapidly than they could reproduce, leading to a collapse in northern cod stocks. But what happened to the cod fishery is not just an environmental disaster. It has eroded the economic foundation and threatened the way of life of whole communities in Atlantic Canada.

Since the WCED (Brundtland Commission) published its report 12 years ago, we have moved forward in understanding these links, harnessing knowledge, and using new technologies to meet the sustainable development challenge. Progress is seen in many forms: international agreements, new government policies, innovative business practices, responsible consumer choices, and creative community programs that take into account the intricate links between the environment, the economy and human well-being. IISD is working to broaden and accelerate these trends.

A Pivotal Year for Climate Change

1998 was the year the climate change debate shifted from, “Is something really happening?” to “What must we do about it?”

Over the past year the climate change issue underwent a pivotal transformation: what had been an environmental concern championed by a small group of scientists and environmental organizations, has now been widely legitimized in mainstream political and corporate circles. The focus has now shifted from debating the science to taking action. Consequently, a major priority for the Institute in 1998–99 was to foster greater understanding of the complex international negotiations about climate change and its impacts, and to provide decision-makers with the kind of information they need to make informed policy choices.

After more than 20 years of research, the overwhelming majority of climatologists have concluded that the current warming trend is caused by the accumulation of greenhouse gases in our atmosphere—mainly carbon dioxide from burning wood and fossil fuels—that trap the sun’s heat. Since the Industrial Revolution, the concentration of carbon dioxide in the Earth’s atmosphere has increased by 30 percent. A number of other natural and man-made gases—mainly methane, nitrous oxide and chlorofluorocarbons—are also substantial and long-lasting contributors.

Over the past century, average global air temperature at the Earth’s surface has risen by half a degree Celsius. While this may not seem like much, mini ice ages in the past have been caused by similar shifts in average temperature. Although fossilized tree stumps in the High Arctic make it clear that the Earth has always experienced climate variation, what concerns scientists about the current warming trend is its rapidity, which points to human activity as the chief cause. And we have only seen the beginning. The Intergovernmental Panel on Climate Change projects that the average global temperature could rise by as much as another 3 degrees Celsius over the next century, an extremely abrupt change that would give people and the natural world little time to adapt.

A series of weather-related disasters dominated headlines in 1998, reinforcing the public view that, along with the undeniable effects of El Niño, climate change was responsible for an increase in destructive weather events. The worst ice storm in memory blacked out Eastern Ontario, Quebec and parts of New England. Hurricanes Georges and Mitch pounded the Caribbean and Central America, killing thousands. Intense rainfall swelled China’s Yangtze River, killing 3,000 people and leaving 14 million homeless. Drought caused widespread famines in the Sudan, Ethiopia and North Korea. It also contributed to vast forest fires in Siberia, Brazil and Indonesia, which released huge amounts of carbon dioxide into the atmosphere, adding to the warming trend.

While the loss of life, suffering and environmental damage caused by these natural disasters was impossible to quantify, the insurance industry calculated that weather-related events cost \$90 billion US in property damage in 1998, an increase of almost \$30 billion US over 1996, the previous worst year on record.

But 1998 will also be remembered as a year in which governments and major multinational corporations made substantial commitments to reduce emissions of greenhouse gases and fund innovative green technologies. British Petroleum, Shell and Suncor all announced long-term investments in solar and wind energy. Toyota unveiled a prototype of the Prius, its hybrid electric car, and Ford and DaimlerChrysler teamed up with Vancouver’s Ballard Power to develop pollution-free, hydrogen-powered cars.

The sea change began in December 1997, at Kyoto, Japan, where 160 nations hammered out the first binding international agreement to reduce greenhouse gas emissions. Thirty-eight developed nations and countries in transition in Eastern Europe agreed to reduce emissions by an average of 5.2 percent compared with 1990 levels, between the years 2008 and 2012. This was finally an acknowledgement that even if all the research is not conclusive, the community of nations must take action now.

IISD has focused its strategic response to the challenges posed by climate change in four main areas:

- research on effective adaptation measures to environmental changes on the North American Great Plains;
- expert advice to the National Climate Change Process Issues Tables, part of Canada’s commitment under the Kyoto Protocol to reduce greenhouse gas emissions;

“Your *ENB* is very useful in providing up-to-date information on negotiations and developments regarding the environment and biodiversity. I teach graduate courses in development theories and political economy of natural resource management, so I find your updates very useful for my classes. Often, I make prints of your bulletin for my students. Thank you very much and keep up the excellent work.”

— *Dr. Emma Porio, Professor and Chair, Department of Sociology and Anthropology, Ateneo de Manila University, Manila, Philippines*

- strengthened international efforts to understand and address climate change by creating a knowledge network to facilitate research and capacity building in developing countries, and to promote dialogue and understanding between nations of the North and South; and
- objective and timely information on climate change negotiations through the *Earth Negotiations Bulletin*, part of IISD's Reporting Services.

IISD played a vital communications role at Kyoto, and at the follow-up negotiations at Buenos Aires in November 1998, posting daily reports, pictures and audio clips on *Linkages*, the Institute's Web site (<http://www.iisd.ca/linkages>) for the *Earth Negotiations Bulletin* (ENB). A team of ENB reporters attended every negotiating session at Kyoto and Buenos Aires, producing print reports overnight for delegates, and publishing daily bulletins and updates to the world on the Web. During the Kyoto negotiations, the ENB Web site received as many as 45,000 server requests a day, with reports available in English, French and Japanese, and during the Buenos Aires negotiations as many as 55,000 requests, with information available in English and French.

"The *Bulletin* has changed the way we negotiate multilateral agreements," in the view of Hans Peter Schipulle, a high-ranking member of Germany's delegation at Buenos Aires. ENB has become the acknowledged record of international sustainable development negotiations, providing a freely available, objective source of information. This helps level the playing field for smaller countries that often do not have enough delegates to attend all conference sessions, which are held concurrently. It also allows delegates to concentrate on the issues, rather than spending much of their effort reporting back to their governments. ENB is distributed electronically and in print to more than 178 countries. Subscribers include officials at the highest level of ministries of foreign affairs, environment, international cooperation, and the United Nations and other international organizations. The success of the ENB in delivering information effectively and on time was keenly illustrated at Buenos Aires: because of time zone differences, delegates often found their home offices had read the latest ENB report while they were sleeping, and were phoning early in the morning with follow-up questions.

Through its Web sites, IISD has consolidated its position as a leading source of reliable information on climate change issues and sustainable development. Some examples of IISD's electronic resources include:

"I represented the Government of the Federated States of Micronesia at conferences at which your ENB provided invaluable support. I just wanted to let you know how much governmental delegates rely upon and appreciate your excellent work. Recently, I came across your Web site and thoroughly enjoyed it. Keep up the good work."

— Nina Ejima

- The *ENB Archive*, which contains the reports on all major climate change meetings since 1995 (see <http://www.iisd.ca/linkages/voltoc.html>).
- *Climate-L*, a moderated e-mail list intended to facilitate information exchange on the UN Framework Convention on Climate Change (UNFCCC) process. It provides news items; information on past and upcoming meetings related to the UNFCCC; and copies of position papers and pointers to other online resources such as Internet sites and longer documents. The *Climate-L* subscription list includes most of the professionals in the field (see http://sdgateway.net/noframe/en_list93.htm).
- IISD, in partnership with the International Development Research Centre and the North-South Institute, has launched a knowledge network on climate change (see <http://iisd.ca/climate/southnorthkn.htm>). This network of a dozen institutes in both North and South is designed to facilitate research and enhance the capacity of countries to shape effective, equitable and sustainable climate change action plans. It focuses on the Kyoto flexibility mechanisms, adaptation, green technology transfer, emissions target setting and involves the private sector.

One of IISD's principal outreach priorities in 1998–99 was to produce a series of publications explaining the implications and opportunities of the Kyoto Protocol—to translate its dense, technical and diplomatic terms into understandable language. In June 1998, the Institute published *A Guide to Kyoto: Climate Change and What it Means to Canadians*, which in nontechnical English and French outlined the main elements of the treaty, and options for reducing greenhouse gas emissions in the energy, transportation and industrial sectors. The *Guide*, whose content was thoroughly refereed by climate change experts, became an authoritative source on the Kyoto Protocol. Some 3,500 copies were distributed or sold to decisions-makers throughout Canada.

An issue of IISD's sustainable development digest, *Developing Ideas*, focused on funding solutions for climate change and on issues of equity between nations of the South and the North. As with most of IISD's publications, *Developing Ideas* was distributed both as a print publication and on the Web to reach a wide audience.

The Institute's headquarters is in Winnipeg, Canada, on the eastern edge of North America's Great Plains. As part of its commitment to act locally, IISD held workshops and produced publications of interest to policy makers and the agricultural community on the Prairies.

"IISD's Great Plains program is one of the few sources of information I find helpful in understanding the whole climate change issue... where we're at, where we need to go, what policies will work and which won't," said Gordon McPhee, who farms 2,000 acres near Dauphin, Manitoba. "IISD's publication, *Greenhouse Gas Emissions from Agriculture and the Canadian Commitment at Kyoto*, makes sense of what the agreement means for farmers, and where we need to go from here."

Through its research activities, IISD has provided information on how farmers on the Great Plains must adapt to the changes likely to come with climate change: less rainfall in spring and summer, and the introduction of new diseases and insect pests as a consequence of a warmer climate.

IISD's Great Plains program is also working with partners such as Ducks Unlimited, Wetlands International, Prairie Farm Rehabilitation Administration and other organizations to examine the role of wetlands as sinks to help absorb atmospheric carbon dioxide, thus reducing net emissions of this greenhouse gas. Wetlands also act as sponges and filters for groundwater, and their role will be ever more vital if annual precipitation on the Prairies decreases with climate warming.

IISD staff made substantial contributions to the Canadian government's planning process to implement the commitments made at Kyoto. David Runnalls, IISD's Interim President, co-chairs the working group responsible for providing advice to the government on two of the Protocol's features, Joint Implementation and the Clean Development Mechanism, that are designed to help developed countries reach their emission reductions targets while encouraging investment in clean energy technologies in developing countries. Staff from IISD's Great Plains program are participants in Canada's National Climate Change Process. In total, Canada has set up 16 issue and sector tables to provide expert advice on ways to reduce greenhouse gas emissions. Dr. Ed Tyrchniewicz, one of IISD's Senior Fellows, is a member of the Agriculture and Agri-food Issues Table, and Great Plains Program Director Allen Tyrchniewicz is a member of the Transportation Issues Table's subgroup on freight.

The Institute's Solutions for Business program was commissioned by Environment Canada to produce a research paper entitled "Incentives for Early Action," which made a series of practical recommendations for how the federal government could encourage the private sector to begin reducing emissions before 2008, the first year of the Kyoto Protocol's five-year target period for reducing greenhouse gas emissions. What is needed, the report concluded, are clear ground rules so that companies can register emissions reductions, and know with confidence that they will get credit for their investment. The sooner a system of certifying and "banking" of credits is established, the report noted, the more likely Canada will initiate activities to meet its Kyoto commitment. The longer we wait, the farther the goal post will be, because Canada's annual greenhouse gas emissions are increasing by 1 to 2 percent a year. The Solutions for Business program also submitted a report to the Department of Foreign Affairs and International Trade, urging the Canadian government to take into account the lessons learned and best practices it had found in a survey of the experience of eight countries in planning offices to administer Joint Implementation and Clean Development Mechanism projects with developing countries.

IISD is also working with southern partners to help develop options for the Clean Development Mechanism. One such project is with the Tata Energy Research Institute in India. Funded by the Canadian International Development Agency, the project consists of collaborative research and workshops in India and Canada. The international policy aspect is being carried out in partnership with the Pembina Institute for Appropriate Development in Canada, and member institutions of the Asian Energy Institute.

Through its participation in high-level conferences and working groups, and its influential publishing program, IISD has become a major player in policy research and public outreach on climate change. And during its strategic planning activities in 1998-99, the Institute identified climate change as one of four priority areas it will focus on over the next five years. IISD's goal is to stimulate innovative solutions to what is clearly one of the gravest threats to the sustainability of our planet.

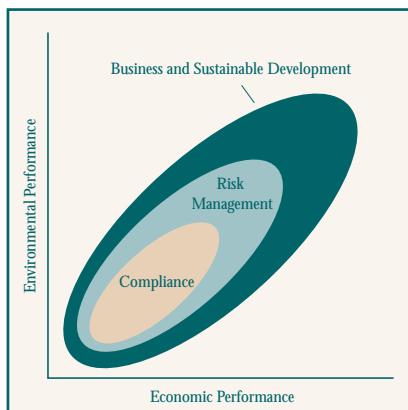
"Yours is a wonderful Web site, which has been of significant value to our efforts at the U.S. Agency for International Development's Global Environment Center."

— Paul Violette, Senior Climate Change Policy Advisor

Working with the Business Community

Objectives

The journey toward sustainable development creates myriad business opportunities, ranging from the development of green technologies, such as clean-burning fuels, to consulting services. IISD's Solutions for Business program advises the private sector how to identify new markets and to incorporate sustainable development into business plans. The program also helps companies respond to the emerging environmental concerns of their clients and consumers generally. Solutions for Business works with governments to pursue policies and initiatives that will remove barriers and provide incentives for companies to use energy more efficiently and reduce waste products.



Growing environmental concerns, public pressure and regulatory measures are changing the way business operates. The Business and Sustainable Development Web site (<http://iisd.ca/business>), developed with the Knowledge Communications program, explains the benefits of sustainability to companies, as they make the journey from environmental compliance, through to environmental risk management, to sustainable development strategies.

This Web site, visited by dozens of companies in the resource, service and manufacturing sectors, describes 15

methods for implementing sustainable development, ranging from "lifecycle assessment of materials" to "zero emission processes," with case studies of each technique. As well as offering practical guidelines for complying with sustainability reporting, the site offers a wealth of advice on new business opportunities, and sources of start-up financing. The site also features a large bank of case studies of companies that have won awards for implementing sustainable development practices.

Based on market research and case studies, the program has developed key messages for businesses:

- Consumers are demanding environmentally friendly goods and services produced by socially responsible companies.
- When bankers and venture capitalists evaluate companies as potential investments, increasingly they are considering both environmental risks and environmental market opportunities.
- Consequently, more and more companies are discovering the benefits of going beyond mere regulatory compliance, to adopting sustainability as their business goal.

The program demonstrates how sustainable business performance has become a global competitive advantage, a catalyst for innovation, and an opportunity to capture new markets.

Maintaining a competitive advantage: Companies that visit the Business and Sustainable Development Web site

Resource sector

BHP Mining
British Petroleum
Louisiana Pacific Corporation
Shell (The Netherlands)

Service sector

A. T. Kaerney, Inc.
Arthur D. Little
Banco Nacional de Mexico
Beak Consultants Ltd.
CH2M HILL, Inc.
Dresdener Bank (Germany)
Ernst & Young
KPMG
SustainAbility, UK
Troutman Sanders LLP
United Parcel Service

Manufacturing sector

Asea Brown Boveri
Audi (Denmark)
BASF-AG (Denmark)
Bausch & Lomb
Boeing Company
Dow Chemical Company
DuPont
Eastman Chemical Company
Ford Motor Company
General Electric
Hoechst (Germany)
IBM Corporation
Johnson & Johnson
Monsanto
Nike, Inc.
Nokia Head Office
Novo Nordisk A/S
Philips Electronics
Samsung (Korea)
Sony (Germany)
Volkswagen (Germany)
Volvo

Selected Achievements

- A meeting in Calgary in September 1998, hosted by Suncor's CEO, Rick George, was the occasion for introducing an exciting IISD initiative. The Institute is launching in Alberta a new approach to the management of by-products and wastes. The meeting attracted 85 executives from a broad spectrum of industries, as well as government representatives. The goal is to identify and assess new opportunities so businesses can sell their waste products to other companies to use them in their manufacturing processes.

The project, called by-product synergy, is an initiative of Applied Sustainability, a company affiliated with the Business Council for Sustainable Development—Gulf of Mexico. IISD is providing local support and services for the project. Modelled after a successful program in Texas, Florida and Mexico, the goal of the project is to achieve a series of new industrial linkages that will:

- provide new sources of potential revenue;
- reduce the amount of hazardous waste and materials being shipped to landfill sites; and
- save energy and reduce greenhouse gas emissions.

Many companies already have recycling programs. For example, slag from steel making and fly ash from coal-generating plants are commonly sold to cement manufacturers for use in their products. But high-volume recycling and new business links can benefit from the systematic approach that is being introduced in Alberta. The experience in Texas and in Mexico was that communication and creative thinking are key to making by-product synergy work. The biggest hurdle is forging the link—getting firms in entirely different sectors to talk to one other, because that is often where the most innovative opportunities can be identified.

Solutions for Business Program Director, Jim Leslie, says the biggest potential will likely be in Alberta's energy and related manufacturing sectors. The challenge will be to recycle waste heat and find new uses for the mountains of materials—sand, sulphur and other by-products of petroleum and tar sands exploration and processing. Forestry and agriculture operations are other potential sources of waste products for recycling.

So far 11 companies and research organizations have signed on for the project. "This has been my dream for more than a year," Leslie says. "This is one project that could really make a difference." He hopes the Alberta initiative is just the beginning, and believes the by-product synergy concept can be introduced to other regions of Canada and the world.

"The younger generation is a key element in achieving a sustainable world. As an organization committed to sustainable development, we therefore hold a responsibility to educate youth on SD challenges. Also, the IISD program offers a great opportunity to strengthen skills needed inside our organization."

— *Christine Elleboode, Communications Manager, World Business Council for Sustainable Development, Geneva*

The Business and Sustainable Development Web site was nominated for a 1998 Manitoba Sustainable Development Award of Excellence.

- In 1998–99, the Solutions for Business program has sought to help prepare both the business community and governments for the consequences of the Kyoto Protocol, which will require greenhouse gas emissions reductions in Canada in the period 2008–2012 of about 21 percent below the business-as-usual scenario. For business, it is a matter of seeking ways to use the opportunities in the treaty's provisions, such as joint projects with developing country partners. IISD is collaborating with the World Business Council for Sustainable Development to build capacity in developing countries to undertake green energy projects under the terms of the Protocol's Clean Development Mechanism.
- The program prepared a policy paper for Environment Canada, which sets out compelling reasons for establishing policies that provide credit for early action as soon as possible, so that the private sector can advance its plans and actions to reduce and capture greenhouse gas emissions. The Solutions for Business program also submitted a report to the Department of Foreign Affairs and International Trade, urging the Canadian government to take into account the lessons learned and best practices it had found in a survey of the experience of eight countries in planning offices to administer Joint Implementation and Clean Development Mechanism projects with developing countries.
- The Solutions for Business program is working with the International Development Research Centre in Ottawa on a pilot project to test the potential of "performance contracting" as a means of speeding up the adoption of high-efficiency technology in Canada and developing countries. The twin goals are to reduce greenhouse gas emissions and create economic opportunities.

Performance contracting involves hiring a company to finance, build and operate a green energy or water project. The company, referred to as an ESCO (energy service company), agrees under the terms of the contract to be paid out of the savings resulting from the reduced energy costs of operating the new plant. The ESCO therefore has a great incentive to use the most efficient and reliable technology available. The other advantage for the host institution is that it does not have to provide the capital cost of the project.

Preliminary studies in Canada and five developing countries have now been completed, and the project will move into the implementation phase in the next fiscal year.

"Your Web site contributes to the necessary spread of valuable information. I have passed on your address to many of my clients!"

— *Linda Woudstra, Director, Yellow and Blue Consultancy BV, The Netherlands*

"I have found your Web site very interesting and well done."

— *Stella Papasavva, Senior Research Scientist, General Motors, Michigan, USA*

"I visited your Web site resources and found them very useful. We will certainly make links to them in our own online teaching materials."

— *Dr. Paul Shrivastava, President, Environmental Intelligence Inc., Bucknell University, Pennsylvania, USA*

Empowering Communities for Sustainable Livelihoods

Objectives

Since 1991, IISD's Community Adaptation and Sustainable Livelihoods program has been trying to understand the complex livelihoods of rural people in less-developed countries. How can people in the developing world escape from poverty and build a sustainable future for their children? The program began by creating a framework to define what is needed to sustain rural livelihoods: an integration of community knowledge, appropriate technologies, access to credit, and enabling policies. This work led to a more holistic understanding of community development, and also revealed important factors that constrain communities from participating effectively in policy and investment decisions.

The Community Adaptation and Sustainable Livelihoods program is now developing tools to help local people work within the sustainable livelihoods framework, so that they can define their own future. The tools help communities create a vision of the future based on their strengths, which they then communicate to decision-makers at higher levels.

Development agencies usually design projects to correct problems and fulfill needs in a community. An unintended result is that local people often focus on the deficiencies in their village. Further, the proposed solutions usually require foreign technology and know-how, so aid workers—rather than local people themselves—are often viewed as the principal agents of change. This process can disempower a community, making it difficult to sustain the results of a project after funding ends.

The Community Adaptation and Sustainable Livelihoods program is currently testing a method called appreciative inquiry to turn the current approach around. Appreciative inquiry gets a community to focus on achievements rather than problems, and seeks to go beyond participation to foster inspiration at the grassroots level. First developed in the early 1990s at Case Western Reserve University to help corporations sharpen their competitive advantage, appreciative inquiry recently has been applied in community development projects in Mauritania and Ghana, with encouraging results.

Once local people have created a vision of what is possible, they must communicate it to officials in government and business if they are to participate in decision-making. The program is helping them achieve this goal through community-based media. In this approach, local people, development professionals and journalists design media productions together in a participatory workshop. Local people are then assured that the programs accurately reflect their vision and viewpoint. When the productions are played to focus groups of government and corporate officials, they can stimulate more equal and effective communication between a community and decision-makers.

Selected Achievements

- The Community Adaptation and Sustainable Livelihoods program has recently obtained funding for projects in India and the Canadian Arctic that will test these methods of local empowerment. It is also developing partnerships with Aboriginal peoples in Manitoba, where the program's approach is particularly well suited to the rich oral tradition of First Nations.
- The United Kingdom's Department for International Development is funding a two-year project that will use appreciative inquiry to help rural people in Southern India plan and implement community projects. Subsistence farmers in these barren drylands are causing social and environmental stress as they fight to maintain their livelihoods. Their demand for fuel is causing deforestation; their crops are competing with livestock for scarce agricultural land; their need for water is causing conflict and tension. The Community Adaptation and Sustainable Livelihoods program will work with MYRADA, a local nongovernmental organization, to help local people create a development vision based on community strengths. The program will design small projects in resource management and microcredit to help make that vision possible. The project will share lessons learned both locally and internationally by producing a training video on appreciative inquiry and by creating an Internet site for broader dissemination. IISD's Measurement and Indicators program will help community groups evaluate progress toward their shared vision.

- The program has also published the first book that describes the application of appreciative inquiry to bring about positive change in communities. Called *Locating the Energy for Change: An Introduction to Appreciative Inquiry*, Dr. Charles Elliott of Cambridge University describes ways to conduct an appreciative inquiry and includes case studies from the corporate world and developing countries.
- The program is testing the use of community-based media on Banks Island in the High Arctic, one of the areas of Canada most affected by climate change. Inuit elders and hunters in the community of Sachs Harbour have observed thinner layers of sea ice forming later each year. Caribou are crashing through the ice and drowning when they migrate in the autumn. The hunters have also observed new species of fish, mammals and insects for the first time in their oral history, and they are concerned that their traditional lifestyle and close relationship with the land will be affected by these changes. Over the next year, program staff will make a participatory video with the Inuit, so that decision-makers in Canada can see the effects of climate change through Inuit eyes and understand how they are trying to adapt. Funders for this project include the Climate Change Action Fund (Government of Canada); the Walter and Duncan Gordon Charitable Foundation; Indian and Northern Affairs Canada; and the Government of the Northwest Territories.
- Over the past year, the program has continued to refine the activities of its drought mitigation project in Zimbabwe, enabling it to test the usefulness of its sustainable livelihoods framework in the field. Now in its third year, the project supports the adaptive strategies of local people to drought and economic stress with appropriate technologies and policy analysis. To better understand community adaptive strategies, the Community Adaptation and Sustainable Livelihoods program has relocated a project manager from Winnipeg to Harare. It has also provided cameras to local farmers so they can document desertification and show local solutions, such as mulching of community gardens, composting techniques and planting of indigenous trees. Funded by the Canadian International Development Agency, the project is being jointly managed by IISD and ENDA-Zimbabwe, a local nongovernmental agency.

Zimbabwean women from the village of Mudzi participate in the Community Drought Mitigation Project, funded by the Canadian International Development Agency.



Harnessing Trade to Create Prosperity and Equity

Context and Objectives

The journey toward sustainable development will be costly, and as traditional sources of aid slow to a trickle, developing countries will face increasing difficulty rising to the challenges ahead without the wealth that can be generated by international trade. At almost \$6 trillion US a year, international trade is a powerful economic force, but its potential to foster sustainable development is just that—potential. What's more, trade rules and trade itself can lead to environmental degradation and inequities that can leave the poor in developing countries even worse off.

IISD's goal is to help ensure that trade actively promotes sustainable development, creating greater prosperity in the world's poorest countries. Since it was launched seven years ago, the Trade and Sustainable Development program's unique contribution has been to help widen the scope of the debate, from a narrow focus on trade and environment to a broader discussion that takes into account development issues. IISD has taken this approach because its policy research has clearly shown that concentrating solely on trade and environment too often leads to solutions that harm developing countries by reducing their export opportunities.

Our thinking on this issue is encapsulated in the "Winnipeg Principles," also known as *Trade and Sustainable Development Principles*, a document drafted in 1994 by a nine-member working group drawn from the trade, environment and development communities (see <http://iisd.ca/trade/princpub.htm>). As the document succinctly puts it: "Incorporating a sustainable development perspective permits a joint consideration of environment, economy and human well-being in trade matters—a qualitative step beyond current trade-environment debates."

The Trade and Sustainable Development program works to ensure that the Winnipeg Principles are reflected in all trade agreements. As an important first step, it is focusing on reforming the rules of the World Trade Organization (WTO), to better address both environmental and development concerns. In the past two decades, the WTO's role has evolved from a treaty devoted to reducing tariffs (the General Agreement on Tariffs and Trade or GATT) to an organization issuing rulings on matters that were once strictly domestic affairs: investment rules, environment, health and safety regulations, intellectual property law and subsidies. The WTO's scope, and its no-nonsense approach to compliance with its rules, make it arguably the most influential international organization in the world.

But the increasingly global economy governed by the WTO is intimately connected to the global environment. Time and again, the WTO has been asked to rule on complaints that domestic environmental rules are interfering with trade. A good example occurred when Brazil and Venezuela successfully argued that a section of the US Clean Air Act was unfairly blocking their gasoline exports. But the connections are not always negative: properly framed, trade rules have the potential to protect the environment and foster development. Stronger rules against agricultural subsidies, for example, could shift production from the subsidized North to the poorer regions in the South, where fewer pesticides and fertilizers could be used to grow crops. Our focus on the WTO and other trade agreements seeks to build on such mutually beneficial potentials, and to reform the rules to reduce conflicts.

IISD is also working to build capacity in developing countries on the issues of trade and sustainable development. Many Southern governments resist linking trade and sustainable development issues in the WTO, fearing their exports will be blocked by environmental demands. Although they have good reason to be cautious, ultimately their interests will be best served if they fully understand the links between trade and sustainable development, not only to reduce the risks but also to exploit the opportunities. Today, developing exports that are certified as environmentally friendly can be a matter of survival—even a key to prosperity—for firms supplying competitive environmentally conscious markets. Our work in capacity building seeks to encourage strong and informed Southern voices on the issues of trade and sustainable development.

Selected Achievements

- At a High-Level Symposium on Trade and the Environment convened in Geneva on March 15-16, 1999, IISD presented a blueprint for how the WTO can fulfill its mandate to support sustainable development. Over 600 delegates, including Sir Leon Brittan, the European Union Trade Commissioner, attended the symposium. (Our proposal, “Six Easy Pieces: Five Things the WTO Should Do—and One it Should Not,” can be accessed online at <http://iisd.ca/trade/wto/sepmain.htm>.) Both Interim President David Runnalls and Senior Fellow Konrad von Moltke addressed the symposium. As part of its continuing efforts to improve transparency at the WTO, IISD’s Reporting Services provided exclusive coverage for the environment meeting and a subsequent follow-up meeting on trade and development issues. (Coverage of the high-level meeting can be accessed at <http://www.iisd.ca/linkages/sd/wtohls.html>.)
- IISD and IUCN (The World Conservation Union) launched a trade knowledge network to foster research and expertise in trade and sustainable development in developing countries. The goal is to give Southern countries a stronger voice in international negotiations such as the possible WTO Millennium Round. The program initially involves partners in six countries or regions: Argentina, Central America, China, Pakistan, South Africa and Vietnam. The knowledge network is sponsoring workshops and case study research on sustainable development links in each country. It also commissioned papers on current trade issues such as the trade implications of the Kyoto Protocol; the greening of government procurement; and foreign investment and sustainable development. A key aspect of the initiative is to provide partners with information technology assistance to allow them to work together more effectively.
- IISD continued its efforts to influence Chinese trade policy to support sustainable development. The Institute hosts the Secretariat of the Trade and Environment Working Group of the China Council for International Cooperation on Environment and Development, a high-level advisory committee to the Chinese government established in 1995. David Runnalls is co-chair of the working group, which in 1998–99 undertook research on life-cycle analysis of plastics in international trade, endangered species and traditional Chinese medicine, and the transfer of clean coal-burning technology to China.
- The Institute’s Trade Rules and Sustainability in the Americas project completed a thorough analysis of how to apply the Winnipeg Principles for trade and sustainable development to the hemispheric integration process, and the emerging Free Trade Area of the Americas (FTAA). The analysis used the principles as a yardstick to measure progress in the hemisphere, and identified examples of best practices that can help to advance integrating sustainable development while negotiating freer trade in the Americas. Its recommendations were submitted to the FTAA’s Committee of Government Representatives for the Participation of Civil Society.



David Runnalls displays IISD’s publication “Six Easy Pieces: Five Things the WTO Should Do — and One it Should Not” at the WTO High-Level Symposium in Geneva.

Breaking Down Borders: Knowledge Communications

Objectives

Since its inception in 1990, the Institute has focused much of its effort on communications, to engage people of all backgrounds and disciplines to produce and share knowledge about sustainable development. IISD believes that harnessing the Internet will help overcome geographic and cultural boundaries.

Through IISD's Reporting Services, part of the Knowledge Communications program, the Institute has covered progress toward sustainability at the international level. As well as its written reports on what was said and agreed to at meetings and negotiations, IISD's Reporting Services interviews delegates for their perspective. Those interviews are then recorded and featured on our Web site, together with reports of meetings and negotiations. IISD also publishes a quarterly journal, entitled */linkages/journal/*, which features background and analysis of broader issues.

The vast majority of sites on the World Wide Web were created in developed countries. One of IISD's goals is to get more information and viewpoints from developing countries on the Internet, to use the empowering potential of electronic communications to help bridge the gap between South and North.

IISD's "Spinning the Web" network now includes leading nongovernmental organizations in Argentina, Canada, Costa Rica, Hungary, India, Senegal and Sweden. In partnership with these organizations, the program is building knowledge networks to combine information bases, and develop new ideas and practices for sustainable development.

Through the Knowledge Communications program's internship program, funded by the Canadian government, the Institute provides young Canadians with an opportunity to work in international organizations, researching sustainable development policy and practice in trade, climate change and business.

Often interns have the opportunity to get some real hands-on experience. For example, one young Canadian was posted to the Stockholm Environment Institute, and accompanied Sweden's delegation to the climate change negotiations at Buenos Aires in November 1998. Another Canadian student was a member of an environmental reporting team for the United Nations Environment Programme in Nairobi, Kenya. Other interns were posted as far afield as Senegal, India, Pakistan, Argentina and the Philippines.

"Keep up the good work. Your Web site is excellent."

— *Julie Cardinal, Consultant, Village Power Program, National Renewable Energy Laboratory, U.S. Department of Energy*

"It's fantastic what you've done, and... I will certainly be using the SD Gateway site! Very best wishes, and take care."

— *John Manoochehri, Wadham College, Oxford University, England*

Selected Achievements

- IISD's Reporting Services—*Earth Negotiations Bulletin* and *Sustainable Developments*—covered a record 32 international conferences and meetings in 1998–99, solidifying its role as a must-have information source. IISD's Reporting Services is now playing a central role in helping organizations such as the World Trade Organization and the Global Environment Facility open their meetings to the world community. As well, two new electronic newsletters—*Climate-L* and *linkages/buzz!*—were added during the year, as the service continues to add specialized products in response to requests from its subscribers. (*Climate-L* can be accessed at http://sdgateway.net/noframe/en_list93.htm, and *linkages/buzz!* at <http://www.iisd.ca/linkages/>.)

Web traffic soars: the stats

IISDnet (<http://iisd.ca>)

Requests (pages viewed): more than 1,350,000 (more than 39% annual increase)

Visits: more than 500,000 (more than 26% annual increase)

Users: more than 300,000 (more than 15% annual increase)

Countries of origin: 153

SD Gateway (<http://sdgateway.net>)

Requests (pages viewed): more than 250,000 (more than 1,200% annual increase)

Visits: more than 70,000 (more than 1,300% annual increase)

Users: more than 45,000 (more than 1,000% annual increase)

Countries of origin: 126

Definitions

Request: any collection of hits that successfully retrieves content (i.e. a single Web page viewed, the text and graphics are not counted separately).

Visit: a series of consecutive requests from a user to a site (e.g., in one visit a user may view several different pages on a site).

User: a unique Internet Protocol address. It may represent an individual, but more often one Internet Protocol address is shared by many people, so there is a higher number of individuals visiting the site than the number of users counted.

Countries: the total number of countries from which users visited the site.

Reporting period: 1998-99 fiscal year

“The effort that you are making in listing positions available within the sustainable development field is great. I very much appreciate your work in satisfying this need. For someone like myself who is looking for work and business contacts, it is a valuable resource.”

— *George Corbin,*
Eco-Power Systems
Development

- New features were added to the SD Gateway (<http://sdgateway.net>), one of the Institute's three Web sites, to integrate online information developed by our Spinning the Web partners, a network of eight sustainable development institutes. The enhancement allows increased global access to the content of IISD's network partners, with many of the online pages available in English, French and Spanish. The SD Gateway has been tailored for quick electronic access by users in developing countries, where older computers with slow modems and unreliable Internet connections often cannot download online sustainable development content, unless it is provided by a site like ours. Users in developing countries also depend on the SD Gateway for sustainable development information because it is faster than using Internet search engines.
- An SD Job Bank was launched, and proved to be an effective tool to help professionals from around the world identify new career opportunities in environmental action, community development and international cooperation.

"Greetings from Zimbabwe. I was quite impressed with your Web site."

— *R. Palepu*

"Dear SD Gateway: I have found your Web site to be a useful resource for information on sustainable business practices and ISO 14001."

— *Patrick Yarnell, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC*

"I have been tracking the SD Gateway job postings with enthusiasm, looking for work in my area of expertise. A great service—thank you!"

— *Maureen Cureton, Marin Consultants*

"The site is very progressive, user-friendly and advertises positions applicable to me. Keep up the great job."

— *Rivendell Bongaard*

- IISD's Youth Internship Program placed 34 young people with 31 international organizations in 1998–99. This proved to be a win-win project, offering stimulating work experiences for young Canadians and providing research and Internet skills to host organizations overseas. The program is also helping to forge new relationships between IISD and its expanding range of international partners.
- The Knowledge Communications program developed an outreach strategy for youth on climate change for Environment Canada's Public Education and Outreach Issue Table. The strategy recommended launching an Internet site on climate change for a youth audience, which would be developed by young people. The strategy also recommended providing training and internships, and a special seed capital fund, so that young entrepreneurs can launch businesses that offer green services or products.
- A sustainable development timeline, created by IISD staff as an educational tool, was printed in poster form for the American Library Association with funding from the US Agency for International Development, and widely distributed to more than 40,000 information professionals in North America. The Internet version, which includes audio, can be seen at <http://iisd.ca/timeline/>.

Sustainable Development Timeline (<http://iisd.ca/timeline>)
Yahoo Canada's "pick of the week" July 19–25, 1998

Developing Tools to Measure Sustainable Development

Consultative Group on Sustainable Development Indicators

Alan AtKisson
David Berry
Arthur L. Dahl
Gilberto C. Gallopin
Allen Hammond
Peter Hardi
Jochen Jesinghaus
Donella H. Meadows
John O'Connor
Robert Wallace

“Your Science and Policy Dialogue on Sustainable Development Indicators sounds very appropriate and well designed.... I'd like to attend.”

— *Dr. C. S. Holling,
Ecologist, University
of Florida*

Objectives

After the Earth Summit in Rio de Janeiro in 1992, many nations agreed to adopt the concept of sustainable development as an overarching principle to guide economic growth and the management of the Earth's resources. The problem is, how do you determine whether policies are actually promoting sustainable development? How do you gauge, for example, if our use of forests or agricultural land is sustainable over time?

IISD is a world leader in developing tools and methods to answer these questions. But it's not an easy task. There are myriad factors to take into account, and each region has its own particular environmental, social and economic forces at work. However, if we are going to achieve the goal of sustainable development, it is essential that we have quantifiable goals and empirical evidence to assess whether we are making progress.

“While economists have developed a number of indexes to measure economic growth, there is currently no widely accepted way of evaluating sustainable development,” observes Dr. Peter Hardi, Director of IISD's Measurement and Indicators program.

Dr. Hardi and his colleagues were instrumental in founding the Consultative Group on Sustainable Development Indicators. This group is developing a holistic approach to measuring sustainable development, which reflects economic, environmental and social factors. One principle they have determined is that each geographic region requires a distinct set of indicators. There is no universal gauge like a thermometer for measuring sustainable development. The rate of soil loss, for example, is an important measure of the health of the North American prairie ecosystem, but it would be irrelevant in the Arctic, where soil loss isn't a major concern but toxics in the food chain is a pressing problem.

Another principle is that widespread public consultation is required to select an appropriate suite of indicators to measure sustainable development in a particular community. Otherwise, they will not reflect local values and requirements.

Dr. Hardi and the other researchers in the Measurement and Indicators program are widely sought as speakers and teachers to train others on approaches to measuring sustainable development. In 1998-99, Dr. Hardi was an invited speaker at international conferences at the Massachusetts Institute of Technology, and in Austria and Pakistan. Juanita DeSouza-Huletey gave a paper at a conference sponsored by the International Society for Ecological Economics at Santiago, Chile; and Laszlo Pinter taught a course on sustainable development indicators at the Natural Resources Institute of the University of Manitoba.

“You guys provide a great service. I am really impressed with the efficiency with which my request for help has been processed.”

— *Nigel Jollands, Environmental Performance Indicators Programme, Ministry for the Environment, New Zealand*

Selected Achievements

- At the request of the North West Frontier Province of Pakistan, staff from the Measurement and Indicators program created a tool kit, including detailed calculations for 10 indicators, to measure the effectiveness of a new conservation plan. The sustainable development indicators were selected after extensive local consultations, and IISD provided training to local researchers on how to collect valid and reliable data. Using the tool kit, officials and local environmentalists will be able to identify the key indicators and use them in the decision-making and planning process to measure the progress of the North West Frontier Province's conservation plan.
- IISD is a member of the core team producing Manitoba's *Sustainable Development Report for 2000*, which will provide a benchmark on the province's progress toward meeting its sustainable development goals. IISD contributed expertise on the definition and selection of measurement indicators. The *Sustainable Development Report* is mandatory under provincial law, and replaces a much narrower "State of the Environment Report," which focused solely on environmental issues. This is the first time the Province of Manitoba is preparing a sustainable development report that will address the interaction between social, environmental and economic issues throughout the province. The report is also among the first initiatives of its kind and scope in Canada and internationally.
- IISD contributed chapters, including a study of environmental policy effectiveness in North America, to the second *Global Environmental Outlook Report (GEO-2)* published by the United Nations Environment Programme. The report provides an integrated evaluation of global environmental trends, with a focus on sustainable development. The GEO effort is led by the United Nations Environment Programme, in partnership with an international network of collaborating centres, of which IISD is Canada's representative.
- Together with the United Nations Environment Programme and the International Development Research Centre, IISD designed a training course on integrated environmental assessment and reporting that was provided to specialists in West Asia and will be taught in other regions of the world. Based on the methodologies used in preparing the *GEO* report, this training program will help national and regional environmental reporting practitioners prepare policy-relevant and forward-looking analyses. The methodology is based on participation from all sectors of society and builds on the use of both environmental and socio-economic indicators. The training course is the first of its kind to build capacity in developing countries to conduct environmental assessments that include both social and economic issues.
- The program initiated a major update of its online "Compendium of Sustainable Development Indicator Initiatives and Publications" (<http://iisd.ca/measure/compindex.asp>). This interactive database is recognized worldwide as the pre-eminent source on environmental performance measurement. Its purpose is to promote information sharing, synergies and alliances. The project is jointly funded by IISD, Environment Canada, the World Bank, and the United Nations Division for Sustainable Development.

"Your work has an important influence on us, both for policy-makers and people carrying out fieldwork. I carefully review the literature on sustainable development indicators and find that you always provide the most up-to-date information on the Internet. I sincerely request permission to adapt part of your sustainable development index database into Chinese."

— Chih-Ku Chen, *Environment and Development Fund, Chutung, Hsinchu, Taiwan*

Working for Sustainability on the Great Plains

Objectives

While IISD pursues research and projects internationally, it is no less involved in its own backyard. But what a backyard! The North American Great Plains ecosystem stretches south to Mexico, north to the boreal forests of Manitoba, Saskatchewan and Alberta, and from Winnipeg west to the Rockies.

The Great Plains is one of the most important and export-oriented agricultural regions in the world, although in many places there are near desert-like conditions. Because of the wide-ranging potential impact, climate change is one of the Great Plains program's core priorities. The program's goal is to provide decision-makers in communities, businesses and governments with a balanced and informed perspective on the leading climate change issues and policies that will likely affect the region. The program has been actively involved in developing new strategies to help Canadians live up to their commitments under the Kyoto Protocol to reduce greenhouse gases by 6 percent below 1990 levels over the five-year period, 2008–2012.

The program facilitates research on how the prairie ecozone will be affected by global warming, which could help farmers adapt to the expected changes in weather patterns and take advantage of opportunities that may be created. Warmer average temperatures, for instance, will bring more frost-free days, extending the growing season. Less severe winters will be easier on cattle and

other livestock. Over time, the extent of agriculturally productive land will expand northwards. But on the negative side, climate change will likely bring quicker thaws and more flooding in spring, drier summers, more insects and increased salinization of the soil. Damage from hailstorms and tornadoes may also become more frequent.

Through its workshops, the program has identified a variety of attitudes to climate change on the Great Plains. Some farmers, called "innovators" or "early adopters," are receptive to new ideas. They are more likely to have already adopted soil conservation techniques such as zero tillage, which reduces the number of times the soil is worked, lowering the emissions of carbon dioxide and nitrous oxides, as well as increasing the soil's ability to store carbon. The Great Plains program focuses its efforts on reaching producers that are "early adopters" of new ideas. These efforts focus on what are called "no-regret activities" that not only address climate change but also increase efficiency and lower risk. Examples include techniques to conserve water and fuel, and to employ less fertilizer, by using manure from cattle operations. Research in the Great Plains program indicates that farmers should diversify their operations, so that if changes in weather patterns affect a particular crop, they will have income from other crops that may be less affected by drought or new diseases.



IISD's Great Plains program also focuses on the sustainability of natural resource management on the prairies and examines how communities are being affected by transportation policies, globalization and international trade agreements. Through an analysis framework, developed by program staff, policies are evaluated to determine their agricultural and developmental sustainability, leading to specific recommendations for change or action.

Selected Achievements

- The program prepared seven policy papers on climate change, dealing with such issues as how the Kyoto Protocol will affect the competitiveness of agricultural production on the Canadian Prairies, policy options for reducing greenhouse gas emissions from agriculture, and land use and climate change. These papers provide decision-makers in prairie communities, businesses and governments with a practical perspective on some of the key issues surrounding climate change in the region.
- In partnership with Ducks Unlimited, the Prairie Farm Rehabilitation Administration, Wetlands International and other groups, the Great Plains program assembled available research and held a workshop to examine the extent to which the protection of wetlands can conserve groundwater and help store carbon. The partnership will draw together the available research on ways to enhance the capacity of prairie soils and wetlands to absorb carbon dioxide, thus slowing the accumulation of this greenhouse gas in the atmosphere. This could be an economically attractive option for Canada to meet part of its commitment under the Kyoto Protocol to reduce overall emissions.
- Working with the Attorney General's Office of Minnesota and the Minnesota Department of Natural Resources, IISD has created an international organization to foster sustainability and adaptation to climate change in the Northern Great Plains region. Known as the Great Plains Institute for Sustainable Development, it represents an effective partnership between the regions of Canada and the United States that encompass the Northern Great Plains. The intent of the Great Plains Institute is to bring together government officials, academics, the private sector, nongovernmental organizations and community members to promote sustainable development in the region. The specific objectives of this international forum are to enhance decision-making abilities and conflict-resolution efforts, provide opportunities for coordinated research activities, convene stakeholder groups to analyze issues and policies, act as an information clearinghouse, and collaborate on solutions to mutual problems.
- The Institute's services as the secretariat for the World Commission on Forests and Sustainable Development are administered through the Great Plains program. The Commission is made up of a group of eminent persons and scholars representing both the North and South. It is co-chaired by Ambassador Ola Ullsten, former Prime Minister of Sweden, and Professor Emil Salim, former Minister of Population and Environment in the Government of Indonesia. Through a series of regional hearings, including the North American hearing that IISD held in Winnipeg in 1997, the Commission consulted forest stakeholders and experts on five continents.

IISD collaborated with the WCFSD to launch its final report in April 1999, and is assisting with follow-up efforts to implement the Commission's proposed policy and institutional reforms to foster wiser stewardship of the Earth's forests (see box on next page).

“On the prairies, about 36 percent of greenhouse gas emissions come from agriculture. The question now is: where can we cut emissions effectively and still remain competitive? IISD is providing the research to help farmers make the right decisions.”

— *Alan Ransom,
Manitoba farmer,
and member of the
National Agriculture
Environment
Committee*

Innovative Ideas to Save the World's Forests

The world is rapidly losing its forests: about 15 million hectares are cut and burned annually, mainly for agriculture. As well as impoverishing local residents, forest decline and the progressive erosion of other habitat threatens 75 percent of the world's mammal species and 44 percent of its bird species. Deforestation is also accelerating climate change.

The World Commission on Forests and Sustainable Development proposes a set of new institutions to safeguard the future of the world's forests:

- **Forest Security Council:** the Commission challenges the handful of countries that have some 85 percent of the world's forests to exercise leadership through a multinational council, modelled partly on the G8 summits but also involving the science, business and NGO communities.
- **ForesTrust** is envisaged as a nongovernmental body to involve citizens in solving the forest crisis. It would consist of five elements:
 - **Forest Watch:** a watchdog institution to oversee the sustainable management of forests, and to blow the whistle on corrupt practices.
 - **Forest Award:** to recognize outstanding conservation projects.
 - **Forest Ombudsman:** to act as an international watchdog over the world's forest resources.
 - **Forest Management Council:** to encourage establishing criteria and indicators for measuring sustainable forest management; and to foster the launch of "ecolabels" for wood products produced from sustainably managed forests.
 - **Forest Capital Index:** to measure the health and sustainability of a nation's forest resources. It would also take into account such environmental benefits as their role in maintaining supplies of clean water; creating and retaining soil; contributing to the productivity of fisheries and agriculture; and in helping to regulate climate.



Sustainable Development Report

March 31, 1999

IISD is committed to promoting a global transition to sustainable development. In doing so, we follow operating policies which conserve and protect resources needed for the survival of future generations. In accordance with our Sustainable Development Policy, we pursue the following Sustainable Development Objectives in our workplace.

Environmental Integrity

Energy Efficiency

IISD staff are encouraged to use energy efficient means of transportation to commute to work (bicycle, walk, public transport or car pool) and to use the stairs rather than elevators. A bicycle rack located in a secure parking garage is provided by IISD for staff use. Energy saver office equipment including photocopiers and computers is used. Notices posted throughout our premises encourage staff to conserve energy by turning out lights and turning off office equipment.

Pollution Prevention

All employees actively participate in the Institute's multi-material recycling program. IISD is a project partner with the Skyline Recycling Project, an activity that provides meaningful employment opportunities for Winnipeg's core area youth while diverting many items and materials from landfill sites.

Purchasing

IISD surveys suppliers to identify those adhering to environmentally responsible practices and standards. Preference is given to bulk purchasing of products with high use of post-consumer waste and minimal packaging. Hotels and caterers having practical environmental conservation programs in place are preferred. Repeat business is available to suppliers exemplary in their sustainable development practices.

People's Well-being

IISD is an evolving organization. Our policies are based on values, which are lasting and promote sustainable development within the organization, while remaining adaptable to the changing work environment.

Hour-long weekly staff meetings are held to keep communication channels open and clear, and to provide a forum for training and the exchange of information. Other less structured "brainstorming sessions" are held periodically to encourage program teams to communicate with each other and exchange ideas and information in greater depth on specific topics of common interest. Team building occurs with individuals from different program areas joining together to work on specific initiatives, both within the office and at informal gatherings outside the office.

Auditors' Report on Management's Sustainable Development Report

To the Members

International Institute for Sustainable
Development

We have audited the attached Sustainable Development Report dated March 31, 1999 covering the year then ended. The report is the responsibility of the management of the Institute. Our responsibility is to express an opinion on the fairness of the disclosure of the activities outlined in the report based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance that management's assertion, which is outlined in the attached report, is free from significant misstatements. An audit includes examining, on a test basis, evidence supporting the content and disclosures in management's assertion. An audit also includes assessing the criteria used and the significant judgements made by management, as well as evaluating the overall presentation of management's assertion.

In our opinion, the attached Sustainable Development Report presents fairly, in all material respects, the Institute's activities with respect to sustainable development as outlined in the report for the year ended March 31, 1999.

Melouitte + Touche LLP.

Chartered Accountants
Winnipeg, Manitoba
April 22, 1999

Including 27 freelance writers on the IISD Reporting Services team and persons working full and part time in the Winnipeg office and elsewhere, there were 91 people associated with IISD at March 31, 1999. A snapshot picture of our organizational profile on that date shows that 47 percent are women, 1 percent is disabled, and 18 percent are minorities or of aboriginal descent. On March 31, 13 percent of our Senior Fellows and Associates and 28 percent of our Board members were women.

IISD actively engages in outreach activities in our home community of Winnipeg, Manitoba. These include participation in the environment committee of the 1999 Pan Am Games, the sustainable development committee of the Winnipeg Chamber of Commerce, the program development committee of the Fort Whyte Centre for Environmental Education, the City of Winnipeg's CentrePlan committee, and co-chairing the local chapter of UNIFEM.

IISD sponsors an "All Charities Campaign" each year, raising funds from staff for the United Way as well as several other charities within Winnipeg. Staff also participated in the Red Cross "Life Bus" blood donation program.

IISD has demonstrated its commitment to youth and sustainable development in several ways this year. We were pleased to provide training opportunities and mentoring through our involvement as a sponsor of an award-winning Youth International Internship project involving 34 young Canadians. Our staff frequently participate as speakers and guest lecturers at local universities, community colleges and highschools. We participate in various career symposia including the Rotary Clubs of Winnipeg Career Symposium. This two-day event had over 15,000 attendees in 1999 and involved over 1,000 hours of volunteer time. IISD is also a funding partner for the Manitoba Round Table on Environment and Economy (MRTEE) scholarship program, and participated in the Youth Serves Manitoba program.

We invite students and other community groups interested in sustainable development to tour the Institute and visit our information centre, which acts as an information clearinghouse for sustainable development issues. We make our conferencing facilities available to other organizations in the community, on a cost-recovery basis, when they are not required for our own activities.

Economic Efficiency

We continue to dedicate efforts to maintaining or improving our cost effectiveness. After adjusting for non-recurring governance and transition costs, 86 cents of every dollar go to program delivery. This is a decrease of 1 cent from last year.

We operate as an electronic institute. We continue to enhance the features of our intranet to facilitate efficient information exchange in our organization. It is designed to accommodate our internal information needs, including our Calgary, Ottawa, New York and Geneva physical offices, and virtual offices elsewhere. It provides a convenient and efficient means by which to orient new staff, provides ready access to important information such as currently updated directories and databases, policies, procedures, information centre updates, form templates, and minutes of corporate management and program leadership team meetings as well as staff meetings. We continue to emphasize the use of electronic mail, the Internet, and other electronic media for communications and data storage. Whenever practical we operate nationally and internationally using telephone, video conferencing and electronic communication rather than travel. Virtual office links are established as the network of people associated with the Institute expands to include representation in various strategically significant places outside the Winnipeg centre. We enjoy the benefits of representation in many of these localities without having to incur significant additional fixed infrastructure costs.

One of IISD's strategic goals has been to reduce its reliance on operating grants by generating revenues from an increasingly diverse base of supporters. In the past year, designated grants and other income as a proportion of total expenditures have increased by 4 percent to 63 percent this year from 59 percent last year. IISD's continuing success in achieving this goal is a tangible measure of its expanding influence among decision-makers in Canada and internationally.

Consolidated Financial Statements

March 31, 1999

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Consolidated Statement of Financial Position	27
Consolidated Statement of Changes in Net Assets	28
Consolidated Statement of Operations	29
Consolidated Statement of Cash Flows	30
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Consolidated Statement of Financial Position

March 31, 1999

	1999	1998
Assets		
Cash	\$ 1,342,880	\$ 622,957
Accounts receivable	2,632,892	2,618,070
Marketable securities (Note 4)	7,093,583	8,713,090
Prepaid expenses and deposits	65,281	78,055
	11,134,636	12,032,172
Capital Assets (Note 5)	417,520	443,621
	\$ 11,552,156	\$ 12,475,793
Liabilities		
Accounts payable and accrued liabilities	\$ 1,012,733	\$ 682,617
Deferred revenue (Note 6)	3,240,930	4,495,417
	4,253,663	5,178,034
Net Assets		
Net assets invested in capital assets	417,520	443,621
Reserve for program development	4,251,783	4,251,783
Reserve for long-term development	2,412,902	2,440,466
Unrestricted net operating assets	216,288	161,889
	7,298,493	7,297,759
	\$ 11,552,156	\$ 12,475,793

Auditors' Report

To the Members

International Institute for Sustainable
Development

We have audited the consolidated statement of financial position of the International Institute for Sustainable Development as at March 31, 1999 and the consolidated statements of operations, changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Institute as at March 31, 1999 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

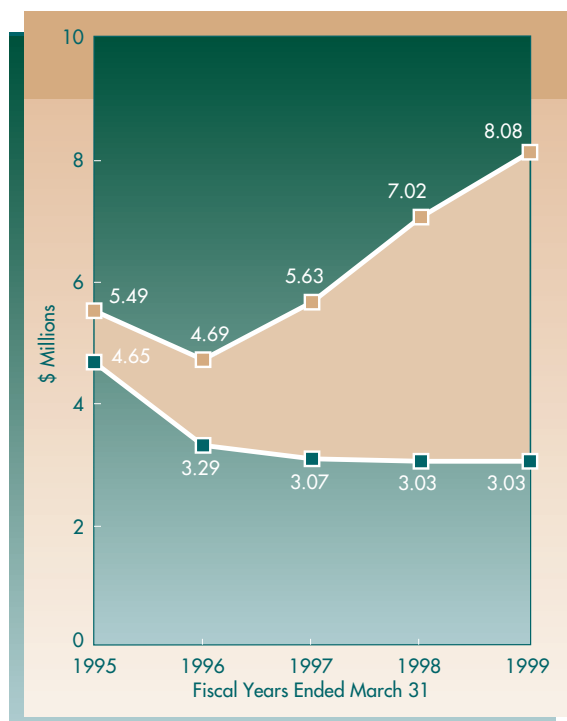
Helmutte + Touche LLP.

Chartered Accountants
Winnipeg, Manitoba
April 22, 1999

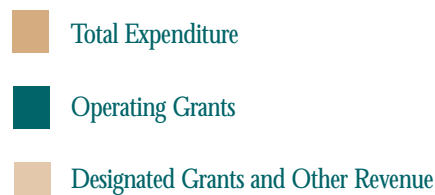
Consolidated Statement of Changes in Net Assets

For the Year Ended March 31, 1999

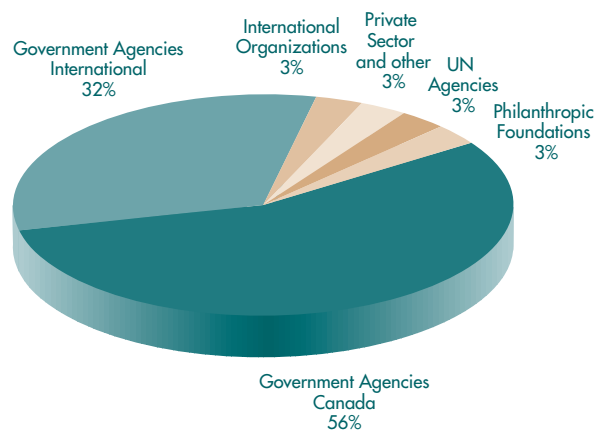
	Net Assets Invested in Capital Assets	Reserve for Program Development	Reserve for Long-Term Development	Unrestricted Net Operating Assets	Total 1999	Total 1998
Balance, Beginning of Year	\$ 443,621	\$ 4,251,783	\$ 2,440,466	\$ 161,889	\$ 7,297,759	\$ 7,163,915
Excess of revenue over expenses (expenses over revenue)	(340,900)	-	-	341,634	734	133,844
Investment in capital assets	314,799	-	-	(314,799)	-	-
Internally imposed restriction	-	-	(27,564)	27,564	-	-
Balance, End of Year	\$ 417,520	\$ 4,251,783	\$ 2,412,902	\$ 216,288	\$ 7,298,493	\$ 7,297,759



1995-99
IISD Financing Trend (\$ Million)



1998-99
Designated Grant Revenue by Donor



Consolidated Statement of Operations

For the Year Ended March 31, 1999

	1999	1998
Revenue (Notes 2(b) and 3)		
Designated grants	\$ 4,482,582	\$ 3,481,583
Operating grants	3,027,832	3,027,832
Interest	475,497	524,517
Other revenue	91,512	122,672
Total Revenue	8,077,423	7,156,604
Expenses (Schedule 1)		
Programs		
Knowledge Communications	1,463,954	1,380,960
IISD Reporting Services	1,561,974	1,335,957
Measurement and Indicators	1,193,663	1,106,262
Solutions for Business	509,093	475,729
Trade and Sustainable Development	719,311	689,107
Community Adaptation and Sustainable Livelihoods	405,507	510,481
The Great Plains	652,648	491,859
New Program Development (Note 7)	119,244	95,428
	6,625,394	6,085,783
Administration (Note 7)	684,228	503,871
Outreach	503,061	227,149
Board	264,006	205,957
Total Expenses	8,076,689	7,022,760
Excess of Revenue over Expenses	734	133,844
Appropriation from (to) Net Assets		
Net assets invested in capital assets	26,101	(7,995)
Reserve for long-term development	27,564	(297,337)
Increase (Decrease) in Net Operating Assets	54,399	(171,488)
Net Operating Assets, Beginning of Year	161,889	333,377
Net Operating Assets, End of Year	\$ 216,288	\$ 161,889

Notes to the Consolidated Financial Statements

March 31, 1999

1. Incorporation, Mandate and Tax Status

The International Institute for Sustainable Development (IISD) was incorporated on March 15, 1990 as a corporation without share capital under Part II of the Canada Corporations Act. It commenced operations shortly thereafter at its head office in Winnipeg, Manitoba, Canada.

IISD is a registered charity in Canada. It is also exempt from U.S. income tax under paragraph 501(c)(3) of the Internal Revenue Code.

The vision of IISD is better living for all—sustainably. Its mission is to champion innovation, enabling societies to live sustainably.

2. Significant Accounting Policies

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in Canada and include the following significant accounting policies:

a) Principles of consolidation

The consolidated financial statements include the assets, liabilities, net assets, revenues, expenses, and other transactions of IISD Business Trust and IISD Solutions, both of which are controlled by IISD. All material inter-company transactions and balances and results of operations have been eliminated upon consolidation.

IISD Business Trust carries on consulting and other business activities consistent with the mandate of IISD. IISD Solutions is a corporation without share capital incorporated under Part II of the Canada Corporations Act and is the trustee of IISD Business Trust. IISD appoints the members of IISD Solutions and, according to the terms of the IISD Business Trust, all resources of the Trust must be provided to IISD as the Trust's sole beneficiary.

b) Revenue recognition

i) Operating grant revenue

Operating grants are subject to the condition that they must be expended in accordance with the mandate of IISD. Operating grant revenue from the Government of Canada is recorded annually

continued page 30...

2. Significant Accounting Policies (Continued)

b) Revenue recognition (continued)

in the accounts in an amount equivalent to one fifth of the total funding commitment over the period April 1, 1995 to March 31, 2000. Operating grant revenue from the Province of Manitoba is recorded in an amount equal to the lesser of one third of funding from all other sources and annual amounts prescribed in the funding agreement. Any additional amounts received under current grant agreements are reflected as deferred revenue.

ii) Designated grant revenue

Designated grants must be expended in accordance with the donor's designation. Revenue for grants designated for specific current activities is recorded in the accounts as the related expenses are incurred. Designated grant commitments for specific future activities are reflected as deferred revenue. Revenue for grants designated generally for use in program or long-term development activities is recorded in the accounts in the year in which the grant is awarded.

iii) Interest income

Interest income is recorded on an accrual basis, net of amortization of discounts or premiums on the purchase of bonds.

c) Marketable securities

Marketable securities are carried at amortized cost plus accrued interest. Discounts or premiums on the purchase of bonds are amortized on a straight-line basis over the investment's remaining term.

d) Capital assets

Capital asset expenditures are recorded at cost. Amortization, which is based on the cost less the residual value over the useful life of the asset, is computed using the straight-line method over the following terms:

Equipment	10 years, 5% residual
Leaseholds	Initial term plus one renewal
Computer systems	3 years, no residual

e) Publication production costs

Publication production costs are expensed in the year in which the publication is printed.

Consolidated Statement of Cash Flows

For the Year Ended March 31, 1999

	1999	1998
Cash Provided by Operations		
Designated Grants (Schedule 2)		
Government of Canada	\$ 1,642,509	\$ 2,745,636
Governments of provinces	10,250	300
Governments of other nations	1,623,716	1,133,705
United Nations agencies	162,988	152,476
International organizations	114,295	145,869
Philanthropic foundations	506,108	20,766
Private sector and other	154,836	188,733
Operating Grants		
Government of Canada		
Environment Canada	200,000	200,000
Canadian International Development Agency	712,000	1,212,000
Government of Manitoba	1,145,833	1,145,833
Other	-	17,539
Total Operating and Designated Grants	6,272,535	6,962,857
Increase in Accounts Receivable	(14,823)	(1,123,302)
Other Revenue	91,512	122,672
	6,349,224	5,962,227
Cash used in operating activities	(7,409,506)	(6,619,192)
Net Cash used in Operating Activities	(1,060,282)	(656,965)
Cash Provided by Investments		
Interest for long-term development	475,497	524,517
Purchase of capital assets	(314,799)	(252,001)
Net Cash Provided by Investing Activities	160,698	272,516
Net Decrease in Cash and Marketable Securities	(899,584)	(384,449)
Cash and Marketable Securities, Beginning of Year	9,336,047	9,720,496
Cash and Marketable Securities, End of Year	\$ 8,436,463	\$ 9,336,047
Represented by:		
Cash	\$ 1,342,880	\$ 622,957
Marketable securities	7,093,583	8,713,090
	\$ 8,436,463	\$ 9,336,047

Notes to the Consolidated Financial Statements

3. Funding Arrangements

Designated grants

IISD receives funding from a variety of public and private sources to finance specific projects within its programs. Projects may carry on over more than one year. The related designated grants are recorded as deferred revenue when the funding commitment is made and recognized in revenue as the projects progress. A summary of designated grant funding committed and recognized in revenue during the year is as follows:

	Funding Commitments (\$000's)	Designated Grant Revenue (\$000's)	Deferred Revenue Increase (Decrease) (\$000's)
Governments and agencies			
Canada	\$ 1,653	\$ 2,498	\$ (845)
International	1,624	1,447	177
	3,277	3,945	(668)
United Nations agencies	163	135	28
International organizations	114	111	3
Philanthropic foundations	506	146	360
Private sector and other	155	146	9
	\$ 4,215	\$ 4,483	\$ (268)

Designated grants and other revenue which includes publication sales and cost recoveries are summarized by program as follows:

Program	Sales and Cost Recovery (\$000's)	Designated Grants (\$000's)	Total (\$000's)
Knowledge Communications	\$ 2	\$ 871	\$ 873
IISD Reporting Services	-	1,634	1,634
Measurement and Indicators	28	767	795
Solutions for Business	17	201	218
Trade and Sustainable Development	10	387	397
Community Adaptation and Sustainable Livelihoods	3	143	146
The Great Plains	14	353	367
Administration, New Program Development and Outreach	17	127	144
	\$ 91	\$ 4,483	\$ 4,574

3. Funding Arrangements (Continued)

Operating grants

IISD has entered into renewed funding arrangements with the Government of Canada (Environment Canada and the Canadian International Development Agency (CIDA)) and the Government of Manitoba. The arrangements with the Government of Canada provide operating grants for the five-year period April 1, 1995 to March 31, 2000. The arrangement with the Government of Manitoba provides operating grants for the six-year period April 1, 1995 to March 31, 2001. Since April 1, 1995 CIDA has reduced its aggregate funding commitment by \$114,000 to \$4,886,000.

A summary of the funding is as follows:

	Funding Commitment (\$000's)	Funding Recorded 1999 (\$000's)	Funding Recorded Prior years (\$000's)	Funding Commitment Remaining (\$000's)
Government of Canada				
Environment Canada	\$ 4,600	\$ 200	\$ 4,200	\$ 200
Canadian International Development Agency	4,886	712	3,212	962
Government of Manitoba	6,875	1,146	3,667	2,062
	\$ 16,361	2,058	11,079	\$ 3,224
Decrease (Increase) in deferred revenue		970	(1,690)	
Operating grant revenue (Note 2(b)(i))		\$ 3,028	\$ 9,389	

4. Marketable Securities

Marketable securities include investments in Canadian dollar denominated, fixed-rate debt instruments issued or guaranteed by the governments of Canada, its provinces, or large Canadian chartered banks. Maturities range from one month to twenty-seven months based on expected future cash flow requirements. Investments are normally held to maturity.

A summary of marketable securities is as follows:

Maturity	Carrying Value (\$000's)	Market Value (\$000's)
1999	\$ 3,314	\$ 3,317
2000	2,281	2,300
2001	1,499	1,494
	\$ 7,094	\$ 7,111

5. Capital Assets

The categories of capital assets and components of net assets invested in capital assets are summarized as follows:

Category	1999			1998
	Cost	Accumulated Amortization (\$000's)	Net Asset Value	Net Asset Value (\$000's)
Equipment	\$ 661	\$ 460	\$ 201	\$ 227
Leaseholds	99	88	11	20
Computer systems	1,103	897	206	197
	\$ 1,863	\$ 1,445	\$ 418	\$ 444

6. Deferred Revenue

The amount by which recorded commitments exceed the revenue recognized as Operating or Designated grants is reflected as deferred revenue. The principal components of deferred revenue are summarized below:

	1999 (\$000's)	1998 (\$000's)	Deferred Revenue Increase (Decrease) (\$000's)
Operating grants	\$ 720	\$ 1,690	\$ (970)
Designated grants			
Government agencies			
Canada	1,354	2,199	(845)
International	734	557	177
United Nations agencies	30	2	28
International organizations	1	(1)	2
Philanthropic foundations	360	-	360
Private sector and other	42	32	10
	2,521	2,789	(268)
Other	-	16	(16)
	\$ 3,241	\$ 4,495	\$ (1,254)

7. Governance and Transition Costs

During the year, IISD conducted organizational and fund development reviews, and initiated a strategic planning process leading to renewal of its vision, mission and strategic objectives. Costs of a facilitated strategic planning meeting involving board members and senior staff amounting to \$59,000 are included in Board expenses for the year. Other costs of conducting the organizational and fund development reviews, beginning to implement their recommendations, and of the transition in leadership, amounting to \$302,000, are included in the Administration and Outreach categories.

Also, during the year, IISD began segregating program innovation costs from its administrative costs. These initial program or project development costs are now grouped with IISD's other program expenses and are presented under the New Program Development caption. The comparative figures for the year ended March 31, 1998 have been restated to reflect this change in presentation.

8. Commitments

- a) IISD is obligated to make payments under various leases expiring up to March 31, 2004 as follows:

	(\$000's)
2000	\$ 80
2001	67
2002	13
2003	13
2004	13

- b) IISD has guaranteed a bank line of credit for IISD Solutions, as trustee for IISD Business Trust, in the maximum amount of \$250,000. At March 31, 1999 there was no balance outstanding against this credit facility.

9. Financial Instruments

Interest rate risk

Interest rate risk is the risk that arises from fluctuations in interest rates, and the degree of volatility of these rates. This risk is addressed by staggering investment terms to correlate with expected future cash flow requirements. IISD does not use derivative instruments to manage its exposure to interest rate risk.

Credit risk

Credit risk arises from the potential that a counterparty will fail to perform its obligations. IISD's credit risk is managed through a Board approved investment policy which restricts its investment to Canadian dollar denominated, fixed-rate debt instruments issued or guaranteed by the government of Canada, its provinces, or large Canadian chartered banks. Credit risk related to IISD's accounts receivable is mitigated by the fact that the receivables are comprised of amounts due from numerous public and private sector entities which are identified in Schedule 2.

10. Uncertainty Due to the Year 2000 Issue

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the Year 2000 as 1900 or some other date, resulting in errors when information using Year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than that date.

The effects of the Year 2000 Issue may be experienced before, on or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting IISD including those related to the efforts of customers, suppliers, or other third parties, will be fully resolved.

Schedule 1 Expenses

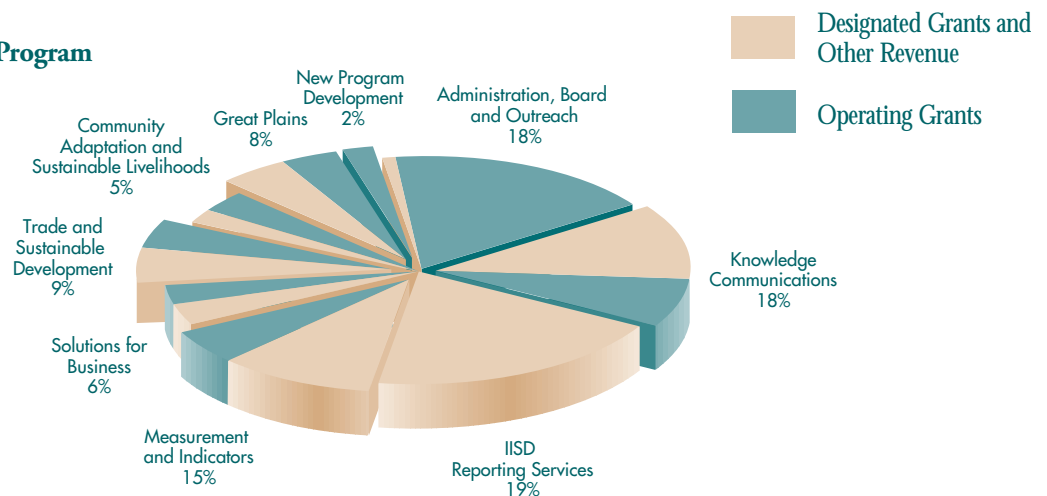
For the Year Ended March 31, 1999

(000's)

The following table summarizes expenses incurred in each of IISD's programs:

	<i>Knowledge Communications</i>	<i>IISD Reporting Services</i>	<i>Measurement and Indicators</i>	<i>Solutions for Business</i>	<i>Trade and Sustainable Development</i>	<i>Community Adaptation and Sustainable Livelihoods</i>	<i>The Great Plains</i>	<i>New Program Development</i>	<i>Administration</i>	<i>Outreach</i>	<i>Board</i>	<i>1999 Total</i>	<i>1998 Total</i>
Personnel	\$ 718	\$ 374	\$ 480	\$ 226	\$ 298	\$ 265	\$ 309	\$ 4	\$ 539	\$ 254	\$ -	\$ 3,467	\$ 2,973
Travel	90	496	249	40	106	50	50	41	6	58	-	1,186	1,097
Publishing	16	117	19	12	23	10	39	12	-	36	-	284	276
Consulting	414	421	256	155	196	21	177	58	42	54	-	1,794	1,423
Meetings	4	-	9	1	19	3	(5)	-	1	41	-	73	142
Rent	46	36	37	27	22	13	21	-	31	15	-	248	275
Supplies and other	37	34	22	19	15	22	22	4	18	25	-	218	178
Telecommunications	33	47	17	8	15	6	15	-	12	9	-	162	169
Research materials	11	-	7	3	4	3	4	-	6	2	-	40	40
Amortization of capital assets	95	37	98	18	21	13	21	-	29	9	-	341	244
Board	-	-	-	-	-	-	-	-	-	-	264	264	206
	\$1,464	\$1,562	\$1,194	\$ 509	\$ 719	\$ 406	\$ 653	\$ 119	\$ 684	\$ 503	\$ 264	\$ 8,077	\$ 7,023

1998-99 Revenue and Expenses by Program



Schedule 2

Designated Grants Committed

For the Year Ended March 31, 1999

(000's)

Government of Canada (and agencies)		United Nations agencies	
Canadian International Development Agency (CIDA)	\$ 951	United Nations Environment Programme (UNEP)	73
International Development Research Centre (IDRC)	413	United Nations Development Programme (UNDP)	71
China Council for International Cooperation on Environment and Development (CCICED)	98	United Nations Industrial Development Organization (UNIDO)	8
Public Works and Government Services Canada	54	Climate Change Secretariat	8
Environment Canada	34	Plant Genetic Resources Secretariat	3
Natural Resources Canada	29		163
Department of Foreign Affairs and International Trade	27	International organizations	
Agriculture and Agri-Food Canada	20	Global Environment Facility	61
Auditor General	8	World Bank	27
Prairie Farm Rehabilitation Administration	5	World Trade Organization	15
Fisheries and Oceans Canada	4	Commission for Environmental Cooperation	7
	1,643	The World Conservation Union (IUCN)	4
			114
Governments of provinces and territories		Philanthropic foundations	
Alberta	5	The Ford Foundation	256
Manitoba	3	Wallace Global Fund	104
Nunavut	2	Winslow Foundation	72
	10	MISTRA	58
		Walter & Duncan Gordon Foundation	16
Governments of other nations			506
France (ACCT/IEPF; ADERLY)	408	Private sector and other	
United States of America (USAID)	314	Applied Sustainability LLC	37
Switzerland	254	Pollution Probe	25
United Kingdom (DFID)	220	International Union of Forestry Research Organizations	24
Germany	122	Great Plains Institute	17
Denmark	71	Intergovernmental Forum on Chemical Safety	16
European Commission	71	Placer Dome	10
Austria	54	Bellagio Forum for Sustainable Development	9
Finland	40	Ducks Unlimited	8
Sweden	35	National Round Table on Environment and Economy	3
Norway	26	North-South Institute	3
Australia (AUSAID)	10	Other	2
Currency Adjustments	(1)	University of Calgary	1
	1,624		155
			\$ 4,215

IISD Staff

Charles Agobia
Jeff Anderson
Scott Anderson
Rod Araneda
Graham Ashford
Louise Avanthay
Deborah Bakker
Stephan Barg
Tatjana Brkic
Shannon Brown
Carolee Buckler
Chad Carpenter
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Dennis Cunningham
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Juanita DeSouza-Huletey
Andrea Douglass
Ron Duerksen
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Rae Fenwick
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Bill Glanville
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