

## Welcome to GPI News #6: September, 2001

Dear Friend of GPI,

At a time of shocking and horrifying news from the USA, it seems more important than ever to redouble our efforts to create a sane society based on gentleness and respect both for our fellow beings and for the natural world that gives us life. So we thank you in a particularly heartfelt way today for your membership in **GPI Atlantic**, for joining us in the endeavour to create indicators of progress based on decent human values, and for your subscription to the *GPI News*.

Your contribution directly supports the GPI research and the continuing development of the Genuine Progress Index. The GPI is a tool that can redirect public policy towards the basic values we share as Nova Scotians, as Canadians, and as human beings. As a completely independent, non-profit group, we depend on your support. Our newsletters are designed to keep members posted on new research results, the latest GPI activities, and policy applications of the GPI.

Welcome to our sixth newsletter. Since our last newsletter in June, we have had a very busy summer. We have been completing several major reports on which research has been ongoing for three years. So we have a lot to report as new and ground-breaking results roll off the GPI production line. We plan three newsletters this fall, so members will have received their eight scheduled newsletters before the end of this calendar year.

As a member, you are also entitled to a 25% discount on all GPI publications. When you order publications, simply state on your order that you are a member, and subtract the 25% discount from your cheque or credit card total. Your transaction is then recorded in our special members' database. You can order publications directly from the GPI web site at [www.gpiatlantic.org](http://www.gpiatlantic.org).

We are delighted to send this newsletter your way, and we welcome your suggestions and opinions. Thank you for your support

Ronald Colman, Ph.D,  
Director, GPI Atlantic

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## ***Special Bonus Offer***

Give a gift to a friend that will create genuine benefit and contribute to genuine progress. To give a membership in GPI Atlantic, which includes a subscription to *GPI News* and a 25% discount on all GPI publications, please visit the GPI Atlantic web site at [www.gpiatlantic.org](http://www.gpiatlantic.org). or click <http://www.gpiatlantic.org/membership.shtml>.

New GPI Atlantic members will receive a free copy of the revised *Nova Scotia Ecological Footprint* (100 pages) valued at \$35 + HST. And as thanks for your gift subscription, we would like to offer *you* your choice of any GPI publication gratis. When you send in your gift subscription, please let our webmaster, Cliff Esler, know which publication you'd like to receive.

We depend on member support to do our research and to construct the Genuine Progress Index. Thank you!

## **GPI NEWS Vol. 1, No. 6, September 2001**

### **RECENT AND UPCOMING GPI ACTIVITIES**

#### ***Income Distribution Report Released***

On July 18, GPI Atlantic released its report on *Income Distribution in Nova Scotia*, one of the core components of the Genuine Progress Index. The dramatic results were reported on the front pages of both Nova Scotia daily newspapers, on CBC radio, in editorial columns in both newspapers, and on Newfoundland radio. Take your browser to <http://www.gpiatlantic.org/clippings.shtml#incdist> to read these stories on our web site.

Hans Messinger, Director of Statistics Canada's Industry Measures and Analysis division, gave invaluable assistance to GPI Atlantic researcher and report author Colin Dodds MA, in providing data and reviewing the report. Mr. Messinger was in Halifax for the report release and was interviewed both by CBC radio and by *The Daily News*. Click [http://www.gpiatlantic.org/mc\\_hans\\_swick7-18.shtml](http://www.gpiatlantic.org/mc_hans_swick7-18.shtml) for the Daily News article. Report results are summarized in this newsletter.

#### ***Greenhouse Gas Report Released During Heat Wave***

On August 8, the 230-page GPI Greenhouse Gas Accounts were released, again to front-page news coverage, editorials, and radio and TV coverage. You may navigate to <http://www.gpiatlantic.org/clippings.shtml#ghg> for news reports. The report's lead researchers and authors are Sally Walker Ph.D and Anne Monette MES. The same week Canada was gripped by one of the worst heat waves on record and fires ravaged Nova Scotia forests.

GPI Atlantic researchers were joined at the August 8 press conference by:

- Kyle McKenzie, Atlantic region coordinator of the Canadian Climate Impacts and Adaptation Research Network, who discussed the science of climate change and potential impacts on Atlantic Canada; and by
- Meinhard Doelle, former executive director of the Clean Nova Scotia Foundation, who had just returned from Bonn where he was a member of the Canadian delegation to the international climate change negotiations. Mr. Doelle spoke of the policy implications of the GPI report and Nova Scotia's potential to lead the country in reducing greenhouse gas emissions in cost-effective ways.

#### ***2,400 Community GPI Surveys Completed***

In Glace Bay, 1,700 detailed surveys have now been collected as the first step in constructing a community-level Genuine Progress Index for that industrial Cape Breton

town. In Kings County 700 surveys have been collected, with the remaining surveys expected to be complete by the end of November. GPI Atlantic gratefully acknowledges funding support from the Canadian Population Health Initiative, the National Crime Prevention Centre, the Canadian Rural Partnership, HRDC and the Nova Scotia Provincial Summer Student Employment Program, in this ambitious project. Particular thanks go to the dedicated and talented Glace Bay and Kings County survey managers and staff for their extraordinary work this summer.

Database design by Dalhousie University's Population Health Research Unit and St. Mary's University's Time Use Research Program is now complete, and data entry will begin in the fall. This is the first time GPI Atlantic is collecting its own data for a Genuine Progress Index and it is hoped that the Glace Bay and Kings County projects will act as a template for communities throughout the country that want to establish their own measures of well-being. Already a partnership at the University of Saskatchewan is studying the Nova Scotia Community GPI for potential application in certain Saskatchewan communities.

### ***GPI Atlantic Board Encourages Continued Participation in Round Table Initiative***

At a July 16 meeting, the GPI Atlantic board of directors approved the year 2000 financial statement, discussed fundraising efforts, established a new board committee structure, and recommended continued participation in the sustainable development indicators initiative of the National Round Table on the Environment and the Economy.

Five GPI Atlantic researchers (3 with Ph.Ds and 2 with Masters degrees) are now participating directly in the Round Table's effort to produce sustainable development indicators for Canada, including work in expert groups in fisheries, forests, soils, and social indicators. The National Round Table also provided funding that has allowed completion of the GPI renewable natural resource accounts, which will be used this fall as a basis for development of national indicators.

At its June 29 meeting in Ottawa (and over GPI Atlantic's strong objections), the Round Table decided to exclude all indicators of sustainable development based on Canadian consumption habits. As GPI Atlantic members know, the *Ecological Footprint* is a core component of the Nova Scotia Genuine Progress and the only one that places direct responsibility on consumers by measuring the environmental impacts of our consumption patterns.

Because resource consumption is directly related to wealth, and because the ecological footprint of wealthy nations and households is therefore so much larger than that of poorer nations and households, consumption-based indicators naturally join together social and environmental concerns, and link sustainability to intra-generational equity as well as inter-generational equity.

The Round Table's unfortunate decision means that Canada's reporting on sustainable development will not provide direct feedback to Canadians on the environmental impact of their increasing use of sport utility vehicles, of energy consumption, of the transportation costs of imported food, and of other basic consumption patterns. Nevertheless, both the Board and staff of GPI Atlantic felt that GPI Atlantic's contribution to the national process would be more helpful through continued participation than by withdrawing.

### ***Bill 65 Introduced into NS Legislature***

Nova Scotia MLA Howard Epstein has introduced into the Nova Scotia legislature Bill 65, known as the "Well-being Measurement Act" -- "An Act to Develop and Provide for the Publication of Measures to Inform Nova Scotians About the Health and Well-being of People, Communities and Ecosystems in Nova Scotia."

The Bill's preamble states that "an important objective of the Legislature is to promote the well-being of Nova Scotians" and that "the citizens of Nova Scotia, including members of the House of Assembly, are better able to promote and enhance the well-being of Nova Scotians if they are well informed about the state of well-being of people, communities and ecosystems in the Province."

The Bill calls for the House of Assembly's Standing Committee on Public Accounts to study and make recommendations on "the definition, development and periodic publication of a set of indicators of the economic, social and environmental well-being of people, communities and ecosystems in the Province."

### ***GPI Atlantic in the Press and Publications***

Aside from the considerable publicity generated by our recent report releases, GPI Atlantic results and activities are reaching an ever wider audience. For example:

- Both on CBC Newsworld and on national radio, GPI Atlantic was invited to respond to a new report commissioned by Philip Morris that showed smokers saved the Czech Republic's health care system money by dying young.
- GPI Cost of Obesity results were reported in the *Canadian Medical Association Journal*. Go to <http://www.cma.ca/cmaj/vol-163/issue-11/1497c.htm>.
- Profiles of GPI Atlantic recently appeared in the popular Atlantic Canada magazine *Saltscapes* ([here](#)), in the *Atlantic Cooperator*, in the business journal *Atlantic Progress* (click [here](#)), and in *The Catalyst* vol. 23, no. 4, published by Citizens for Public Justice in Toronto (click [here](#)).
- GPI Atlantic will be profiled in the U.S. *Journal of Innovative Management* this fall. Click [here](#).
- The GPI Atlantic web site was recently named "Web Site of the Week" by the Safe Water Group (<http://safewatergroup.org/>)

- The School Children's Food Foundation (Kids Eat Smart Foundation) in Newfoundland is referencing results from GPI Atlantic's Income Distribution report in its literature.

### ***GPI Report Releases and Work in Progress: Fall 2001***

- GPI Fisheries and Marine Environment Account (authors Dr. Tony Charles, Heather Boyd, Amanda Lavers and Cheryl Benjamin): released September 11.
- GPI Forest Account (authors Sara Wilson, Linda Pannozzo and Minga O'Brien), scheduled for release in early October.
- GPI Soils and Agriculture Account Part II, (authors Jennifer Scott and Julia Cooper) scheduled for release in October.
- Work is ongoing on the GPI Air Quality Account (Anne Monette); the GPI Transportation module (Larry Hughes, Ph.D, Vanessa Husain, and David Caulfield), the GPI Solid Waste module (Jeff Wilson), and the component on Debt and Assets (Colin Dodds). All are scheduled for release in the winter of 2001-2002.
- A GPI Atlantic study on the *Economic Impact of Smoke-Free Workplaces* is scheduled for release by the N.S. Department of Health in fall, 2001.

### ***First Issue of Reality Check Due in October***

After receiving excellent and detailed feedback on a prototype issue in the spring, GPI Atlantic and the Atkinson Charitable Foundation are now preparing for publication the first issue of *Reality Check: The Canadian Review of Wellbeing*, with an anticipated release date in October. Among notable reviewers of the prototype issue was federal Finance Minister Paul Martin, who provided encouragement and support for the publication.

GPI Atlantic has engaged an outstanding Nova Scotia writer, Parker Barss Donham, as writer for *Reality Check*, and Semaphor Design Company of Halifax for the logo, identity, design and layout.

### ***Other GPI Atlantic Projects: Fall 2001***

- Based on its Community GPI work, GPI Atlantic is undertaking a survey of British Columbia CAP (Community Access Program) sites to assess their impact on volunteerism. The project is funded by Industry Canada. In the course of a visit to British Columbia scheduled for October, GPI Atlantic will also lead a training workshop for a forming "GPI Pacific."
- GPI Atlantic is working closely with the First Nations Forestry Association of Nova Scotia on a proposal for a full-cost accounting study of the Pictou Landing First Nations forest and community that will assess the impact of forest restoration on community health.

- GPI Atlantic is a partner in the five-year *Healthy Balance* research project on unpaid caregiving coordinated by the Maritime Centre of Excellence for Women's Health and the Nova Scotia Advisory Council on the Status of Women. In fall 2001, GPI Atlantic will prepare a databank and methodology analysis on unpaid caregiving for phase 1 of this project.
- GPI Atlantic is working closely with the Halifax Inner City Initiative on a proposal for a Community GPI in the economically troubled north end of Halifax.
- GPI Atlantic recently entered a partnership with the new Organic Agriculture College of Canada at the Nova Scotia Agricultural College in Truro, to support further GPI development of its Soils and Agriculture Accounts.

### ***GPI Atlantic Organizational Development, Fall 2001***

Due to increasing interest in the GPI work, there has been a growing demand for presentations. Due to limited resources and capacity, GPI Atlantic has been unable to accept all requests for presentations. For example, GPI Atlantic recently declined an invitation to participate in a two-day October, 2001 meeting of experts on health and gender indicators in Santiago, Chile.

GPI Atlantic's small core staff is stretched thin, and both staff and researchers are underpaid. Indeed, during its first five years, most GPI research and staff contributions have been provided on a voluntary basis. Therefore a major effort in the coming months will focus on strengthening GPI Atlantic's organizational capacity.

The first step in that process has just been completed with the creation of an excellent new financial accounting system that allows all revenues and expenses for each GPI component and project to be tracked precisely. This will allow us to determine whether each GPI activity is on budget and exactly where fundraising activities need to be targeted. Profound thanks to our volunteer treasurer, John Leon, and our accountant, Sara Winchell of Trident Bookkeeping and Accounting Services, for their outstanding and tireless work in this area.

Efforts in the coming months will focus on fundraising for core GPI activities. To date, most of the core GPI research has been financed by member contributions, GPI News subscriptions, contracts, and voluntary work. We will also attempt to strengthen our office and administrative infrastructure, the promotion of our web site, and the expansion of our member base. By early 2002, we hope to have a strong GPI organizational structure capable of handling the growing demands.

### ***Movement Towards a Composite Genuine Progress Index: Winter 2001-2002***

In early 1997, after detailed consultations with Statistics Canada, GPI Atlantic decided to develop each component of the Genuine Progress Index separately to ensure methodological rigour and integrity, attention to detail and sources, and relevance to policy makers who require as comprehensive a portrait of each component as possible.

However, GPI Atlantic has now completed sufficient components of the index that the time is right to identify the key indicators that will serve as annual benchmarks of progress, and to determine the form and shape of the Genuine Progress Index as a whole. In the winter of 2001-2002, GPI Atlantic will bring together all its researchers in this effort to identify these core indicators, to discuss the most meaningful results to date and the connections between them, and to assess the potential for aggregation of some results into sub-indices.

GPI Atlantic does not intend to seek a single “bottom line” GPI number to compare to the GDP. After all, one of our core critiques of the misuse of the GDP to measure progress is its tendency to over-simplify the complex web of social, economic and environmental realities. We do not intend to fall into the same trap but will seek a middle ground that moves towards a composite index without compromising the integrity of the separate results to date.

This will be a challenging process and we will keep our members fully informed. Most importantly, we regard the Genuine Progress Index always as a work in progress, and never as a rigid, final product. GPI Atlantic researchers always welcome improvement on every aspect of the GPI research as better methodologies and data sources become available. That is why each report is rigorously reviewed by experts before release. We will continue to exercise that rigour in this winter process.

### ***Errata***

Thanks to GPI researchers Dr. Larry Hughes and Vanessa Husain for discovering a typographical error and a mistake and in the transportation section of the *GPI Ecological Footprint* report (section 12, page 46). Corrections have been made in the report on the GPI web site. If you own this report, please make the following corrections: The corrected Table 11 (Transportation Energy Demand, Nova Scotia, 1997-2020,) row 3: Energy Demand (transportation sector) now reads as follows: 1997: 80.0 petajoules, 2020: 102.2 petajoules. And two lines above Table 11, correct statement is “...a 27% (not 25%) increase in transportation energy demand.” Then please eliminate the next sentence, from “These trends.....(to)...20 years.” We apologize for the error.

### ***Acknowledgements***

Inspiration for the Nova Scotia GPI project came from the ground-breaking work of [Redefining Progress](#) which produced the first GPI in the United States in 1995. Though GPI Atlantic's methods differ in many significant ways, particularly in not aggregating index components for a single bottom line, we share with the original GPI the attempt to build a more comprehensive and accurate measure of well-being than can be provided by market statistics alone. For recent RP work, please see [www.rprogress.org](http://www.rprogress.org).

GPI Atlantic also gratefully acknowledges the work of many pioneers in the fields of social and environmental accounting. Some of our recent work in natural resource

accounting draws inspiration particularly from the outstanding work of the World Resources Institute and others who are acknowledged in more detail in our reports. Without the contributions of these pioneers, the Nova Scotia GPI project would not be possible. We have borrowed from the methods of many experts, and we hope that they and others in turn will improve on our own work.

***Fall Calendar In Brief:***

- **Sept. 11:** Release of GPI Fisheries and Marine Environment Accounts (87 pages).
- **Sept. 13:** Presentation to Community Action on Homelessness conference, United Church, 2107 Brunswick Street, Halifax, 7pm. Emphasis on GPI Income Distribution results. Watch for pre-conference article in *The Coast* weekly, Sept. 12.
- **Sept. 17:** GPI Atlantic Board of Directors meeting, World Trade and Convention Centre, 7<sup>th</sup> floor, 4pm-6pm.
- **Sept. 20:** Keynote address to Communities in Bloom national conference, Trade and Convention Centre, St. John, New Brunswick, 8.30am.
- **Sept. 26:** Participation in consultation of the Canadian Institute for Health Research and the Canadian Population Health Initiative, Art Gallery of Nova Scotia, 12.30-4.30
- **Sept. 28:** Health, Work and Wellness conference organized by the New Brunswick Heart and Stroke Foundation, Fredericton. 9am: keynote address: "Economics as if People Mattered;" 1pm: talk: "Work and Life: Achieving Balance."
- **Sept. 29:** Presentation on volunteerism to V.O.N. Kings County, Wolfville, 9am
- **October 1:** 10am-3.30pm, Toronto, Atkinson Charitable Foundation session for a "funders' alliance" to support wellbeing measurement work in Canada.
- **October 3:** GPI Atlantic presentation and display to: Society for Corporate Environmental and Social Responsibility, 10am-4pm Student Union Building at Dalhousie University.
- **October:** Release of GPI Forest Accounts and Soils and Agriculture Accounts (Pt.2)
- **October 11:** Presentation to Nova Scotia Tobacco Control conference, Kespuwick, Annapolis Valley.
- **October 11:** Presentation to Dalhousie University School of Resource and Environmental Studies class on environmental accounting.
- **October 12:** 1.30pm-3.30pm, Dalhousie University, Halifax: Presentation to Sustainable Campuses Conference.
- **October 19-21:** Participation in Rural Diversity Conference, Kespuwick, Annapolis Valley, organized by ACOA and the Canadian Rural Partnership.
- **October 22:** Presentation to National Community Economic Development conference workshop, Halifax: 1.30-3.30pm, Citadel Halifax. 1960 Brunswick St.
- **October 26:** ACAP Sustainable Communities conference, Sydney, Cape Breton. Presentation, 10.30am: "Measuring Progress Towards Sustainable Development;" 1pm and 3pm: Workshops: "Measurements and Indicators."
- **October 28-30:** Ottawa: Prevention Dividend Conference on *Economic Evaluations: Making the Case with Dollars and Sense.* GPI Atlantic presentation on "Measuring Impacts: The GPI Approach to Economic Evaluations," Ottawa Marriott Hotel.

- **November 16:** Keynote address to Cape Breton Volunteerism conference, 9.30-11am, Coast Guard College, Wetsmount, Sydney.
- **November 29:** Presentation to Forest Forum, Truro.
- **Looking ahead:** February 22, presentation in Victoria, BC; March 5-6: Environment Canada sustainable development indicators conference, Toronto.

## **GROWING ECONOMY LEAVES MOST NOVA SCOTIANS POORER**

### ***Only Richest Gain. Inequality Grows, GPI Report Finds***

A growing economy has left 80% of Nova Scotians worse off than they were in 1980 and the income gap between rich and poor wider than at any time in the last 20 years. The findings are part of a new 60-page report on *Income Distribution in Nova Scotia*, released July 18 by GPI Atlantic. The report, based on Statistics Canada data, is one of 22 components of a new index of well being for Nova Scotia, the Genuine Progress Index, intended as a pilot project for Canada.

An executive summary, the full 60-page report, press stories, and a detailed database consisting of 260 pages of background spreadsheets, tables and charts, are available through the GPI web site :at [www.gpiatlantic.org](http://www.gpiatlantic.org). Please click [here](#) for the report, summary and press stories. Principal researcher and report author is Colin Dodds, MA. Using the data collected, GPI Atlantic could now construct a comparable Income Distribution report for each Canadian province.

#### ***Following are some highlights from the Income Distribution report:***

Economic growth statistics are the most widely used measure of wellbeing and progress. When the Gross Domestic Product (GDP) is growing, we are assumed to be “better off” as a society. But the GDP only reports the *total* income generated by all economic activity. It tells us nothing about how income is shared. The GDP can grow even while most people are getting poorer, while inequality grows, and while profits flow out of the region and country.

This new GPI report shows that only the incomes of the wealthy have been positively correlated with economic growth in the last decade. Although it has often been asserted that “growth is a tide that lifts all boats,” most Nova Scotians’ real income has fallen and inequality has increased even as the economy has grown, a clear indicator that GDP is an inadequate measure of societal wellbeing. The Genuine Progress Index (GPI), by contrast, *does* measure income distribution as one of its 22 core social, economic and environmental components.

### **1. Regional Income Gap Grows**

The income gap between the richest provinces (Ontario and Alberta) and the rest of the country grew in the 1990s. In 1990, Nova Scotians had 82 cents for every \$1 of disposable income in Ontario. In 1998 they had 73 cents.

The average Nova Scotian disposable household income dropped \$3,000 in the 1990s (down 8%), while Ontarians saw a \$1,800 increase (up 4%) and Albertans a \$2,100 increase (up 5%). *(All figures are in real dollars after adjustment for inflation.)*

However, the Alberta and Ontario increases are entirely due to sharp gains (11%-12%) for the richest 20% of households in those provinces. Lower and middle incomes have fallen or stagnated and inequality has grown sharply.

## **2. Poor and Middle Income Nova Scotians Lose Most – NS Poor are Poorest in Canada**

(Note that Canada has no official definition of “poverty.” In this report, the term is therefore used in a relative rather than absolute sense.)

Since 1990, middle income Nova Scotians have lost the most in absolute terms (average \$3,600) and the poor have lost the most in percentage terms (29% of their disposable income).

The poorest 20% of Nova Scotian households are the poorest in the country and the poorest 40% of Nova Scotian households have lost more income in *both* absolute *and* percentage terms since 1990 than the bottom 40% in any other province. The bottom 60% of Nova Scotian households have an average income lower than that in any other province in Canada.

## **3. NS Income Gap Grows - Rich Increase their Share of Pie**

Inequality has grown sharply. In 1990 the richest 20% of Nova Scotian households had an average disposable income 6.2 times greater than the poorest 20%. By 1998, the income of the rich was 8.5 times greater, the second widest income gap between rich and poor in the country after Alberta.

The richest 20% of Nova Scotian households have 42% of the total annual disposable income in the province up from 39.2% in 1990. The poorest 20% have just 4.9% of the income, down from 6.4% in 1990.

The richest 20% of Nova Scotian households average \$70,000 a year in disposable income (*after taxes*), compared to \$8,205 for the poorest 20%. The richest 20% of Ontarians average nearly \$100,000 in disposable income.

## **4. Inequality Grows Across Canada**

These are national trends. In the 1990s, the poorest 20% of households saw their income share fall in every province except Saskatchewan, and the next 40% saw their income share fall in every single province. In fact, middle income households in every province have less disposable income now than they did 20 years ago, while the richest 20% of households have increased their income share in every province. The income gap has grown across the country.

Prince Edward Island is a notable exception to the national trends. PEI is the most equitable province in the country with the smallest income gaps between rich and poor and between men and women, as well as the lowest poverty rates in Canada for both sexes, and the lowest rate of child poverty. It is also the only province in which the poorest households average higher incomes today than they did in 1980 and 1990.

### **5. Market Income Drops Most Sharply – Down 50% for Poor**

The decline in disposable income in Nova Scotia is due primarily to a drop in market income (wages, salaries, and income from self-employment and investments.) The poorest 20% of Nova Scotian households have seen their market income fall by more than 50% in real terms since 1990, the sharpest drop in the country.

As a percentage of disposable income, market income for the poor is now just 31%, the lowest level ever recorded. Middle income Nova Scotian households have seen their market income drop by 20% (or \$6,000) since 1990, also the sharpest drop in the country.

### **6. Middle and Higher Income Nova Scotians Get More Cash Transfers than Poor**

Government cash transfers, (such as EI, CPP, Old Age Security, Child Tax Benefit) to middle income groups have increased by 73% since 1990, while transfer payments to the poorest households have fallen by 15%.

Middle income Nova Scotian households actually receive an average of 45% more in government cash transfers than the poorest 20% of Nova Scotians. Even the second wealthiest 20% of Nova Scotian households receive an average of 8.5% more in transfers than the poorest 20%.

### **7. Has An Increasingly Open and Unregulated Market Improved Wellbeing?**

It is generally asserted that free trade and other elements of an increasingly open and unregulated market improve the wellbeing of Canadians. However, income analysis does not support this assertion.

In the 1980s, before the Canada-US Free Trade Agreement and the North American Free Trade Agreement, for example, market income and disposable income increased for Canadians and Nova Scotians in all income groups. The income gap between rich and poor also narrowed, and equality grew. In every province, including Nova Scotia, the poorest 20% of households increased their share of income in the 1980s.

Since the free trade agreements, incomes for poor and middle income households have fallen sharply in real terms, and inequality has grown. 80% of Nova Scotian households are worse off since free trade, with declines in both market income and disposable income. Only the wealthiest 20% have done better since free trade.

## 8. The Gender Gap: More Women Live in Poverty

Despite relative educational parity, Nova Scotian women earn only 80% of the hourly wages of men. Even with identical education, field of study, employment status, work experience, job tenure, age, job duties, industry and occupation, female hourly wages are still 11% lower than equivalent male wages.

Full-year full-time working women in Nova Scotia earn 70% of male wages, with 21% of these women earning less than \$15,000 a year (\$8 an hour or less) and 38% earning less than \$20,000 a year (\$10 an hour or less).

One in six Nova Scotian women lives below Statistics Canada's low-income cut-off, a low income rate that is 50% higher than that for men (by far the widest low-income gender gap in the country) and 26% above the national average for women.

The female poverty rate in Nova Scotia is the highest in Atlantic Canada and the second highest in the country after Quebec. Single mothers and unattached elderly women have the highest poverty rates, with 70% of Nova Scotian single mothers living below the low-income cut-off.

Nearly half the province's 40,000 poor children live in single parent families, and a child living with a single mother is nearly four times as likely to be poor as a child living with both parents. Overall, nearly one in five Nova Scotian children under 18 live in poverty, the fourth highest rate in the country after Newfoundland, Quebec and Manitoba, and in improvement over Nova Scotia's #1 ranking in 1997.

## 9. Poverty and Inequality Adversely Affect Health and Health Care

Poverty and income inequality are among the most reliable predictors of poor health. Low-income earners have poorer physical and mental health and higher rates of hospitalization and health service usage. Concerted public policy has dramatically lowered poverty rates among seniors. Similarly, improving social supports for single mothers, who have particularly high rates of poverty, is one of the most cost-effective strategic investments governments can make to reduce long-term health care costs.

Growing economic disparities may lead to a two-tier health care system in Canada in two different ways. With nearly 30% of Canada's health care spending now in the private sector and growing, low income Canadians are less able to afford certain health care costs. Secondly, only the rich provinces may be able to afford high quality *public* health care as federal transfers fail to compensate adequately for growing regional disparities.

Recruiters from Alberta are now offering Nova Scotia health care workers \$5 more an hour than they receive here.

## **NS Greenhouse Gas Reductions Can Save More Than \$200m/year**

### **GPI Plan Would Make Province First to Reach Climate Change Targets**

*The following notes are from GPI Atlantic's August 8 news conference at Dalhousie University, releasing the GPI Greenhouse Gas Accounts for Nova Scotia. The comments by Kyle McKenzie and Meinhard Doelle refer to facts contained in the GPI report. Principal researchers and report authors are Sally Walker Ph.D and Anne Monette MES.*

*Please [click here](#) for the full 230-page report, executive summary, and press stories. Click [here](#) for the full-page editorial on the GPI Greenhouse Gas Accounts that appeared in the Halifax Sunday Herald, 26 August, 2001.*

Nova Scotia could avoid more than \$200 million a year in energy costs and global climate change damages by cutting its greenhouse emissions, according to GPI Atlantic's new 230-page *GPI Greenhouse Gas Accounts for Nova Scotia*.

If the province acts on the report's recommendations, it could reduce its greenhouse gas emissions to 17% below 1995 levels by 2010 and become the first province in Canada to take decisive action on the most serious environmental challenge of the century – climate change.

Prepared by six researchers over more than two years, the GPI report describes cost-effective measures that would save between \$17 and \$31 in avoided energy costs and global climate change damages for every dollar invested. The GPI report accepts the 17% reduction target as a key indicator of “genuine progress” for the province. The target exceeds the Kyoto Accord target for Canada, recently confirmed at Bonn, which commits the country to reduce emissions to 6% below 1990 levels (the equivalent of 15% below 1995 levels.)

At a news conference August 8 at Dalhousie University, GPI Atlantic board member and former Clean Nova Scotia executive director, Meinhard Doelle, who has just returned from Bonn as a member of the Canadian delegation to the international climate change negotiations, hailed the GPI results as a model for all of Canada.

#### **“Greatest challenge since WWII”**

“Climate change has been referred to by the Canadian government as the greatest challenge facing us since World War II,” said Doelle. “At a time when the U.S. has pulled out of the Kyoto climate change agreement and is isolated, the world is looking for a model of innovation and responsibility.”

“Nova Scotia’s waste reduction success proves we can be leaders in reducing our environmental impact *and* benefit economically at the same time,” said Doelle. “Just as officials from around the world are coming to see how we have reduced our waste by 50%, they will look to us for help on how to deal with climate change.”

“But we’re not on target yet,” warned Doelle, pointing to GPI results that Nova Scotia’s greenhouse gas emissions are now 15% higher than they were in 1995, and that Nova Scotians emit an average of 22 tonnes of greenhouse gases per person each year, twice the West European average.

“To turn it around,” Doelle told the news conference, “we have to do what this report recommends – conserve energy and change the ways we travel and produce heat and power. The GPI study shows we *can* do all this, and still save money and improve the quality of our lives.”

Kyle McKenzie, of Dalhousie University’s School of Resource and Environmental Studies, and Atlantic Region Coordinator for the Canadian Climate Impacts and Adaptation Research Network, noted at the news conference that scientists agree that global warming has already begun, with potentially devastating consequence for human society.

“The 1990s was the warmest decade on record,” said McKenzie. “Snow cover has declined by 10% since the 1960s alone, mountain glaciers are retreating, and sea level is rising.”

### **Hurricanes and floods predicted for Nova Scotia**

McKenzie pointed out that a consensus of 2,000 scientists on the United Nations Intergovernmental Panel on Climate Change (IPCC) projects that temperatures will rise by up to 5.8°C this century and that greenhouse gas concentrations in the atmosphere will more than double from pre-industrial levels. These rates of increase are unprecedented in history.

“The scientists have identified the fossil fuels burned by power plants, cars, industry and homes as the most likely cause of global warming,” says McKenzie.

McKenzie noted that predicted impacts of climate change in Nova Scotia include an increase in extreme weather events, particularly hurricanes, floods and droughts, as well as adverse impacts on the province’s fisheries and agriculture industries. Low-lying regions around Yarmouth, the Bay of Fundy and Halifax Harbour have been identified by Environment Canada as particularly vulnerable to sea-level rise, higher tides, increases in storm intensity and frequency, and storm-surge flooding.

The Truro flood plain and Tantramar Marshes are also susceptible to flooding, and sections of the southern and eastern shores may experience erosion and increased coastal

instability. In other parts of Nova Scotia, saltwater infiltration of groundwater, threats to communication links and overtopping of dykes due to storm surges are also predicted, along with falling lake and groundwater levels.

The GPI researchers used a wide range of estimates by climate change economists to conclude that Nova Scotia's current annual greenhouse gas emissions will cause between \$760 million and \$21 billion worth of future global damages due to climate change, depending on which climate change and costing models are used.

Carbon dioxide has an atmospheric life of more than 100 years," says McKenzie, "so every tonne of greenhouse gases we emit now continues to cause damage for a very long time."

### **Cutting GHG emissions can save money**

By contrast, the GPI report cites successful examples of business investments in energy efficiency and conservation that have reduced greenhouse gas emissions at little cost and produced long-term savings that have helped companies' bottom line. Simple household energy conservation measures, like turning down the thermostat, washing clothes in cold water, and cleaning furnace filters regularly, could cut residential emissions by up to 50% and save households more than \$800 a year.

Cutting fossil fuel consumption also produces a range of other benefits, like reduced emissions of nitrogen oxides, sulphur oxides, volatile organic compounds, particulate matter and other air pollutants. Switching just 10% of freight from road to rail on the Halifax-Amherst corridor alone would save Nova Scotians more than \$10 million a year when the impacts of reduced pollution, accidents and road repair are included in the equation, says the GPI report.

Reducing single occupant auto commuting by 50% through carpooling or mass transit would reduce Nova Scotia's greenhouse gas emissions by 228 kilotonnes and save more than \$12 million a year in avoided damages, quite aside from savings to motorists through reduced fuel costs.

Sport utility vehicles have half the fuel efficiency of a mid-sized car and produce twice the greenhouse gas emissions. Sales of SUVs and light trucks are forecast to increase by 46% in Canada between 1997 and 2020. But taxing car sales according to fuel efficiency and GHG emissions, as in the UK, can make smaller cars cheaper and big ones more expensive, and encourage a switch to smaller cars.

Electricity generation accounts for 39% of Nova Scotia's total emissions and provides the best opportunity for large reductions in greenhouse gases. Currently Nova Scotia's thermal power stations are less than 40% efficient, so that 60% of fuel burned is discarded as 'waste' heat. District heating, increasingly widely used in Europe, turns this discarded 'waste' heat into space heating and hot water for residences. This combined

heat and power generation can sharply cut greenhouse gas emissions and save money, since less fuel is consumed to perform two tasks.

Investment in renewable energy sources, like the Western Valley Development Authority's exploration of wind energy for the Annapolis Valley, will also allow major reductions in greenhouse gas emissions. The GPI study concludes that Nova Scotia has the potential to become a market leader in the development of renewable energy sources, creating new business opportunities for the region.

As a transitional fuel, natural gas provides opportunities for the province to reduce its greenhouse gas emissions quickly. A \$24 million investment by Nova Scotia Power that enabled its Tufts Cove boilers to burn natural gas will avoid climate change and pollutant damage of at least \$16 million a year, or \$560 million over the life-span of the generating unit, according to GPI estimates.

A more ambitious conversion to "combined cycle" (gas fuel, steam injection) generating units could reduce greenhouse gas emissions from power generation by more than 50% compared to coal and 44% compared to oil. Most electricity in the province is currently produced by coal (80%) and oil (10%).

Considered together, the GPI study finds that a concerted effort to reduce greenhouse gas emissions in just three sectors that account for 70% of all emissions – electricity generation, land transportation, and residential energy use – can cut emissions by 4 million tonnes in 2010 compared to a "business as usual" scenario. With similar reductions in agriculture, waste, commercial and industrial emissions, Nova Scotia can cut emissions by 5.2 million tonnes by 2010.

The GPI report recommends shifting some of the tax burden from labour and wages to carbon and pollution as the most efficient and cost-effective way to implement greenhouse gas reductions in practice. The GPI Greenhouse Gas Accounts note that if tax shifting is revenue neutral, it imposes no excess burden on business, saves money, and aids economic development.

The key message in the GPI Greenhouse Gas accounts is that 'less' is sometimes 'better' in the Genuine Progress Index. *Reducing* our greenhouse gas emissions improves long-term wellbeing and prosperity and makes the GPI go up.

The Nova Scotia Greenhouse Gas Accounts are the fourth in a series of natural resource accounts and the tenth major data release for the Nova Scotia Genuine Progress Index that will consist of 22 social, economic and environmental components. The report follows the release of a report on Income Distribution in July, and will be followed in the coming weeks by the release of the Fisheries, Forests, and Soils renewable natural resource accounts.

## **Closing Note to Friends of GPI: You Can Support What You Value**

The way we measure progress can significantly shift the policy agenda from its present purely economic focus to a broader view of well-being and quality of life that reflects our shared aspirations as human beings. If we are to shift course from some of the destructive patterns we currently embrace and to plan a better future for our children, we can begin by counting and valuing what really matters.

As a non-profit group, GPI Atlantic depends on donations and funding support. Most of the GPI research, data collection and analysis, and community development work is provided on a voluntary basis. Your financial support will enable our staff to devote more time and effort to their GPI work.

Donations to GPI Atlantic (Box 489, RR#1, Tantallon, N.S. B0J 3J0, Canada) will be gratefully acknowledged. Please share this issue of *GPI News* with your friends and associates, and encourage subscriptions and memberships (\$95 individual and non-profit, \$190 corporate and government, \$45 student, plus applicable taxes).

Members receive future issues of *GPI News*, a 25% discount on all GPI reports and publications, four issues of *Reality Check: The Canadian Review of Wellbeing* (to be published later this year), and a free copy of GPI Atlantic's *Ecological Footprint* analysis (100 pages).

Thank you for your support and your interest.

*Ronald Colman, Ph.D*  
*Director, GPI Atlantic*

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Please visit our web site at [www.gpiatlantic.org](http://www.gpiatlantic.org) and stay in touch with our work. The web site provides:

- free on-line articles, press releases and media clippings on the GPI work;
- a summary of current activities and presentations;
- publication abstracts and ordering information;
- an update of progress on the community GPI;
- a list of our board of directors and researchers;
- membership information.

***Please note that GPI Atlantic has a new phone number: 902-489-7007, and a new office at 126 Portland Street, Dartmouth. Mailing address remains the same: Box 489, RR#1, Tantallon, NS B0J 3J0.***