

**Bill No. 146: Environmental Goals and Sustainable Prosperity Act**

**Genuine Progress Index (GPI) Atlantic  
Written submission**

Presentation by Clare Levin  
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5:30 pm, Wednesday, April 4, 2007

My name is Clare Levin, and I am the Managing Director of a non-profit research organization based here in Nova Scotia called Genuine Progress Index (GPI) Atlantic. GPI Atlantic is committed to the development of a Genuine Progress Index for Nova Scotia – a new measure of sustainability, wellbeing and quality of life. We are also involved in a national initiative, called the Canadian Index of Wellbeing, to see these types of indicators incorporated across the country, and we consult on the development of indicators and measures of progress internationally as well.

I would like to begin by congratulating the Department of Environment and Labour and the Minister for bringing forward this Act. GPI Atlantic has always had at the foundation of its work the view that Nova Scotia can indeed be a leader in building and demonstrating sustainable prosperity, and that we have the potential here much more so than in other parts of the country to effect genuine change and create a sustainable future. It is very gratifying to see the government recognizing this as well, and bringing forward an Act intended to move Nova Scotia in the right direction on these issues.

While we are very pleased with the spirit of the Act, GPI Atlantic has a number of recommendations and amendments to suggest based on our extensive research on sustainability indicators in Nova Scotia over the last ten years. The Act does set targets in a number of areas in Section 4 (2). However, it should be made clear within the language of the Act that these targets represent minimum standards, and that our actual anticipated goals should far exceed what has been set out. I suggest that, in order to prevent delay of the passage of this Bill, such an omnibus statement be inserted as an amendment to the Bill, rather than going back and revising each specific target in detail at this stage.

GPI Atlantic's research clearly indicates the kinds of realistic and achievable targets that can and should be developed. We have done extensive reporting on best practices and attainable targets set in other jurisdictions on a number of the issues outlined in the Act, and this work can be used as the basis for setting more ambitious, yet realizable, targets that will be truly visionary, and will help Nova Scotia "achieve international recognition for having one of the cleanest and most sustainable environments in the world by 2020," as declared in the Act.

I would like to give you two specific examples from our work to date – on the particular issues of greenhouse gas emissions and renewable energy – just to demonstrate what is possible and needed to vault this province into a position of genuine leadership in this field. In our Greenhouse Gas Accounts, GPI Atlantic recommended that the targets set out in the Kyoto Protocol (a 6% reduction in emissions below 1990 levels) be considered a minimum target for Nova Scotia. Because of the potentially drastic negative consequences of climate change and the associated high costs, our GHG Accounts recommend aiming for a higher target, as outlined by the David Suzuki Foundation, of a 50% reduction from 1995 levels by 2030.

Indeed, since our GPI GHG Accounts were published in 2001, further scientific research and evidence has emerged, supporting the need for even swifter action on this issue, and for even greater reductions in emissions. The 2006 report prepared by Sir Nicholas Stern, former Chief Economist of the World Bank, for the UK Government, found that climate change, if left un-checked, could result in a 20% reduction in global GDP. In a recent book titled *Heat: how to stop the planet burning*, journalist and academic George Monbiot makes the case for no less than a 90% reduction in emissions by 2030. The UK for example, is introducing a new Bill that will set targets of a 26-32% reduction by 2020 and a 60% reduction by 2050, from 1990 levels. GPI Atlantic would like to see the Province set similar targets for reductions in GHG emissions that will show true leadership in this province on meeting the enormous challenge of climate change.

In the case of renewable energy, the Act's target of 18.5% by 2013 is also very modest, and does not provide the leadership that the Act sets out to achieve. In our GPI Atlantic Energy Accounts, we examined best practices on renewable energy and I'd like to mention just a few examples of actual, achievable targets in this field. In Europe, Germany has set targets of renewable energy composing 35% of electricity generation and 25% of transportation energy by 2020. In Denmark, renewable electricity generation from wind was already at 18.5% in 2003, and the Danes intend to increase this percentage rapidly to 29% of electricity production. In addition, the European Union as a whole has set a target of generating 22% of electricity from renewables by 2010.

Even right here in Atlantic Canada, we have examples of extraordinary and inspiring leadership on the development of renewable energy. Prince Edward Island has set a target of having 100% of its electricity produced from renewables by 2015. Again, Nova Scotia should look to these examples and best practices as models for our own targets and goals in order to become an internationally recognized leader on sustainability.

These are just two examples – on GHG emissions and renewable energy – of how the Act's very well-intended but currently modest objectives can be strengthened in practice. If time allowed, GPI Atlantic would happily extend this analysis to the other areas covered by the Act. The good news, however, is that there are many highly cost-effective ways to improve our sustainability performance, and to reach ambitious targets. Abundant evidence in our GPI Atlantic research to date has shown that taking action in areas such as emissions reductions, energy efficiency, improving air and water



quality, and conserving resources, not only helps the environment, but can also significantly improve the bottom line for businesses, and create jobs for Nova Scotians.

Let me go back to the example of Germany for a moment. Between 1995 and 2000, Germany created over 25,000 jobs in the wind energy sector. Germany is a leader in wind technology and exports both equipment and expertise around the world. Nova Scotia can follow this example by encouraging the further development of environmental products and technologies. This will not only make Nova Scotia more sustainable, but will also create jobs, improve our economic performance, and provide export opportunities for Nova Scotia around the world, as has already happened with our leading-edge solid waste management system.

In addition to setting more ambitious targets, further clarification and precision are needed for some of the targets set out in the Act. For example, Section 4 (2) (u) specifies that “the Province will adopt strategies to ensure the sustainability of the Province’s natural capital in the areas of forestry, mining, parks and biodiversity by the year 2010”, but the Act does not define what sustainability in this context means, and it does not specify the sustainable practices required to reach this laudable goal.

I encourage the Government to adopt a strong definition of sustainability in this Act, where qualitative changes in our natural capital are assessed in addition to quantitative changes. Again, GPI Atlantic’s research provides some good examples. Based on the evidence presented in our GPI Forest Accounts, published in 2001, for example, we noted the vital importance of qualitative indicators of forest health, including age and species diversity. The evidence presented demonstrated the critical need for an increase in unevenly aged forest management and selection harvesting, in conjunction with a reduction in clear-cutting, and a shift to value-added production using forest products. These recommendations would ensure that a single-aged, single-species plantation is not considered equivalent (as simple fibre counts are liable to do) to an old growth or mixed age and species forest, which does a better job at providing key ecosystem services such as watershed protection, climate regulation, protection of biodiversity, prevention of soil erosion, provision of habitat for a wide range of bird and animal species, and resilience against disease and infestation.

A strong definition of sustainability is essential in order to ensure the long-term sustainability of Nova Scotia’s natural capital, and to achieve the maximum economic benefit from the natural resources we do use.

I also want to comment on Section 4 (2) (b) which outlines the commitment to adopting vehicle emissions standards for new motor vehicles comparable to those in California. While this is an excellent target, it is essential that any discussion of transportation goals also address other issues of sustainable transportation, such as the provision of mass transit and active transportation options. GPI Atlantic’s recently released Transportation Accounts examines these issues in detail and includes analysis of 20 key indicators of transportation sustainability, including GHG and pollutant emissions, congestion, crash costs, and accessibility.

GPI Atlantic also strongly recommends that the critical concept of the “precautionary principle” be included in Bill 146, just as it currently is in the Nova Scotia Environment Act – Section 2 (b) (ii). We would also like to see the “*mays*” turned into “*shalls*”, and we’d like to see adequate funding put in place to achieve not only the goals set out in the Bill, but the more ambitious ones that are certainly eminently achievable.

I would like to make two final points regarding this Bill. The first is that GPI Atlantic recommends that the existing references to “economic growth” [Sections 3 (2) (b) and 4 (1) (b)] be amended to “economic development”. As economist Herman Daly at the University of Maryland notes, development refers to qualitative improvement, while growth simply refers to quantitative increase (which may or may not lead to improvement). It is certainly the former we want in Nova Scotia. “Economic development” is a more accurate description of the economic prosperity and qualitative improvement in wellbeing that we seek than simple quantitative “growth” in the size of the economy, which can be spurred as much by increases in crime, pollution, sickness, and natural disasters as by improvements in wellbeing. We regard this simple change of wording as essential to align the language properly with the Bill’s noble objectives.

And finally, as an organization that is dedicated to the measurement of progress, and to the development of and reporting on indicators of sustainability, GPI Atlantic recommends amending this Act to include a more formal and comprehensive mechanism for measuring and reporting on progress towards sustainable prosperity. This should include the development of a robust and holistic set of indicators, such as those we have developed over the last decade for the Nova Scotia GPI. Indeed, at this point, after more than ten years of work in this area, no province in Canada has a more complete set of sustainability indicators than Nova Scotia. It would be a pity not to use them as a way of measuring progress towards the noble goals set out in Bill 146. Without a full set of indicators examining all aspects of sustainability including environmental, social, and economic issues, in addition to the more specific reporting on the particular targets set out in the Bill, the government will not have the evidence and information needed to point to causal factors as well as strengths and weaknesses in current practices, or to make the policy decisions required to take us in the right direction towards achieving these targets and to becoming a recognized leader in this field. In my written submission, below, I have included a recommended amendment on this vital measurement issue drawn from Manitoba’s Sustainable Development Act.

Over the last ten years, GPI Atlantic has conducted and amassed a significant set of research and data on sustainability indicators for Nova Scotia – this extensive data set is unique in Canada. These reports and recommendations should be used to develop targets and to identify key indicators and a reporting framework for this bill. With the Nova Scotia GPI as its foundation, there is no doubt that this province has all that it takes to become a leader in socially, environmentally, and economically responsible development. We are delighted to see the Province make this important commitment.



Thank You.

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## **PROVINCIAL SUSTAINABILITY INDICATORS AND REPORTING**

### **Provincial sustainability indicators established**

The minister shall cause sustainability indicators to be established within one year after the coming into force of this Act. The minister shall

- (a) prepare a draft set of indicators;
- (b) consult with the public and with experts regarding the proposed indicators; and
- (c) prepare and submit a report to the minister respecting the proposed indicators and any related issues, setting out any recommendations it considers appropriate.

### **Provincial sustainability report required**

The minister shall cause a Provincial Sustainability Report to be prepared based on the sustainability indicators within one year after their establishment and thereafter within one year after the release of data from the national census of the Government of Canada, or at such other times as may be decided by the minister.

### **Report to be tabled**

The minister shall lay a copy of each Provincial Sustainability Report prepared under this section before the Legislative Assembly

- (a) within 15 days of the completion of the Report if the Legislative Assembly is in session; or
- (b) if the Legislative Assembly is not in session, within 15 days after the beginning of the next session.