

MONTRÉAL CARBON PLEDGE

REPORT ON BÂTIRENTE INVESTMENT PORTFOLIOS CARBON FOOTPRINT



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- 1. Preamble: Climate Emergency—The duty to do more
- 2. Bâtirente
- 3. The Montréal Carbon Pledge (MCP)
- 4. Principles for Responsible Investment (PRI)
- 5. Financial risks from climate change
- 6. Bâtirente's shareholder engagement and carbon footprint

1. PREAMBLE: CLIMATE EMERGENCY-THE DUTY TO DO MORE

The severity of the climate change predicted by science, if no action or insufficient action is taken, combined with the duty of all institutional investors to prevent the manifestation of the material risks that will affect their capacity to provide their beneficiaries with the long-term returns they need for a successful retirement, require us to notch up our efforts to mitigate climate risk.

This is why Bâtirente signed the *Montréal Carbon Pledge* (MCP) (Engagement de Montréal sur le carbone) upon its inception in September 2014. The now proven success of this PRI initiative sends to the governments of the world currently meeting at the Paris COP21 Conference a clear message that global institutional finance is now mature enough to take action and join the historical fight against climate change.

Up to date, over 120 investment institutions totaling assets under management worth over US\$10 trillion have subscribed to the Pledge.

The message also shows markets that institutional investors are taking a turn that will lead them to reassess the way in which they allocate their capital. Corporate actors must also take cognizance of the risk of seeing their financing sources progressively running dry if they do not deliver what is expected of them.

As management science tells us: "If you can measure it, you can manage it." Thus, by measuring the carbon footprint of its portfolios, Bâtirente is completing the first step in the process that will eventually allow it to manage its share of climate change factors. Furthermore, committing to the annual disclosure of the carbon footprint of its portfolios means that Bâtirente, like the many other signatories to the MCP, is bound to explain how its footprint evolves in the future.

2. BÂTIRENTE

For over 30 years, Bâtirente has offered members of labour unions affiliated to the CSN a complete high performance retirement system based on the defined contributions model. Bâtirente develops and offers accumulation plans to its active members and retirement income plans to its retired members, as well as an array of retirement income support and planning services. The plans are rolled out on an investment platform comprising eleven funds, including five diversified funds, and Trajectory, its turnkey investment strategy.

3. THE MONTRÉAL CARBON PLEDGE OR L'ENGAGEMENT DE MONTRÉAL SUR LE CARBONE

The Montréal Carbon Pledge is an initiative launched at the September 2014 Montréal PRI in Person Conference. Institutional investors who subscribe to the Pledge commit to measure the carbon footprint of their equity portfolios.

Measuring their carbon footprint helps investors to understand, quantify and manage the impacts of climate change as well as the risks and opportunities from climate change.

From the text of the Pledge:

We commit, as a first step, to measure and disclose by December 1, 2015, and annually thereafter, the carbon footprint of our investments, starting with our equity portfolios, with the aim of developing an engagement strategy or setting reduction targets.

4. PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI)

The Principles for Responsible Investment (PRI) were established by a group of international institutional investors to underscore the importance of environmental, social and corporate governance issues in investment practices.

The process was sponsored by the Secretary General of the United Nations. Bâtirente was one of the first twenty-four institutional investors to sign the Principles for Responsible Investment at the launching ceremony held at the New York Stock Exchange on April 27, 2006.

The Chief Executive Officer of Bâtirente, Daniel Simard, has been a member of the PRI board of directors since the inception of the association in 2006 (his term ends in 2015).

5. FINANCIAL RISKS FROM CLIMATE CHANGE

What are the financial risks arising from climate change for investors?

Climate change is creating unprecedented risks for humanity. Its environmental and social repercussions could significantly reduce expected long term investment returns, thus the importance for institutional investors not only to understand the nature of these risks but to contribute to keeping warming below the agreed upon 2 degrees Celsius.

Actually, we need to recall that CO_2 concentration and average atmospheric temperature have increased with a new speed in the recent geological history of planet Earth, so much so that temperatures could cross the deemed dangerous 2°C increase threshold. The ecological and economic consequences of this imbalance are certain, but all agree that adaptation costs will be significant, even faced with the most optimistic scenarios. Should warming rise 6°C by 2100, net asset value losses reaching 10 percent could result according to a study conducted by The Economist and Vivid Economics based on recognising the value at risk from climate change and various scenarios (*The Cost of Inaction*, 2015).¹

In the shorter term, climate change could reduce investment income in various ways according to economic sector and asset category. These apprehensions are supported by Mercer's published work entitled "Investing in a Time of Climate Change"².

Four risk factors are evoked to explain the headwinds that institutional investors will be facing as a consequence of global warming: the public policies to fight climate change; the necessary technological innovations representing new investment opportunities in growing markets; the increasingly restricted access to natural resources; and finally, the physical impacts of climate change. Actually, the energy transition has already started. The speed at which the transition will unfold is uncertain but we can foresee that the hydrocarbon sector (coal, oil and gas) could be entering a slow but unavoidable decline.

Bâtirente deems it part of its duty to its members to measure its exposure to the carbon risk and, if needed, to consider the various ways in which to minimize these risks, up to and including relying on new investment opportunities. Furthermore, its responsible investment approach also seeks to align practices with the pursuit of the collective goals adopted by the international community to meet its challenges.

In short, based on its conviction that it is essential to the financial interest of its members, Bâtirente wishes to make a fair contribution to international efforts to prevent the planet from reaching a temperature that is deemed dangerous.

^{1. &}lt;a href="http://www.economistinsights.com/sites/default/files/The%20cost%20of%20inaction.pdf">http://www.economistinsights.com/sites/default/files/The%20cost%20of%20inaction.pdf

^{2.} http://www.mercer.com/insights/focus/invest-in-climate-change-study-2015.htm

6. BÂTIRENTE'S SHAREHOLDER ENGAGEMENT AND CARBON FOOTPRINT

Over a decade of climate shareholder engagement

Since the introduction of its responsible investment programme in 2005, Bâtirente has always placed high importance on climate issues among the themes that motivated its representations with the Canadian businesses included in its portfolios.

In addition to asking them to publish sustainable development reports, Bâtirente requested many companies included in its portfolios to:

- Disclose their greenhouse gas (GHG) emissions within the framework of the Carbon Disclosure Project (CDP) or adopt GHG emission reduction targets
- Report on their climate risk exposure and on their strategy to mitigate its impact
- Assess the profitability of their investment projects should a carbon price or other regulatory constraints aimed at reducing emissions be introduced
- Disclose their government lobbying activities against greenhouse gas emission reduction policies, including those of their industry associations
- Adopt the Forest Stewardship Council's (FSC) sustainable forest management standard or request suppliers in their supply chain to adopt it

Many of the targeted corporations agreed to adopt the recommended practices or to use them as an inspiration for their own methods.

In the framework of collective institutional investor initiatives, Bâtirente also frequently approached local and other political authorities to underscore the importance of ambitious and committed public policies to stop global warming, including a regulatory framework for carbon.

Aware that forests are powerful earth atmosphere carbon dioxide sequestration tools, Bâtirente is actively involved with a number of collective initiatives to fight deforestation, including the preservation of the Boreal Forest under the aegis of the Boreal Leadership Council (Conseil Principal de la Forêt Boréale).

BÂTIRENTE'S EQUITY PORTFOLIOS CARBON FOOTPRINT

Bâtirente measured the carbon footprint of its 13 equity portfolios as of December 31, 2014. For each of the companies directly held in our equity portfolios or held through external funds, we calculated the greenhouse gas emissions (GHG expressed as tons of dioxide equivalent or t CO_2) attributable to our share of the company's stocks.

The measured emissions include direct or type 1 emissions, with sources within the company's perimeter (e.g.: transformation process, facilities, plants, etc.) and indirect or type 2 emissions (e.g.: emissions generated by third-parties to produce the electrical power used by the company). Type 3 emissions were not measured.

Emissions were colligated by the South Pole Group, a carbon data specialized firm. A large number of listed enterprises voluntarily disclose their audited or non-audited GHG emissions. However, a not negligible number of these enterprises do not publish this data. To estimate them, South Pole extrapolates based on sectoral multipliers applied to financial data such as sales or number of employees, thus attributing an approximate value to the unreported emissions of these corporations.

To compare the footprint of portfolios, we normalized annual emissions based on capital value. The carbon intensity of our portfolios is thus measured by units of invested CA\$1 million.

Intensity is calculated as follows:

Footprint attributable to portfolio: \sum [Company total emissions $\times \frac{Fair\ market\ value\ of\ shares\ held}{Market\ capitalization}$]

We calculated average portfolio intensity by market and compared them to their benchmark. We drew the following conclusions from the analysis:

- The carbon intensity of all corporate shares directly or indirectly held by Bâtirente Funds represents $69.9 \text{ t CO}_2/\$1$ million or 32 percent less than the $102.2 \text{ t CO}_2/\$1$ million intensity that the composite index, weighted according to allocated assets, would reach
- However, the carbon intensity of our Canadian equity portfolios is higher than the intensity of the composite S&P/TSX 60 and S&P/TSX small cap index, weighted according to allocated assets
- Furthermore, with regard to mainly non-Canadian market portfolios, the carbon intensity and the footprint of Bâtirente Funds reached 63.3 percent of those of the composite index (37.0 vs. 100.8 t CO₂/\$1million)
- The larger part of portfolio footprints is often attributable to a limited number of companies

The utilities sector (often electricity producers) and the oil and gas sector are generally
the largest contributors of emissions in our portfolios, remembering that in all cases,
only type 1 and 2 emissions were taken into account.

CORPORATE EQUITY	INTENSITY (t CO₂/\$1M)	INDEX INTENSITY (t CO ₂ /\$1M)
Canadian equity	115	104
Global equity	58	131
Small cap global equity	70	135
Listed global real estate	14	14
TOTAL	69.85	102.21

Despite the challenge represented by the quality of available data, Bâtirente believes that measuring carbon footprint is an essential tool to assess its climate change risk exposure. As more investors use these measures, we can predict that more enterprises will understand that it is in their interest to measure their own emissions instead of letting them be estimated by third parties.

We must nonetheless recognize that measuring carbon footprints does not reveal everything about investor practices. Actually, to get an overall perspective, we also need to measure any positive contributions made by enterprises to GHG reduction or to their provision of any other environmental service.

The first step: hiring a sustainable growth equity manager

In November 2015, conscious of the necessity to immediately start deploying ambitious solutions to accelerate the transition to a carbon sober economy, Bâtirente granted Toronto-based AGF management firm the mandate to manage on its behalf a global equity portfolio based on sustainable growth.

It is a high growth environmental portfolio with no participation in fossil fuel that will bring exposure to environmental solutions in the areas of water management and waste water treatment, energy and electricity technologies, health and safety, healthy lifestyles, waste management and pollution control.

Bâtirente was seeking a growth focused mandate to complete the approaches of its other global equity managers in a diversification perspective, and it is confident that over the coming years, rising interest in sustainable development in the institutional arena will favour the industry sectors prioritized by this management team.

In addition, adopting this strategy, to which over \$7 million were recently allocated, shows that Bâtirente is ready to walk the talk by allocating capital in a way that positively contributes to fighting climate change and to sustainable development, by favouring the industries that will flourish in a carbon sober economy without jeopardizing the global diversification of its global equity fund.

Investing in innovative solutions to fight climate change, to favour industries that benefit from a carbon sober economy amounts to providing a healthy diversification for a global equity portfolio.

Next step: mobilizing our portfolio managers

Like many asset holders in Québec and elsewhere in the world, Bâtirente delegates to many management firms the mandate to build the investment portfolios that help its members to accrue their retirement capital.

Bâtirente is thus counting on eight management firms for its Canadian equity, global equity and real estate investment portfolios, all capitalization sizes confounded. It follows that managing the carbon risk will require the mobilization of our management firms, who will be directly responsible for incorporating this issue to their management process.

We met all our management firms to inform them of our assessment of the climate issue, and of the carbon measure of the portfolio each one is managing for us. We discussed the means that could be used to progressively accomplish a reduction both in their carbon risk exposure and in their contribution to climate risks.

The suggestions submitted to them included:

- Production of periodic reports on the measurement of their strategies' GHG emissions
- Signature of the Montréal Carbon Pledge and of the Principles on Responsible Investment
- Substitution of lower carbon intensity securities for higher carbon intensity securities when they are available and meet the other investment criteria
- Introduction of a "low carbon" market index in parallel to the traditional benchmark
- Increased consideration given to securities of companies whose products and services
 help to reduce emissions (e.g.: renewable energy, energy efficiency technologies, etc.)
 and recognition of "positive" carbon footprints

The dialogue has just started and will continue over the next few months. We will further comment on it in our 2015 carbon footprint disclosure report.

