

## Economic growth: in search of a new momentum

**First component: determining the causes of the current quasi-stagnation**

**Second component: identify new levers of growth, here and elsewhere, in order to act more sustainably**

Economic growth around the world continues to be sluggish, and the repercussions of that lack of strength are increasingly a subject of concern. The instability and uncertainty that are sapping confidence are also lessening the impact of the current economic policies. We are no longer witnessing a synchronized recovery of economies. An atypical crisis has been followed by an atypical recovery and an atypical expansion phase. We need to recognize that the reference points that economists and decision-makers were used to, are no longer there. This study presents, first of all, a retrospective of the economic conditions that have prevailed over the past 15 years. It shows that accelerating globalization, the deleveraging crisis and the aging population around the world have swept away the old milestones. Therefore, we must find new paths towards growth.

Part II takes a broader look at the conditions that promote growth and development. Without denying the usefulness of GDP, economic growth can be measured using a larger number of parameters, with a long-term view. Reforms are needed in order for economies to regain some degree of robustness, and to promote sustainable development and continuity. This Economic Viewpoint proposes a more inclusive view of the parameters that influence growth in the long term.

### FIRST COMPONENT

#### 1. 1999-2015: MULTIPLE CRISES AND LOSS OF CONFIDENCE

##### 1.1 Outlooks for 2016-2017: economic growth is limp

Neither the global economy nor the advanced economies are in recession. However, the 2008-2009 crisis was not followed by the upwards phase of a new growth cycle that generally typifies the end of a recession. Considering the scope of the last crisis, this limpness is worrisome. According to the World Bank, the annual growth rate of the global economy was -0.3% in 2009, and rose to 5.3% in 2010. Since that rebound, global growth has collapsed, and has been stagnating at around 3.3%.

The first reason for this weakness may be found in China, which in 2016 will post the sixth straight decline in its annual rate of growth, although it is still above 6%. Such an erosion of average growth in China has a definite impact on global growth. This effect is felt all the more strongly, given that in 2014 the weight of China's GDP surpassed that of the United States (based on purchasing power parity - PPP) and that its influence on the economy will keep increasing over the next decade.<sup>1</sup>

Most observers agree on the necessity of giving a boost to national economies, in particular by means of policies that are "growth-friendly." This finding applies to the advanced economies in particular.

<sup>1</sup> GDP according to purchasing power parity. Source: *The growing weight of China and the emerging economies*, Desjardins Economic Studies, January 19, 2016, <https://www.desjardins.com/ressources/pdf/pv160119-e.pdf?resVer=1453219622000>

**Table 1**  
**World GDP growth (adjusted for PPP\*) and inflation rate**

Country or zone	Weight** (%)	Real GDP growth (%)			Inflation rate (%)		
		2015	2016f	2017f	2015	2016f	2017f
<b>Advanced economies</b>	<b>39.9</b>	<b>2.1</b>	<b>1.5</b>	<b>1.8</b>	<b>0.3</b>	<b>0.8</b>	<b>1.6</b>
United States	16.1	2.6	1.6	2.4	0.1	1.3	2.1
Canada	1.4	1.1	1.2	1.9	1.1	1.5	1.9
Quebec	0.3	1.1	1.3	1.6	1.1	0.7	1.4
Ontario	0.5	2.6	2.6	2.3	1.2	1.8	2.1
Japan	4.3	0.6	0.6	0.6	0.8	-0.2	0.4
United Kingdom	2.3	2.2	1.8	0.9	0.0	0.7	2.0
Euro zone	12.1	1.9	1.5	1.3	0.0	0.2	1.3
Germany	3.4	1.5	1.7	1.3	0.2	0.4	1.5
France	2.4	1.2	1.2	1.2	0.0	0.2	1.2
Italy	2.0	0.6	0.7	0.9	0.0	-0.1	0.8
Other countries	4.1	1.3	1.4	1.4	0.5	0.8	1.2
Australia	1.0	2.4	3.0	3.0	1.5	1.3	2.2
<b>Emerging and developing economies</b>	<b>60.1</b>	<b>3.9</b>	<b>3.8</b>	<b>4.3</b>	<b>6.5</b>	<b>12.0</b>	<b>8.7</b>
North Asia	24.6	6.9	6.7	6.4	1.9	2.4	2.4
China	16.6	6.9	6.6	6.2	1.4	2.0	1.9
India	6.8	7.2	7.6	7.5	4.9	5.2	5.1
South Asia	5.1	4.4	4.5	4.4	2.9	2.0	3.0
Latin America	7.1	-0.8	-0.9	1.7	21.3	59.8	40.4
Mexico	2.0	2.5	2.1	2.4	2.7	3.2	3.4
Brazil	3.0	-3.9	-3.2	1.1	9.0	7.3	5.3
Eastern Europe	7.6	-0.3	1.3	2.2	9.8	5.1	4.8
Russia	3.5	-3.7	-0.6	1.2	15.6	6.3	5.4
Other countries	15.6	3.2	2.2	2.6	5.5	7.7	7.1
South Africa	0.6	1.2	0.4	1.3	4.6	6.4	5.9
<b>World</b>	<b>100.0</b>	<b>3.2</b>	<b>2.9</b>	<b>3.3</b>	<b>2.9</b>	<b>5.6</b>	<b>4.7</b>

f: forecasts; \* Purchasing power parities: Exchange rate that equates the costs of a broad basket of goods and services across countries; \*\* 2014.  
 Sources: World Bank, Consensus Forecasts and Desjardins, Economic Studies

That said, the deceleration of the Chinese economy is not the only reason behind lacklustre global outlooks:

- In the United States, real GDP growth will be limited to 1.6% in 2016 and 2.4% in 2017. But the surge in U.S. consumption is encouraging.
- Europe is not enjoying the promised benefits of a single currency, is hanging onto its only source of robustness (Germany), and is struggling to allay business concerns about the difficulties of European integration.
- Japan is recovering to some degree, but since 2009 its growth has been flirting with rates of zero.
- The United Kingdom's decision to exit the European Union (Brexit) has initially shaken the markets, but the turbulence will not end there: we must expect a good deal of uncertainty still to come.
- Russia and Brazil, two emerging economic powerhouses, are still mired in recession. Growth will soon make a comeback.

- The inflation trends in the advanced countries are still generally weak, and while deflation is not a concern for all the central banks, the risk of a generalized price slump remains a subject of debate.

In this context, efforts to achieve growth by means of expansionist budgetary policies are being thwarted by the limits imposed by high levels of public debt. We must also take into account the fact that the effects of fiscal leverage are limited. In addition, monetary policy really has no room left with which to encourage investment or to avoid risks of deflation. Finally, many businesses have failed to wake up and confront the new challenges of competition and technology. They need to catch up on their investments. They are also facing financing problems and they must cope with serious issues relating to human capital (shortages of highly skilled manpower and various rigid constraints of the labour market). All this leaves doubt as to the ability of economies to transform and enjoy new expansion



## 1.2 A brief economic history of the new millennium

On December 31, 1999, the transition to a new millennium was expected to trigger a huge computer glitch. If we all gave a sigh of relief in the morning of 2000, it was because we never suspected the multiple upheavals that have disturbed the global economic and financial balance since then.

### Information and communications technology (ICT)

The speculative bubble of the end of the 1990s and beginning of the 2000s, and the bursting thereof, halted a good many economies in their tracks. But today, the technological shift caused by ICT is still leading to major transformations of business models. This manifests itself, in particular, in the unprecedented acceleration in the circulation of information. It has transformed the way financial markets operate, created possibilities of a new industrial revolution, and profoundly changed methods of consumption.

### Conflicts, protectionism and the costs of insecurity

Geopolitical issues seem to be gaining importance since the beginning of the new millennium, with consequences—difficult to measure, but clearly evident—on economic stability. Beyond the direct impact on U.S. GDP and the triggering of a long period of monetary easing, the events of September 2001 in particular have awakened protectionist tendencies, which have hit Canadian exporters especially hard (e.g. trade disputes, the Buy American Act and increased security constraints at the border).

### The 2008–2009 crisis, and failings of the financial system

Highly accommodative monetary policies during the first half of the 2000 decade, deregulation and some embezzlement situations contributed to the creation of a real estate bubble in the United States, the subprime crisis and the financial meltdown in 2008–2009. This led to a deep recession in many economies. The severe disruptions of the interbank network contributed to credit tightening, impeding business investment that was already held in check by uncertain growth outlooks.

### The rise of China and the reorganization of production centres

The 2000s decade was also characterized by exceptional growth in the emerging economies. China in particular comes to mind, which was granted membership in the World Trade Organization in 2001. The concentration of global capital flows towards the Middle Kingdom, which enjoyed extremely low production costs, intensified the deindustrialization of the advanced economies.

### European construction and instability

The serious concerns generated by the state of affairs in Greece, Spain, Portugal and Italy caused confidence, and the European economy, to plummet. These problems also required costly support plans and sparked protests about a lack of political leadership in Europe. Considering that a cohesive and financially stable European economy is necessary to a balanced global economy, much remains to be done in order for it to reach its full potential.

### Environmental urgency

It was during the 2000s that sustainable development principles were the subject of the greatest experimentation, both in terms of public policy and within businesses. The environmental impact of human activity demands major investments, which in turn depend on constant economic growth. All this creates a dilemma between economic imperatives and environmental imperatives.

To sum up, since the beginning of the 2000s we have seen:

- The bursting of several bubbles, casting doubt on the reliability of the global financial system.
- Historically low interest rates, the raising of which is all the more delicate because the monetary easing has been in effect over a long period of time.
- A very fast reorganization of trade and capital flows, destabilizing the very structure of the advanced economies.
- An environmental, demographic and technological turning point that requires considerable investment.
- To some extent, an opening of global markets, with the governance of that process being faulty, or insufficient.

So, in light of the events discussed above, the limpness of economic growth is worrisome, but not very surprising. It stems from far too many sources of instability and too little confidence. Because the globalization of the economy and of information has the effect of dispersing productivity gains and value-added creation around the world, we can no longer look forward to fast, short-term expansion as was seen in the past.

The economic policies or “rescue operations” that have been put in place since the beginning of the 2000s to support the real economy have been colossal in scope. Those interventions have been successful in containing the damage that otherwise could have been more severe, and escaping a generalized tip-over into deflation. However, despite numerous political actions designed to provide economic support, the real GDP of the western economies has not found its way back to a path of sustained growth. That is why calls for structural reforms are now proliferating. The time has come to transform economies in the direction of greater stability and predictability.

The next step of the analysis calls for some quick consideration about the measurement of growth and the creation of wealth from a long-term perspective.

## 2. GDP IS STILL A KEY INDICATOR FOR IDENTIFYING SOURCES OF GROWTH

Economic growth is a statistical concept that is measured based on changes in real GDP. It is made up of consumer spending, business investment, government expenditures and net exports (exports minus imports). GDP serves as the basis for determining economic potential<sup>2</sup>, the level of output of an economy that is reached when its production capacity is put to full use. Whether or not the full potential is reached influences the use of two major tools for managing the economy: monetary policy and budget policy. The quality of those policies depends on a good understanding of the causes that underly variances between economic performance, and full potential.

### 2.1 In search of economic efficiency to explain, understand and measure growth

Having met for the first time in 1968 and published a famous report in 1972<sup>3</sup>, the Club of Rome has established the basis of the sustainable development imperative. Its principles are supported by a fundamental reality of economic analysis: the scarcity of resources and the necessity of using them in an optimal and responsible fashion. While it received much criticism, the report nevertheless did leave a legacy. The Club of Rome inspired the concept of “zero growth,” which in turn stemmed from another economic law: that of the diminishing return on investment and the inevitable convergence of economies towards a stationary<sup>4</sup> condition. Today, with the accelerated globalization of the economy and the increasing weight of the emerging countries, debates on maintaining growth over the long term are once again on the agenda.

Sustainable long-term growth does not rule out the necessity of creating new wealth in the short term. Why is that?

- First, because the very functioning of the economy and of investment are tied to growth.
- Second, because the operation of government depends on the revenues derived from economic growth, without which it cannot produce new goods or public services, nor significantly reduce social inequalities, nor invest more in the multiple infrastructures that are necessary for the economy to function effectively.
- Finally, because the risks of negative growth would jeopardize the substantial investments that are needed to transform the economy and society.

So, building an economy with a view to long-term growth and sustainable development involves prospects of profit and growth. Here, the concept of quality growth is key. We must seek it out in the benefits of environmental technologies and social innovation, as well as in the infrastructures that contribute to the robustness and efficiency of an economy that is better able to withstand crises and the diverse instabilities of the global economy. In that sense:

- Political leadership and cooperation will play a greater role among the determinants of growth. In concrete terms, we are referring to the quality of institutions and consistency of policies, in order to reduce distortions that manifest themselves in the forms of red tape and hindrances to free enterprise, the circulation of information and market efficiency.
- It is difficult to achieve transformations without innovation or investment. In this context, we must encourage businesses to shore up their balance sheets in order to increase their long-term stability, better finance their investments and thus secure their growth.
- To protect themselves from systemic risks associated with globalization, economies must not only strengthen the pillars of their own domestic growth, but also rely on improved global governance, particularly when it comes to :

1. The financial system, which will need to better reflect the actual economy.
2. Trade agreements, which should be defined multilaterally.
3. Sustainable development principles, which should enable the adoption by all economies of an environmental alignment that will favour more equitable competition.

<sup>2</sup> Potential GDP is a measurement of what an economy can produce in a hypothetical situation with reasonably full utilization of labour and capital, with a given level of knowledge and technological development.

<sup>3</sup> *The Limits to Growth* (Meadows Report), Donella Meadows, Dennis Meadows, Jørgen Randers and William W. Behrens III, 1972

<sup>4</sup> The concept of diminishing returns is a law of economics according to which increasing the methods of production results in a smaller additional return. Using more methods of production makes it possible to make more intensive use of productive capacity and to increase the return. However, at a certain level of production capacity, further increases of production methods do not result in such fast growth of returns, to the point where production stagnates at its maximum potential.

## 2.2 Towards an optimal use of resources

Given that globalization reduces the impact of national policies, the angle of attack for stimulating growth is narrow and therefore represents a real challenge. That cloud could have a silver lining: it requires that we reorient our thinking towards a form of organization that is more social, more environmentally friendly and, ultimately, more sustainable, yet that will get the job done. Taking on that challenge means aiming to achieve optimal use of the available resources. The idea is to put the economy on track towards maximum production and minimized use of resources, directly invoking the principles of sustainable development.

The second part of this Economic Viewpoint proposes a series of sustainable development indicators applied to Quebec; it would be advisable to include these more systematically with other indexes of economic performance. This could change the way we look at growth trends.

## SECOND COMPONENT

### 3.A FEW INDICATORS WITH WHICH TO MEASURE THE LONG-TERM TRAJECTORY OF THE QUEBEC ECONOMY

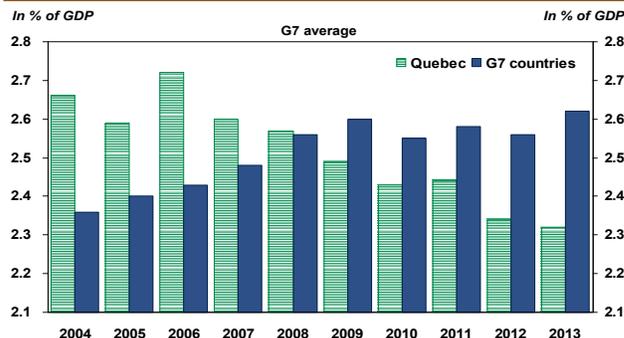
#### 3.1 Some social development indicators

##### Business investment and the standard of living

As mentioned earlier, business investment has been dwindling since 2013. In Quebec, the volume fell below \$50 billion in 2014 and it almost reached the low of 2009. In 2015, its weight within GDP dropped back to where it stood in 2002. More specifically, business investment in intellectual products has diminished since 2011. This bodes ill, given that innovation and investment in intangible capital are the core of the current industrial and ecological revolution. In fact, Quebec is regressing in the field of research and development (R&D), whose share of GDP has also been trending downwards since 2006 (2.7% in 2006 versus 2.3% in 2013). In 2013, according to the Institut de la Statistique du Québec, that share in the G7 countries was, on average, 2.6% (graph 1).

This issue relates first and foremost to the ability of the Quebec economy to improve its productivity. Over the past fifteen years, Quebec's productivity has failed to catch up with the Canadian average.<sup>5</sup> The impact on worker

Graph 1 – R&D intramural expenditures\* as in % of GDP



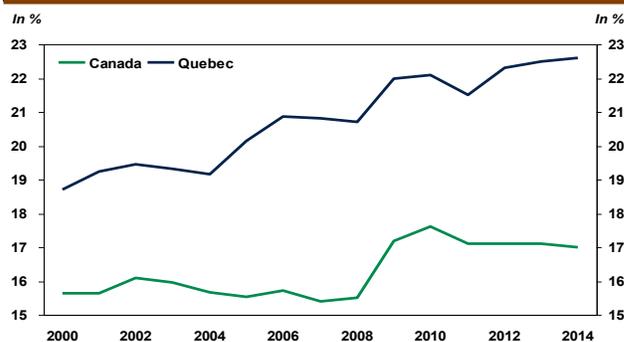
\* Expenditures on R&D work performed within the reporting company, including work financed by others.  
Sources: Institut de la statistique du Québec, Statistics Canada and Desjardins, Economic Studies

compensation and on households' disposable income is direct. In general, the lack of momentum in R&D and innovation compromises growth in the standard of living. We must also keep in mind that Quebec's ability to take its place among world leaders in scientific and technical progress, and thereby maintain its competitiveness, is at stake here.

#### Economic dependency: a hindrance to social progress

The economic dependency ratio rarely attracts much attention.<sup>6</sup> Yet, it has been growing in Quebec since the beginning of the 2000s. The gap between Quebec and Canada as a whole widened in 2012 (graph 2). If we take this as a measurement of the application of social measures, that increase is not a very positive sign of social progress.

Graph 2 – Economic dependency ratio

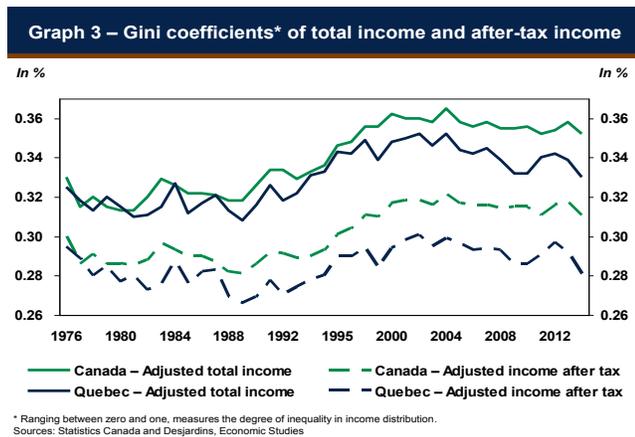


Sources: Statistics Canada and Desjardins, Economic Studies

<sup>5</sup>In 2015, labour productivity in Quebec was \$56.20 per hour worked, versus \$63.96 in Canada. Source: *Productivité et prospérité au Québec 2015*, Centre sur la productivité et la prospérité, HEC Montréal. [http://cpp.hec.ca/wp-content/uploads/2016/01/PP\\_2015\\_01\\_BILAN.pdf](http://cpp.hec.ca/wp-content/uploads/2016/01/PP_2015_01_BILAN.pdf)

<sup>6</sup>The economic dependency ratio is the ratio of government transfer payment dollars for every hundred dollars of total employment income in a given region.

The Gini coefficient, which measures income inequality, shows that both Canada and Quebec saw after-tax income inequalities grow during the 1990s, and reach a relatively stable level from 2004 onwards (graph 3). Canada ranks relatively well in terms of income equality, compared with other developed countries. However, according to the OECD, income inequalities are higher in Canada than in Scandinavian countries, for example. Generally speaking, social inequalities are a sign of under-optimization of available resources.



**School drop-outs and employability**

In the medium and long terms, poverty is clearly linked to the level of education. Quebec’s school drop-out rate is problematic, even though it has improved in recent years. The annual rate of students leaving school with no qualification or diploma was 15.3% in 2012-2013 (table 2). Apart from the human consequences, this issue has bearings on the availability of a skilled labour force. The issue is all the more worrisome in that population growth was limited to 0.5% in 2015, and this will undeniably exert pressure on the labour force. At a time when international competition and mobility of capital have increased, downwards pressure on the labour force does not automatically mean that the

**Table 2 – Quebec : School drop-outs**

*Annual rate of students leaving school without a diploma or qualifications*

	Total	Boys	Girls
2007-2008	20.3	25.2	15.6
2008-2009	18.4	22.6	14.3
2009-2010	17.4	21.5	13.6
2010-2011	16.2	20.1	12.6
2011-2012	16.2	19.8	12.9
2012-2013	15.3	18.8	11.9

Source: Ministère de l'Éducation et de l'Enseignement supérieur, Québec

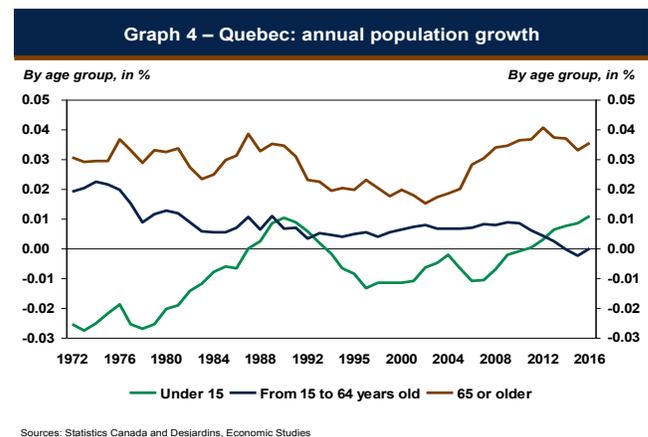
employment rate will head up. Based on the needs of the labour market, employability will depend on developing skills and competencies.

Quebec business needs skilled labour, so we have to get young people to finish high school and encourage them to earn their diplomas. This issue was made very evident in two previously published studies.<sup>7</sup>

Recent years have seen a proliferation of initiatives to reduce the dropout rate. These go beyond government action: the business world and the community have gotten involved, too. The energy invested in increasing school retention and fostering student success must also be considered when the time comes to evaluate an economy’s growth. Getting young people to finish high school and encouraging them to go on to college and university will increase their participation in the labour market and will help combat inequality and poverty. Education is an asset in and of itself, in terms of quality of life, employability and income, and in terms of the economy as a whole.

**Demographics and the size of the economy**

The year 2011 marks a turning point in Quebec’s demographic situation. It was in that year that the population below the age of 15 became smaller than the population of those aged 65 and up. We know that since 2014, the population of working age has been shrinking (graph 4). Since the fertility rate is still below the threshold of population renewal, the size of the economy and its long-term potential hang in the balance. Technology can help increase productivity. However, the competition always ends up acquiring the same technology,



<sup>7</sup> Desjardins, Economic Studies, *The challenge of sustainable prosperity*, 2011, 84 pages. <https://www.desjardins.com/ressources/pdf/dfp2011-e.pdf?resVer=1385156098000> and *For a more entrepreneurial and prosperous Quebec*, 2014, 102 pages. <https://www.desjardins.com/ressources/pdf/de2014s-e.pdf?resVer=1398184629000> [summary] Full version in French Pour un Québec plus prospère et plus entrepreneurial, 2014, 102 pages. <https://www.desjardins.com/ressources/pdf/de2014-f.pdf?resVer=1401906860000>

so ultimately there is always a limit to the promises of a new technology. Moreover, total population growth and labour force growth are always a strong foundation for economic attractiveness and performance in the long term.

### Looking at the present to determine the future

The indicators discussed above are not new. However, they should be taken into consideration, given that their improvement is crucial to the performance of the economy and to its ability to participate in social progress. The transition towards an economy that is more sustainable and, in particular, more respectful of the environment entails major investments in both the private and public sectors. This is the conclusion that the OECD arrives at by defining the parameters of “green growth.”

“Green growth is the means by which the current economy can make the transition to a sustainable economy. It involves promoting growth and development while reducing pollution and greenhouse gas emissions, minimising waste and inefficient use of natural resources, maintaining biodiversity, and strengthening energy security. It requires further “decoupling” of environmental impacts from economic growth, and greening of consumption and production patterns [sic], while reducing poverty and improving health and jobs prospects. Green growth means making investment in the environment a new source of economic growth.”<sup>8</sup>

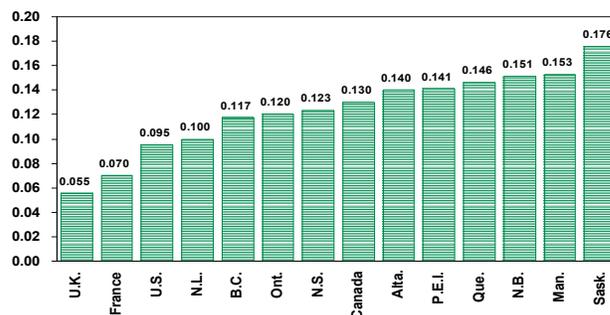
### 3.2 Change indicators that often “slip below the radar” Greenhouse gas emissions

From an environmental perspective, there is one considerable advantage that Quebec enjoys. Naturally, that is hydroelectricity, a clean and renewable source of energy. Moreover, the province’s greenhouse gas emissions per capita are in fact the lowest in Canada: 10.1 tonnes of CO<sub>2</sub> equivalent in 2013, a level that has been clearly falling since 2003 and that now stands below where it was in 1990 (12.8).<sup>9</sup>

Canada also far exceeds the energy intensity of the United States, France or the United Kingdom, to name just a few countries (graph 5). While Canada’s climate and its industrial structure (heavily reliant on the exploitation of natural resources) are very energy intensive and account for the high energy consumption, those facts mean that in the medium long term, Canada must confront the necessity

**Graph 5 – Energy intensity: final energy consumption**

In tonnes of oil equivalent per US\$1,000 of GDP in 2014



Sources: Conference Board of Canada, Statistics Canada, International Energy Agency and World Bank

of reducing that gap. Environmental efficiency is tending to become a new standard of competitiveness, and the increasing pressures of global demand will force us to use energy more sparingly. This will impose, beyond the possible adoption of environmentally friendly technologies, major transformations of our production and consumption methods.

### Water consumption

Quebec and Canada enjoy another significant advantage: freshwater resources.<sup>10</sup> The data on internal renewable freshwater resources show that such resources amount to around 80,000 m<sup>3</sup> per capita in Canada,<sup>11</sup> compared with 8,222 m<sup>3</sup> for the OECD member countries, 8,836 m<sup>3</sup> for the United States, around 21,000 m<sup>3</sup> for Australia, 2,980 m<sup>3</sup> for the euro zone, and 5,926 m<sup>3</sup> for the world average. Such abundance could trigger higher personal consumption. That consumption was at 1,015 m<sup>3</sup> per capita in Canada in 2013, which compares poorly with an average assessed at 310 m<sup>3</sup> for Germany, for instance.

In Canada, approximately 25% of water withdrawals are used by the residential sector and 44% by the industrial sector. The percentages in Quebec are similar, but it loses around 10% of its withdrawals in the distribution process (versus a Canadian average of 5.5%).<sup>12</sup> These consumption data provide business opportunities for Quebec firms that already possess expertise in the rehabilitation and restoration of drinking water distribution infrastructures.

<sup>8</sup> OECD and Green Growth, OECD, <http://www.oecd.org/greengrowth/44273385.pdf>

<sup>9</sup> Source: GHG Emissions, Provincial and International Peers, 2013 (tonnes of CO<sub>2</sub> equivalent per capita). OECD, Environment and Climate Change Canada and The Conference Board of Canada. <http://www.conferenceboard.ca/hcp/provincial/environment/ghg-emissions.aspx>

<sup>10</sup> Desjardins Economic Studies, “Water: abundant, and scarce.” Economic Viewpoint, April 14, 2016, 10 pages. <https://www.desjardins.com/ressources/pdf/pv1604e.pdf?resVer=1460641972000>

<sup>11</sup> Source: World Development Indicators, Renewable internal freshwater resources per capita (cubic meters), Data for 2014, World Databank, World Bank <http://data.worldbank.org/indicator/ER.H2O.INTR.PC>

<sup>12</sup> Source: Water withdrawals by use, Canada, 2013 (% of total withdrawals), Statistics Canada, Conference Board of Canada. <http://www.conferenceboard.ca/hcp/provincial/environment/water-withdrawals.aspx>



As we know, many other indicators are needed to paint a full picture of Quebec's environmental performance (waste management, air quality, etc.). However, energy and water hold such a special place in life that the quality of the way we manage them must be seriously addressed. These few observations about their consumption are enough to remind us that the long term is being built today, and that abundance does not justify careless use.

### 3.3 Looking at the bigger picture

The indicators that we have just reviewed are very interesting. They draw a picture of the economy from a different perspective than that which has been used for decades. To an increasing extent, the analysis of GDP has been supplemented by well-being indicators. In that vein, the Organisation for Economic Co-operation and Development (OECD) has compiled a "Better Life Index"<sup>13</sup> which incidentally ranks Canada in first place among the OECD member countries.

Investing in intellectual property, reducing the economic dependency ratio, lessening inequalities, keeping students in school, the potential for economic expansion in relation to demographics, the quality of the air and the abundance and thoughtful management of an essential resource like water are not parameters that concern social progress alone. They have a real impact on the economy particularly over a long-term horizon. This ties in with sustainable development. These parameters provide a new perspective and a new dimension to the concept of growth because, in many respects, they shape it. These parameters implicitly invoke the concept of potential economic development. They also relate to efficiency and better use of resources.

Would our view of growth be different if we took these indicators into account, along with those that we currently use to examine the economy? Would the comparisons between countries change the current rankings in light of these long-term indicators? Might the potential be defined differently? The workings of the economy are more complex, and its levers more numerous, than used to be the case. It is not a question here of renouncing the tools that are used to propel economies forward, but rather of adding other tools into the mix, and taking stock of them.

## CONCLUSION

### Towards a new economic performance

This study began by attempting to describe the unusual period of the 2000s, characterized by relatively profound crises and marked by the increased interdependence of the world's economies. The acceleration of global competition has shaken the industrial foundations of the advanced countries, whose population is aging. They must rebuild their competitiveness by relying on new technologies. In the past fifteen years, a new social and environmental conscience has asserted itself and called production models into question.

The generalized limp growth in the western countries has also drawn observers' attention to the necessity of considering economic policies in a longer-term perspective, and of shifting to more sustainable development. The vulnerability of an economy with no growth is still a matter of concern. We must keep in mind that the hoped-for progress of the economy towards more responsible production will not gain sufficient momentum without the conventional drivers of innovation and investment.

With that in mind, to achieve this economic transition, we must seek out all potential sources of efficiency. This requires monitoring a series of indicators that apply more specifically to sustainable economic development. It is a vast undertaking, and affects governments, businesses and individuals. They are at the core of this shift, because they are the players who make it happen.

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<sup>13</sup> Better Life Index, OECD, <http://www.oecdbetterlifeindex.org/#/5555555555>