

A Green Economic Stimulus Package to Secure our Current and Future Prosperity

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The Bottom Line: In the Chinese language, the symbol for crisis includes both danger and opportunity. That same approach should guide us in responding to the current economic crisis. A major public investment is needed to generate jobs and growth. This stimulus package – the largest injection of public funds into the economy in decades – is an unparalleled opportunity to kick start the economy of today, while laying the foundation for Canada to succeed in the economy of tomorrow. The world is moving towards a more low-carbon, resource efficient economy. Our major trading partners get it; the U.S., Europe, and China have all announced sizable green stimulus packages. Canada should follow suit, or risk falling behind. We propose at least **\$15 billion in targeted investments that will create over 160,000 jobs** this year in areas such as clean energy and transportation, and green infrastructure and households. These activities will generate immediate economic returns – at least on par with other stimulus options – while reducing environmental impacts that cost Canada billions each year. And they will position Canada to prosper in the emerging global green economy. That's a smart choice, for today and tomorrow.

The Challenge: The global economy, including Canada's, is in a serious recession. Jobs, economic activity and access to credit are shrinking. A significant public investment is needed to kick start the economy, and, particularly, to create jobs. At the same time, Canada faces unprecedented environmental challenges. Scientists say we are nearing the limits of how much pollution and environmental harm the planet can take. The warning signs are everywhere, in the form of the melting polar ice cap, 3,000 Canadians dying each year from air pollution, and wildlife species going extinct at an alarming rate.

These two problems are connected. A healthy economy depends on a healthy environment. By making the right stimulus investments, we can put Canadians to work right away and start to build a greener, stronger economy. In choosing those investments, you need to decide ***what kinds of measures will be most successful, in the short term, at creating new spending and jobs, and over the medium term, at putting Canada on the road to a more prosperous future?***

The Opportunity: The world is moving toward a low-carbon economy. The economy of the future will reward businesses that are energy efficient, low polluting, and use scarce natural resources efficiently. We have witnessed the rapid global growth of clean energy, fuel efficient cars, and other green sectors in recent years. This trend will continue; for example the International Energy Agency projects that clean energy will be by far the fastest growing part of the global energy sector over the next two decades. Wind energy alone is expected to see roughly \$1 trillion in new investment by 2020.

Other countries realize this opportunity. Barack Obama has proposed a major green economic stimulus package for the US. EU countries are doing the same. Even China has earmarked over \$150 billion for green stimulus measures. These are our major markets, and Canada is falling behind. Our economy is among the worst in the OECD in per capita greenhouse gas (GHG) emissions, air pollution, water use, and overall environmental footprint. In short, we are not using our natural capital wisely. If we want to turn this around, and position Canada for the economy of the future, the time to start is now. This stimulus package is a massive public investment that will help to shape the direction of Canada's economic growth for years to come – for better or worse. We must make smart choices.

The Costs of Inaction: Environmental harm is not just a health and ecological problem, it is an economic one. Air pollution costs Canada \$8 billion per year in health and productivity impacts. The costs of climate change will be far greater – more than the costs of both World Wars and the great depression combined, according to the former World Bank chief economist. With a growing global price on carbon, Canada will spend billions in the next few years alone to meet its (modest) GHG targets. And that does not count the costs of climate impacts, like the devastation of BC's forest industry. These costs are real, and should be taken into account in crafting a stimulus package.

The Public Bottom Line: These are *public* funds, so they need to generate public benefits, not just private returns. If a stimulus activity will aggravate environmental problems – like building more roads (adding cars and sprawl) – that erodes its public bottom line. Simply put, there are many effective options available to swiftly stimulate the economy. Of those, the smartest investments are ones that will give the public a double dividend, by generating jobs now *and* creating a healthier environment.

Our Approach: We have researched a broad range of potential stimulus measures put forward by international and Canadian organizations and experts. Each was tested against a series of economic and environmental criteria, which essentially ask two questions: (i) will it provide *maximum economic bang for the buck* (using basically the same criteria as Finance does); and (ii) will it also generate *significant environmental benefits* (based on a three part test)? Our results were reviewed by some of Canada’s top economic experts, and form the basis for our recommendations.

Our Package: We propose at least \$15 billion in investment opportunities that will provide effective, timely economic stimulus. These funds will leverage substantial provincial and private capital, and generate 160,000 thousand jobs in the coming year – while positioning us for a cleaner, more competitive economy. Our three areas of focus are: Public (green infrastructure); Business (clean development and jobs), and Households (helping Canadians go green).

A. Building Green Public Infrastructure ¹

Public infrastructure projects generally offer attractive stimulus opportunities because they (a) create a lasting asset, (b) typically can’t be funded by private capital alone, and (c) provide direct, targeted support for hard hit sectors such as construction, that recycles a large portion of its revenues in Canada. There is a long list of needed infrastructure projects – \$125 billion in cities alone – many of which could get started in the coming months. The choices that we make today in our infrastructure investments will help shape the kind of economy and communities we live and work in for the next thirty years. When choosing among projects with similar economic benefits, we recommend you pick ones that will put us on track for a cleaner, more competitive future, rather than ones carrying a hidden environmental price tag. Fortunately, there are a number of great green infrastructure investments that will create jobs right away, including:

1. **Public transit:** Transit spending generates more jobs (per dollar) than almost any other sector, and it reduces smog, GHGs, and congestion. Let’s update and expand our public transit, with a focus on new, efficient equipment built in Canada, including buses and light rail.
ROI: \$4B generates 52,000 jobs*
2. **Sewage and Water:** Each year Canadian towns and cities dump enough raw sewage into our waterways to fill the House of Commons 25,000 times – due to badly outdated infrastructure. At the same time, many communities lack safe drinking water. Many sewage and waterworks construction projects can get started soon; they can be targeted to create jobs in hard-hit areas, while safeguarding our lakes, rivers and public health.
ROI: \$1.4B generates 17,000 jobs*
3. **Public Buildings:** One of the strongest infrastructure investments available is to build new energy efficient public buildings and retrofit existing ones, such as hospitals, schools, and much-needed low income housing. Many of these projects can start right away, generating new construction jobs that can be targeted to hard-hit communities.
ROI: \$2B generates 24,000 jobs*
4. **Clean-up Toxic Sites:** There are over 18,000 federal contaminated sites across Canada, many of which pose health risks or waste valuable land. Work on many of these sites can begin promptly, generating spending and jobs across Canada, and leveraging private capital.
ROI: \$1B generates 11,000 jobs

¹ The “ROI” figures after each measure refer to costs and jobs in the 2009-10 year. Job figures are for *direct* jobs, based on employment multipliers from Statistics Canada (2005), and supplemented where possible.

* Assume federal government covers 50% of the cost of municipal and provincial infrastructure projects. If it covered 100% of these costs (to expedite activity), these spending figures would increase by at least \$5 billion.

5. **Smart Electricity Grid:** The shift to more renewable energy and greater conservation will require a major modernization of the electrical grid. These changes will lay the foundation for transforming the way we use and produce energy. Plans for grid modernization are in place in most provinces – including in Ontario, where job losses have hit hard. A federal investment will be leveraged by provinces, and enable massive future private investment (in generation) and cost savings (from conservation). It will also address one of the main causes of air pollution and climate change - energy.

ROI: \$1B generates 11,000 jobs

6. **Aboriginal Infrastructure:** There is a major infrastructure gap in aboriginal communities. To begin closing it, we need a major investment in energy efficient buildings (homes, schools, health clinics), clean local energy, sewage and water plants, broadband connections and other priority projects – with an emphasis on local labour and skills development.

ROI: \$600M generates 6,000 jobs

B. Growing Greener Businesses and Jobs

We agree with the major banks' chief economists: government should be very wary of using public funds to support failing businesses. That being said, there *are* instances when providing funds to industries can generate significant public benefits, particularly when: (i) it will generate substantial jobs in affected areas, (ii) it will reduce impacts on public health and the environment, and (iii) the investment will help the industry to grow in the economy of the future. We propose several investments that meet these criteria:

1. **Tax Credit for Clean Tech Investments:** Currently businesses have access to accelerated capital cost allowance for new renewable energy or energy efficiency assets. This is an effective incentive for companies to invest in clean energy technology in Canada. However, it is limited in scope. We recommend that it be expanded in two ways. First, it should cover a *broader scope of clean tech equipment*, including for pollution control, GHG reduction, and greater resource efficiency. Second, it should be *converted to a refundable tax credit*, which will extend this investment incentive to companies not currently in a profit position – such as hard hit sectors (forestry) and many renewable energy producers.

ROI: \$800M generates 6,000 jobs

2. **Training, Skills and Innovation:** We won't be able to put everyone back to work right away, so let's help unemployed workers upgrade their skills. This can be done by extending EI benefits for persons who participate in training, job sharing or skills development programs. The focus should be on building the workforce skills needed for the other stimulus projects, and developing new skills for the new economy. That new economy will also depend on knowledge and innovation; so we also recommend you create a *Green Innovation R & D Fund* targeted at universities and the private sector.

ROI: \$1B generates 4,000 jobs (and supports many more future jobs)

3. **'Greening' the Auto Sector:** The big 3 auto makers' Canadian plants build mostly gas guzzlers that aren't selling – a major reason why the industry is failing. Converting those plants to start building fuel efficient cars that people want to buy would be good for the industry's competitiveness and the environment – and would put people to work right away. Yet Ottawa's recent \$4 billion auto sector bailout failed to address this structural problem. We urge you not to repeat this mistake. *If* you decide to renew this funding for 2009-10 (as indicated in the announcement), then it should be tied to strict conditions for improving environmental performance and competitiveness. Similar requirements should be applied if you choose to provide support to any other sector (which we generally do not recommend).

ROI: \$2.7B² generates 13,000 jobs (tied to green conditions)

4. **Reforestation:** More than 2 million hectares of forest land in Canada are in need of reforestation. Replanting these lands would generate immediate jobs in hard hit forest

² The Ontario government contributed an additional \$1.3 billion

communities. It also would be an investment in a valuable future asset – increased timber supply. Federal funds will leverage provincial and private ones, and will reap benefits for climate change (trees absorb GHGs), watersheds, and wildlife habitat.

ROI: \$500M generates 9,000 jobs

C. Helping Canadian Households Go Green

Last but not least, we propose two measures to help individual Canadians save money and reduce their own environmental footprints. These investments will stimulate immediate economic activity, help the environment, and support the growth of green companies and jobs in Canada.

1. **Home Retrofits:** We should invest in making houses more energy efficient, by expanding rebates for retrofits and energy audits. This will generate jobs across the country in hard-hit construction and trades sectors, leveraged by provincial and private funds. We also should encourage consumers to buy energy efficient appliances by waiving the GST.

ROI: \$900M generates 11,000 jobs

2. **Clean Power Incentive:** Many Canadians want the option to choose clean power, but the extra cost is a big disincentive. Wind, solar and other clean energy sources are becoming more cost-competitive, as innovation, efficiencies and economies of scale kick in (and the cost of conventional power rises). To accelerate this transition requires capital and customers. We can provide both, by expanding the existing EcoEnergy program to provide a modest incentive of 2.1 cent / KWH (the same as in the US) for new clean power generation. This program will be temporary – designed to help this sector ramp up and reach cost competitiveness. Clean power will be the fastest growing part of the global energy market in the next 20 years. This incentive will help position Canada to get ‘in the game’ on this major economic opportunity, leverage significant private and provincial funds, and help Canadians go green.

ROI: \$100M generates 400 jobs (grows to \$2B over 5 yrs)

Other Options: The above measures will provide short term economic and employment returns that are similar to or greater than other stimulus proposals being debated. And when the contribution to Canada’s future competitiveness is factored in – along with environmental and health benefits -- they provide superior public returns.

By contrast, it is widely accepted that **general income tax cuts** (corporate and personal) are among the worst economic stimulus options. Only a small portion of such funds will be reinvested in the Canadian economy in the next year. For example, less than 20% of last year’s U.S. tax cuts were spent in their domestic economy. The better option is targeted tax cuts or incentives *linked to specific purchase or investment actions*, as proposed above. If you make *any* general tax cuts they should focus on lower income households, whose need and propensity to spend is greatest.

Conclusion: Building and implementing an economic stimulus package is about more than fixing a problem, it is about seizing the opportunity to shape our collective future as a country. Canada has done this before. More than a century ago, our leaders invested massive public funding to build a railroad across the country. That bold decision laid the foundation for our nation, and prepared Canada for the economy of the 20th century – an economy powered by coal and oil. The new century will see a new economy; one powered increasingly by clean energy and driven by green transportation; one that will sustain people and the planet; one in which a healthy environment and economy go hand in hand. Our main trading partners get it; Europe is making the switch, the U.S. is close behind, and China is coming on strong. As Barack Obama declared:

We all know that this [shift to a low carbon economy] is the great challenge of our time. If we fail to act, the implications will be grave for our economy, for our security, for our planet. But if we seize this moment, and meet the challenge, we can open to door to a new economy for the 21st century that will bring new energy, new jobs and new hope