

February 24, 2016

The Right Honourable Justin Trudeau, P.C., M.P. Prime Minister of Canada House of Commons Ottawa, Ontario Canada K1A 0A6

Dear Prime Minster Trudeau,

We are a group of technology entrepreneurs and investors from British Columbia who are deeply committed to realizing the economic and environmental benefits of clean energy, resource efficiency and clean water through the commercialization of advanced technologies. Collectively, we have raised billions of dollars and created thousands of jobs in Canadian cleantech companies. We are leaders of a sector that is positioned to deliver both prosperity and sustainability for Canada in the 21st century.

Canada's commitments at COP21, along with the pledges you and your cabinet have made to support clean technology and innovation, have reinvigorated global interest in Canada's cleantech industry. This could not have come at a more important time and we fully support such forward-thinking leadership.

Over the past decade, the global market for clean technologies has grown to more than \$1 trillion as demand for cleantech solutions spread to virtually every sector of the economy including power generation, forest products, oil and gas, mining, chemicals, manufacturing, agriculture and transportation. Over the same period, Canada's cleantech sector grew dramatically and exports of manufactured environmental goods are now comparable to forestry, livestock, mineral products, and processed food. Cleantech is unequivocally a pillar of the Canadian economy.

While Canada's cleantech industry has shown impressive growth in absolute terms, we are losing global market share to increasing competition from the United States, China, Germany, Singapore, Israel and other jurisdictions that are investing billions to compete in the global race for cleantech talent and capital. In fact, Canada has been the world's third greatest loser of market share for cleantech solutions since 2008, falling from 14th to 19th in terms of total market share as other countries pour investment dollars into pioneering these technologies.²

Canada faces a critical decision: to invest in the continued growth of cleantech and the path to sustainable prosperity, or to hold back and see our leadership eroded as other countries develop the technologies of the future. The world will produce and consume more than \$1 trillion of cleantech solutions. The only question is whether Canada will be a buyer or a seller.

We believe the Federal Government has a unique opportunity to transform Canada into a global leader of cleantech investment, innovation and entrepreneurship that can form the foundation of a diverse, competitive and prosperous economy while solving the world's most challenging energy and environmental problems.

 $^{^{1\&}amp;2}$ "The 2015 Canadian Clean Technology Industry Report" Analytica Advisors, 2015.



With this context, we respectfully offer the following recommendations:

- 1. Establish a \$1 billion cleantech loan guarantee program to make early-stage projects bankable. Cleantech solutions are capital intensive, often requiring large amounts of project debt to achieve market deployment. There is a gap in available financing for the initial commercial deployments of new technologies for clean power generation, carbon capture, food production and water treatment. A loan guarantee, such as those developed by the US DOE or the Swiss government, can guarantee a portion of project debt and reduce the risk for banks to provide loans that are needed to accelerate the deployment of clean technologies. Such a cleantech loan guarantee program should be managed by the private sector, support domestic and international initiatives and cover a range of projects from small (less than \$5M) to large (over \$50M).
- 2. Allocate \$500 million to establish Canada as a powerhouse of cleantech venture capital. Venture capital is the lifeblood of the cleantech industry. Canada's venture capital sector is disproportionately small compared to other countries, forcing our cleantech companies to raise capital from abroad. A strong domestic, entrepreneurial and internationally-connected cleantech venture capital industry is essential to ensure sustained growth and development of Canada's cleantech industry. A Canadian cleantech venture capital program of this scale could support 15 20 new and existing cleantech venture capital funds, leveraging up to \$3 billion in total capital that would support the growth of several hundred new cleantech companies. This would not only spur additional R&D and accelerate the deployment of cleantech solutions, but also generate thousands of high-quality jobs.
- 3. Invest \$1.25 billion to transform Sustainable Development Technology Canada (SDTC) into a global flagship of cleantech development. SDTC is an internationally recognized fund that has played a vital role in building Canada's cleantech industry. SDTC is strongly supported by the BC Cleantech CEO Alliance and we should expand on the proven success of this program. SDTC's Sustainable Development Tech Fund should be recapitalized with \$150 million per year over five years. SDTC's NextGen Biofuel Fund should be renamed, restructured, and expanded from a narrow biofuels focus to fund all types of clean technologies and capitalized with \$100 million per year over five years to support later stage commercialization projects. SDTC should increase project cost sharing to 50%, expand expense re-imbursement eligibility to include intellectual property, business development and project capital, and simplify the application process where possible. Best practices drawn from related models (e.g. ARPA-E in the U.S.) should be incorporated into SDTC, rather than replicated under separate entities.
- 4. Level the playing field of tax credits to unlock billions in cleantech investment. Billions of dollars of investment flow to Canada's mining and oil and gas industries as a result of federal and provincial tax credits including exploration credits, investment tax credits and others. It's time to make these same tax credits available to Canada's cleantech industry. For example, allowing tax losses generated by cleantech companies to flow through to their investors would unlock billions of dollars of new investment in clean power generation, transportation and water treatment. We would like to see these investment tax credits be more accessible and applicable to both R&D and project deployment. In particular, we would significantly expand the mandate for NRCAN's CRCE program to broaden the definition of sustainable technologies, and include innovative technologies at earlier stages of development. This would expand access to capital for cleantech companies and accelerate deployment and adoption. Best practices should be adapted from the existing Canadian and US oil & gas tax incentives to level the playing field.



To guide such initiatives, we propose the creation of a federal Cleantech Task Force comprised of government and cleantech leaders with a mandate to design and launch a national cleantech strategy by June 30 2016. We further propose that a single federal Minister be designated as the central point of coordination within the federal government to coordinate implementation and manage accountability of the national cleantech strategy across all federal departments.

To invest in a strong cleantech industry is to invest in a diversified, innovative, knowledge-based economy. According to the Conference Board of Canada, we have fallen precipitously behind other OECD nations in business enterprise research and development and other key metrics of innovation. This trend must be reversed, and investing in cleantech is a critical component of any strategy to move Canada towards a more innovative, knowledge-based economy. Not only do our products represent a substantial share of exports, but our technologies are implemented domestically to increase the competiveness of Canadian companies across diverse industries from resource development, to manufacturing, to transportation. Cleantech is not only an industry but also the technological infrastructure upon which Canada can build a globally competitive economy in the twenty-first century.

We would welcome a conversation to further discuss our recommendations. Jonathan Rhone (jrhone@axinewater.com; 604-220-5186), Marty Reed (marty@evokinnovations.com, 778-988-7215) and Nathan Gilliland (nathan.gilliand@generalfusion.com, 604-763-8844) have agreed to act as our points of contact to facilitate such dialogue.

Sincerely yours,

Jonathan Rhone Nathan Gilliland Marty Reed

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