Submission to the House of Commons Standing Committee on Finance

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About Communitech

Communitech supports and represents more than 1,000 technology companies in the Waterloo Region that are significant drivers of the local and national economy. With twenty years of experience, we like to think of ourselves as a grand experiment that is working.

Neither an incubator or accelerator, Communitech is a new public-private model in innovation — a hub where small and large companies, Canadian and global, collide and create value. Whether helping these companies raise capital, acquire customers, hire talent or go global, Communitech is about helping more tech companies start, grow and succeed.

The Communitech Hub is an 80,000-square-foot clubhouse for the tech ecosystem, housing more than 150 startups, providing targeted support for startups and SMEs, hosting hundreds of events a year and running Canada's largest corporate innovation center, which is home to brands such as TD Bank, Thomson Reuters and General Motors.

We work closely with other accelerators and incubators like the Accelerator Centre, as well as the University of Waterloo's Velocity program and Wilfrid Laurier's Launchpad program, both of which are co-located at the Hub. This co-location epitomizes our close relationships with local post-secondary institutions, which are among the best in North America.

A grand experiment that is working

In 2009, together with the governments of Ontario and Canada, Communitech set out to achieve some big goals through the launch of the Communitech Hub strategy. We wanted to:

- Support the creation of 100 new companies
- Help startups generate 2,000 new jobs
- Help companies attract \$100 million in new investment
- Bring three new multinational companies to Ontario

Today, we have surpassed these goals in ways that were then unimaginable. By 2016 we have:

- Supported 2,296+ new startup companies
- Helped those companies generate 11,400 new jobs
- Helped companies attract \$894.2 million in new investment
- Brought 17 new multinational companies to Ontario

None of this would have been possible without the support of government. Since 2009, we have received \$42 million in provincial investment and \$44 million in federal investment to help execute our strategy. Those investments, in turn, have helped us to leverage more than \$136 million in private sector contributions.

In 2015, the annual economic impact of our strategy was estimated at \$112 million attributed directly to Communitech and \$1.6 billion attributable to Communitech clients – the equivalent of more than \$13 of impact for every \$1 of public investment¹.

Waterloo Region now has the second-highest concentration of startups in the world, and continues to support almost 500 new startups per year. As these startups begin to scale, they have dramatically increased the amount of financing attracted into Waterloo Region tech companies, which has risen from \$27.5 million in 2010 to \$219 million in 2015.

We are also home to eight of Canada's largest technology companies that have combined annual revenue of more than \$15 billion, as well as significant development offices for international companies like Google, Square, Intel and NetSuite.

Why Waterloo Region has grown as an innovation cluster

Twenty-five years after Harvard Business School Professor Michael Porter introduced the concept of "clusters," the evidence is overwhelming – innovation and growth happen when geographic concentrations of inter-connected firms, at various stages of development and size, supported by co-ordinating organizations, collaborate and work together.

For Canada to successfully foster an export-oriented, less carbon-intensive innovation economy it needs to focus on developing world-leading clusters. Specifically, we should:

- 1) Invest in geographically dense, inter-connected business clusters willing to collaborate and exchange knowledge through their rich networks of:
 - Supplier and service providers
 - Co-ordinating intermediaries
 - World-leading research institutions
- 2) Promote access to global supply chains
- 3) Leverage previous investments in clusters where we have significant innovation expertise and momentum

This is the model Communitech has helped to develop and support in Waterloo Region over the last two decades. We believe our experience provides some answers to the three questions your committee poses as part of its pre-budget consultations.

What federal measures would help individual Canadians, businesses and communities contribute to the country's economic growth?

Communitech's experience suggests that a key ingredient in Canada's economic growth will be to build clusters, which is identified as one of the six pillars of the Government's

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¹ Deloitte Consulting

Innovation Agenda. However, for all of the success in Waterloo Region, creating an innovation cluster that can drive the national economy requires far greater scale.

The Compass 2015 Startup Ecosystem Report outlines our challenges in stark terms, as it predicts 80 per cent of investment and exit value generated from startups globally will come from the top five global startup ecosystems, leaving 20 per cent to come from everywhere else.

This is why creating the Toronto-Waterloo Corridor is so important. The combined scale of the Toronto and Waterloo clusters have the potential to be one of these top five ecosystems. To guide our efforts, Communitech has set the following goals by 2025:

- Grow 15 new \$100-million revenue companies
- Deploy \$5 billion in capital in our companies annually (from current \$1 billion)
- Increase our tech workforce from 200,000 to 350,000
- Increase the GDP contribution of the tech sector from five to 10 per cent
- Attract 50 global brands to undertake corporate innovation and become customers for our SMEs and startup companies.

Achieving these milestones will put the Toronto-Waterloo Corridor on the right path. We know where we need to go. The question is how best to get there.

When we ask our companies what they need in order to grow, the answers are overwhelmingly similar – they need access to talent, access to capital and access to global markets and customers. Practical measures to address these challenges can help the Toronto-Waterloo corridor "scale up" and create thousands more highly skilled jobs in the innovation economy.

Access to talent

For the Toronto-Waterloo Corridor to succeed it needs to be the home of choice for the world's smartest people. We must therefore do a better job at **developing** Canadian talent, **retaining** highly qualified graduates and **attracting** the best and the brightest to Canada.

The University of Waterloo is the engine that drives the success of the Waterloo Region cluster. Graduates from the software engineering, math and computer science programs are among the most highly sought-after in the world – and their key differentiator is the university's co-operative education program, which provides them with two years of real-world work experience before they graduate.

Co-operative education is a huge Canadian success story and expanding it across the country should be a Canadian priority. Increasing the number of co-op students, and encouraging greater numbers of employers to hire students through a federal co-op tax credit, would be important steps to addressing long-term talent shortages. In the interim, there is an

immediate need for "finishing school" programs to upskill non co-op graduates and others in the workforce so that they can begin to staff critical unfilled jobs.

There is also a need to attract employees with experience scaling companies to Canada. The competition for high-skilled talent is global, and our existing immigration policies need to change to allow our companies to compete. The U.S., U.K., Netherlands, Ireland and Israel all have specific programs to quickly process work visas for high-skilled workers, whereas in Canada, the only option is the Temporary Foreign Workers program, which takes many months to process applicants. Communitech has made a proposal for a 'Global Skills Visa,' which would alleviate this problem, and we are happy to share with the Standing Committee.

All of these measures will increase the available supply of talent in the relative short term. But over the longer term, Canada needs to develop successive generations of digital talent. Schools across the country should be encouraged to build coding lessons and digital literacy into their core curricula. Early exposure to digital skills not only provides a strong pathway into digital careers, but is also a great equalizer for all Canadians — helping everyone participate more fully in their communities, in business, and in the world around them.

Access to capital

Today, startups in top U.S. ecosystems raise four times more capital, on average, than their Canadian counterparts, who are also four times more likely not to attract any capital at all. To close this gap, incentives for angel investors should be considered, and the government should use its leverage to guarantee pools of private capital dedicated to seed funding.

Moreover, while startups are the fuel that drive vibrant clusters, there is increasing evidence that scale-up companies – who have already raised initial rounds of funding and require more capital to bring their products and services to market – drive real economic growth. We should not be shy about identifying "winners" and setting criteria that give these scale-ups ready access to capital and less-bureaucratic means of facilitating their growth.

One option would be for the government to provide additional funding, whether through grants, loans or investment, to Canadian companies that receive investment from registered VCs, who will already have done due diligence on the companies. By registering qualified VCs at the front end, this follow-on investment would be simple to deploy, and would de-risk the investment for both partners.

Additional efforts should also be made to encourage Canadian corporations and institutional investors such as pension funds to allocate two per cent of their investments as risk capital deployed in technology companies. One potential incentive would be to make corporate venture investments eligible for SR&ED credits.

Government programs

The federal government has more than 70 programs designed to support and provide funding to technology companies looking to grow. While many programs are well-intentioned, a 'tyranny of compliance' has set in and made accessing funds difficult for high-growth companies. Because of the administrative burden attached to each program, it is often those companies best able to work their way through the system that receive public sector investment support. This results in a culture of "grant-repreneurship," and skews programs toward the goal of preventing companies from failing, rather than accelerating those with the best odds of scaling.

The same attention that has been given to startups over the last decade now needs to be focused on scale-ups. Similar to the Olympic "Own the Podium" program, a Top100 program would provide the 100 most promising high-growth startups with resources in strategy, revenue generation, talent management and growth capital, as well as access to 'Canada House' facilities in key markets like San Francisco, New York, Boston and London, and "front of the line" access to appropriate government funding and services. Putting a due diligence process at the front end, rather than with each separate application will also be more efficient and ensure that the most promising companies are supported.

Government should also be looking at itself as a "first customer" and setting a goal of increasing its procurement from Canadian SMEs by 50 per cent over the next five years. Creating research procurement programs modeled after the Defense Advanced Research Projects Agency (DARPA) and Small Business Innovation Research (SBIR) programs would also fund modernization and innovation within its own operations. Reinstating the practice of "unsolicited proposals" for government services and operations would also encourage companies to come forth with new ideas to drive innovation.

Conclusion

Waterloo Region is an example of a successful technology cluster that has been built here in Canada. The challenge we now face is in scaling this success to compete on the global stage, in order to drive the national economy and benefit from the asymmetrical returns that accrue to the largest clusters in the world.

Communitech is leading a policy review with its Board of Directors and client companies, and will be providing more in-depth recommendations to the Innovation Agenda process before the end of August. We would also be happy to appear before this committee to discuss any of the topics in more depth.