



**A 4-Point Plan for Growth:  
Scaling up BC's Technology Ecosystem**

October 2016

**Table of Contents**

Introduction.....3

A 4-Point Plan for Growth.....4

    Priority Asks.....4

    Summary of Recommendations.....5

1. Talent: Invest in World-Class Talent.....6

    Background.....6

    Recommendations.....7

2. Scale up: Encourage Growth and Global Competitiveness.....12

    Background.....12

    Recommendations.....13

3. Markets: Expand Access to Procurement and Global Markets.....15

    Background.....15

    Recommendations.....16

4. Capital: Expand Access to Global Capital.....18

    Background.....18

    Recommendations.....19

Conclusion.....20

Acknowledgements.....21

About BC Tech Association.....22

## Introduction

The impact of technology across all industries is more pronounced than ever. Innovation across all sectors is no longer optional – it's a pre-requisite. The pace of change is accelerating and most of the disruption is coming from new entrants – young companies not afraid to challenge the status quo.

British Columbia has always provided a fertile environment for startups. Rooted in a rich history of explorers and new frontiers, British Columbia is a hub for startups with a nation-leading 3.7% of the working population being part of a startup.<sup>1</sup>

The 2016 BC Technology Report Card reinforced this notion, highlighting the consistent, sustained performance of the BC tech sector – which has grown by 91% in 15 years and continues to outpace the growth in the overall BC economy by nearly two to one.<sup>2</sup> The BC tech industry is a cornerstone of the provincial economy, accounting for:

- \$26 billion in revenue – growing in excess of 6% per year
- \$15 billion in GDP – 3<sup>rd</sup> largest contributor to the provincial economy
- 92,700 employees – more than all of BC resources industries combined
- \$8 billion in wages – with jobs earning 76% more than the BC average

Over the past decade, the government has created a strong foundation for technology and innovation through national programs like the Scientific Research and Experimental Development (SR&ED) tax credit program, the National Research Council's Industrial Research Assistance Program (NRC-IRAP), Venture Capital Action Plan (VCAP), Sustainable Technology Development Canada (SDTC), Western Innovation Initiative (WINN), Canadian Accelerator and Incubator Program (CAIP) and support programs through the research councils (NRC, NSERC), MiTACS, BDC, EDC and the Trade Commissioner Services. Provincially, the government has supported programs like the Small Business Venture Capital Program (SBVCA), Interactive Digital Media Tax Credit, provincial SR&ED and the launch of the new #BCTECH Strategy that includes a new \$100 million BCTECH Fund.

The result has been a vibrant and growing sector comprised of 9,500+ diverse companies across the sub-sectors of Information and Communications Technology (ICT), Interactive and Digital Media (IDM), Cleantech, Lifesciences and Engineering/IT Services. The sector employs 92,700+ people - more than all of BC's traditional resources (forestry, mining, oil & gas and utilities sectors) combined - and employment is expected to grow substantially in the coming years. On a comparative basis, the BC tech sector grew faster than that of virtually every other province in Canada.

Despite the positive growth trend in Canada, the competitive framework for the BC tech industry is not national – it's global. Cities and regions all over the world are looking to capitalize on the technology shift – and on a comparative basis, the BC Tech sector is growing at a slower pace than many other jurisdictions and left as is, there is a risk that BC will lose momentum while other centres make accelerated progress.

In the 2015 Startup Compass report, Vancouver fell 9 places from #9 to #18 in a global ranking of the top startup ecosystems. Some of the key factors pointed to challenges related to access to capital, access to

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<sup>1</sup> [CIBC World Markets, 2012](#), p3

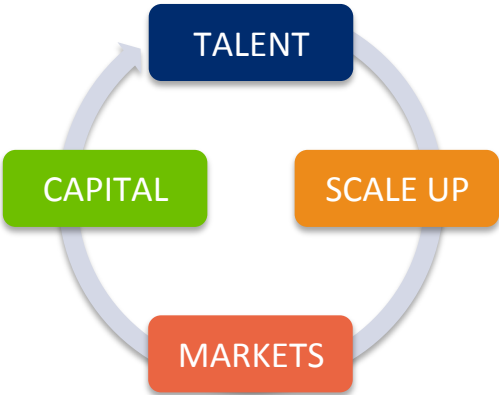
<sup>2</sup> 2016 BC Technology Report Card, p13

markets and the comparatively lower performance of companies overall. A closer review of the report also showed that Vancouver fell ten places from fourth to 14th in the measure of global tech talent. Talent has become the new battleground as leading jurisdictions increase investments in tech grads and adopt streamlined immigration programs to attract the best talent from around the world.

The comparison of leading tech hubs illustrates a Power Law effect – one in which the top jurisdictions take a disproportionate share of the market opportunity. Silicon Valley is already evidence of this phenomenon and the pre-requisite to be a player is to undertake strategic policies and investments that will accelerate the growth of the local ecosystem to forge a stronger outcome.

### A 4-Point Plan for Growth

This paper refreshes our previously published 4-Point Plan for Growth – a policy framework that we first wrote in 2012. This update outlines 16 actions across four pillars that we believe will strengthen the BC tech ecosystem, improve access to capital, expand access to procurement and global markets, invest in world-class talent and encourage companies to scale up to become globally competitive. Successfully growing the strong base of startups into global champions is essential to Canada's Innovation Agenda, global competitiveness and long-term economic and social prosperity.



<p><b>TOP PRIORITY ASKS</b></p> <ol style="list-style-type: none"><li><b>1. Invest an incremental \$100 million in post-secondary to expand graduates of tech programs.</b></li><li>2. Support the home team and adopt procurement programs to become customers of BC tech companies.</li><li>3. Streamline tax credit programs like SR&amp;ED and the angel tax credit to broaden eligibility.</li><li>4. Improve the immigration system to attract the best talent from around the world.</li></ol>
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## Summary of Recommendations

### A 4-Point Plan for Growth

#### **TALENT: INVEST IN DEVELOPING AND ATTRACTING WORLD-CLASS TALENT**

1. Invest an incremental \$100MM in post-secondary to expand graduates of tech programs
2. Enhance the curriculum and experiential learning in post-secondary
3. Invest in K-12 programs to teach coding and technology in the curriculum
4. Improve the immigration system for highly skilled and experienced tech talent

#### **SCALE UP: ENCOURAGE COMPANIES TO GROW AND ACHIEVE GLOBAL COMPETITIVENESS**

1. Streamline the multitude of tax programs to encourage companies to grow and invest in jobs
2. Consolidate provincial tax programs with a single R&D Labour Tax Credit
3. Establish a BC Technology Commercialization Tax Credit
4. Simplify and extend the Federal SR&ED program

#### **MARKETS: EXPAND ACCESS TO PROCUREMENT AND GLOBAL MARKETS**

1. Expand the Build in Canada Innovation Program to BC
2. Introduce a pilot program for Set-Asides in government procurements
3. Improve access to existing government procurement programs
4. Invest in market development programs that expand export activity

#### **CAPITAL: EXPAND ACCESS TO GLOBAL CAPITAL TO GROW COMPANIES**

1. Invest in building strong programs to attract global capital
2. Enhance and expand the Angel Tax Credit program
3. Continue to support existing venture capital programs
4. Expand debt and lending options

# 1. Invest in World-Class Talent

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## Background

The worldwide competition for the best talent is fierce. In order to become a top global innovation hub, BC and Canada needs to build on its reputation as an open and welcoming destination to become globally competitive in attracting world-class talent.

Access to talent has emerged as the greatest challenge that BC tech companies face in expanding their businesses. According to a 2015 report by the Information and Communications Technology Council (ICTC), over 182,000 critical ICT positions will be left unfilled by 2019.<sup>3</sup> Demand for tech jobs is only expected to increase over the next 12 months, across all tech subsectors and regions. Employment in BC's technology sector has grown 29% since 2004 and 32% from 2010-2014, outpacing the rate of growth in both Ontario and Quebec, and growing faster than the Canadian average by 70 percent.<sup>4</sup> Within BC, tech jobs have grown by an average of 5.3% per year over the past 5 years – a faster rate than BC's job growth overall.<sup>5</sup>

The strong demand for talent has also had inflationary effects on tech wages. Tech sector wages have steadily increased from an average salary of \$64,000 in 2008 to over \$82,000 in 2014. BC tech wages are now 76% higher than the BC industrial average and wage growth in recent years has outpaced the growth of available jobs. This suggests a growing imbalance in the demand vs. the talent and is reinforced by research conducted in BC Tech's 2016 Labour Market Study.

This is not an abstract problem, but one that we face now. This year alone, BC tech companies will be seeking thousands of new employees. New computer-science, engineering and technology graduates from BC's post-secondary institutions simply cannot meet the demand for these well-paying positions.

BC tech companies also need highly skilled, experienced talent – those with experience in growing companies from startups to scale-ups to large enterprises. Often, this highly skilled and experienced talent is found outside of Canada, often in jurisdictions that have cultivated significant successes. Over the past several years, changes to foreign talent and immigration have made for a cumbersome, lengthy and often opaque process. The opportunity cost is significant. In a 2015 BC Tech Association survey of tech employers, 70 per cent of respondents indicated that current foreign worker programs are negatively affecting their business, and 70 per cent of respondents indicated they would move operations or hire elsewhere if unable to hire the right talent.

As part of the #BCTECH Strategy, the provincial government has identified talent as a critical issue and has already taken steps towards introducing technology and coding into the K-12 curriculum and initiating a Labour Market Study to examine the supply and demand dynamics for the tech sector. The opportunity for action is upon us – and furthering investments in education and fixing the immigration system will ensure that the BC tech sector is well positioned to compete for human capital.

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<sup>3</sup> The Smart Economy Reshaping Canada's Workforce, ICTC (2015)

<sup>4</sup> 2016 BC Technology Report Card, p23

<sup>5</sup> ICTC (May 2016)

## RECOMMENDATIONS

### INVEST IN DEVELOPING AND ATTRACTING WORLD-CLASS TALENT

Canada needs to create a more conducive environment to encourage, develop and attract the best talent. To win the war on talent, we need to streamline immigration and invest in expanding and improving the education system to nurture a homegrown tech talent pool in the province.

#### 1. Invest an incremental \$100MM in post-secondary to expand graduates of tech programs

#### 2. Enhance the curriculum and experiential learning in post-secondary

- a) Implement mandatory co-op for all tech relevant programs
- b) Increase the number of co-op terms
- c) Extend and expand incentive programs for small tech companies
- d) Modernize post-secondary curriculum to align with industry requirements

#### 3. Invest in K-12 programs to teach coding and technology in the curriculum

- a) Invest in training K-12 teachers to teach coding and technology in schools
- b) Expand ACE-IT programs to include technology
- c) Invest in career education for job opportunities in technology

#### 4. Improve the immigration system for highly skilled and experienced talent

- a) Institute a Global Skills Visa program to attract experienced senior talent
- b) Streamline the Temporary Foreign Worker program for in demand jobs in tech
- c) Implement a trusted employer immigration program for expedited processing
- d) Increase the federal allocation for the BC Provincial Nominee Program
- e) Encourage experienced expatriate Canadians to return to Canada

#### 1. Invest an incremental \$100MM in post-secondary to expand graduates of tech programs

Demand for technology grads has been strong the past few years, with between 5,000 and 10,000 entry-level tech positions created each year. In contrast, there are only 2,000 to 2,500 tech graduates from BC's post-secondary institutions programs each year. On a comparative basis, BC trails other provinces, such as Ontario, Quebec and Alberta, in the number of degrees granted per capita and in the proportion of people that choose to attain technical degrees. Furthermore, BC remains below the OECD average in granting technical doctoral degrees per capita.<sup>6</sup> Exacerbating this issue is the fact that women represent fewer than 25% of all tech grads – an increasingly important factor in growing the overall talent base.<sup>7</sup>

There is a pressing need for more grads across disciplines such as industrial design, graphics, animation, mathematics, data science, life sciences, engineering and particularly computer science/engineering.

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<sup>6</sup> 2016 BC Technology Report Card, p32

<sup>7</sup> 2016 BC Tech Labour Market Study

## **2. Enhance the curriculum and experiential learning in post-secondary**

In Canada and abroad, the University of Waterloo enjoys a reputation for educating the highest quality graduates in its tech programs. The simple reason is its exceptional co-op initiative, which matches students with professional internships as a core part of their degrees. While most of BC's post-secondary institutions offer some form of co-op, this is rarely mandatory, and investment in co-op placements lags behind comparable spending in other provinces.

Experiential and integrated learning through co-op and work placements are key to enhancing the quality and job readiness of graduates entering the tech sector.

### **a) Implement mandatory co-op for all tech relevant programs**

In our 2016 Labour Market Study, employers cited practical experience and interpersonal skills as a top needed skills for junior level hires and felt that often entry-level level hires lack the necessary skills and practical application experiences to meet their needs.

To remedy this, we believe all tech-related degree programs should include mandatory co-op education and work placements. We recommend the government invest in implementing and adequately resourcing mandatory co-op at universities and colleges.

### **b) Increase the number of co-op terms**

A key competitive advantage of the Waterloo region's success is the University of Waterloo's co-op program. It provides students with the equivalent of two full years of hands on experience with employers before graduation.

In the 2016 BC Tech Labour Market Study, two thirds of BC tech companies indicated that they hire co-ops. However, small companies are thirty percent less likely to hire a co-op than medium and large-sized companies commenting that the cost to recruit, train and support co-op placements tends to be prohibitive, particularly for short 4-month terms.

We recommend a similar format to Waterloo, in that the number of co-op terms is increased to 5-6 terms over the course of the degree, starting from the first year, and to encourage longer 8 months options.

### **c) Extend and expand co-op incentive programs for small tech companies**

As per the 2016 BC Tech Labour Market Study, only half of all small tech companies have hired a co-op student. These companies indicated cost as a barrier, particularly in terms of training and developing these co-ops, which often takes away from the productivity of their smaller workforce. Programs like the Integrated Skills Initiative (ISI) offered through the BC Innovation Council have supported smaller tech companies in placing co-ops and interns

We recommend expanding the ISI program to assist a larger number of small tech companies to hire co-op students during their work terms.



#### **d) Modernize post-secondary curriculum to align with industry requirements**

Technology advances at a rapid pace and institutions need to be able to keep up, in order to equip new graduates with the right skills to be ready for careers in tech. Co-op experiences play a necessary role in allowing students to bring current insights and technical requirements back into the classroom. Professors and teaching professionals who actively work in partnership with industry, in such areas as technical advisory boards and joint research projects also have greater insights on curriculum needs.

We recommend the establishment of a working committee with government, education and industry stakeholders to regularly discuss current and projected employer requirements and adjust the curriculum to reflect these needs.

### **3. Invest in K-12 programs to teach coding and technology in the curriculum**

#### **a) Invest in training K-12 teachers to teach coding and technology in schools**

The province's BCTECH Strategy commits to revamping the K-12 curriculum to include a focus on STEM disciplines and applied computational and design thinking. We recommend further investments in preparing educators and schools, partnering with industry to leverage experts to help build and update curricula, execute on training teachers and students to code; and investing in a sustainability model that ensures ad hoc initiatives become formalized, with a collaborative and iterative feedback loop.

#### **b) Expand ACE-IT program to include technology**

In order to encourage and better prepare high school students to choose technology degrees in post-secondary, we recommend that high school apprenticeships like the Accelerated Credit Enrolment in Industry Training (ACE-IT) currently offered via the Industry Training Authority, be expanded to offer more varied tech sector-specific programs. ACE-IT credits can be applied towards both high school graduation and post-secondary credentials.

#### **c) Invest in career education for job opportunities in technology**

Programs like the province's "Find your Fit" program for trades and ICTC's Focus on Information Technology (FIT) have been successful in creating awareness for career opportunities in high schools. We recommend extending this model of programming as well as broader marketing campaigns to promote the awareness of career opportunities in tech for youth.

### **4. Improve the immigration system for highly skilled and experienced talent**

Much of Silicon Valley's success has been built on the ability to attract the best talent from around the world. A recent report put the number of immigrant founders of billion-dollar companies at 51 per cent,<sup>8</sup> but the ability of companies to attract technical and business talent from around the world to Silicon Valley has helped to fuel its growth.

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<sup>8</sup> <http://nfap.com/wp-content/uploads/2016/03/Immigrants-and-Billion-Dollar-Startups.NFAP-Policy-Brief.March-2016.pdf>

### **a) Institute a Global Skills Visa program to attract experienced senior talent**

To compete with the world's most innovative global companies, Canada must leverage its comparative advantage as a diverse and open country and become the destination choice for globally mobile skilled talent. However, our current immigration system is not designed to facilitate this at the rate required. The challenges of cumbersome, slow and out-dated processes continue to cause significant delays to the growth of high-potential companies.

Along with our colleagues at Communitech, MaRS, ICT Association of Manitoba and Venn, we recommend the establishment of a Global Skills Visa that would enable Canadian companies to recruit high-skill and experienced talent in a timely manner, helping them to scale faster, create more local jobs and transfer knowledge into the Canadian economy.

The Global Skills Visa should be designed as a streamlined, online process that would provide responses within three weeks. The program should also allow for both temporary and permanent pathways to Canada and serve to replace the ill-named Temporary Foreign Worker Program in relation to highly skilled and experienced tech talent.

### **b) Streamline the Temporary Foreign Worker program for in demand jobs in tech**

For Canadian tech companies, the path to recruiting global workers often starts with the Temporary Foreign Worker (TFW) program, however the ill-named and misperceived program is often too slow and cumbersome to enable companies to make timely and competitive offers to in-demand workers. The Labour Market Impact Assessment (LMIA) requirement, combined with an inflexible, opaque application process, means that companies wait months for answers, with minimal indication of how the process is proceeding.

In addition to senior talent, we recommend streamlining the program to improve efficiency and processing times for the most in demand tech-related occupations by creating a preferred route without LMIA or recruitment requirement.

### **c) Implement a trusted employer immigration program for expedited processing**

We recommend the government re-establish a Trusted Employer Program to expedite work permits for BC's high-growth and top-hiring employers. This would include a transparent application process for all eligible companies to participate, supported by enhanced concierge services.

### **d) Increase the federal allocation for the BC Provincial Nominee Program**

The Provincial Nominee Program (PNP) facilitates an expedited immigration process for certain categories of applicants including skilled workers. BC's current PNP program has a stated processing time of 4-6 weeks. However with the impact of changes to the temporary foreign worker and immigration programs, the volume of PNP requests grew dramatically, causing the BC government to temporarily suspend processing of PNP requests.

We recommend that the government increase BC PNP allocations and ensure there is an allocation within PNP specifically for tech jobs.

**e) Encourage experienced expatriate Canadians to return to Canada**

With an estimated 350,000 Canadians living in the Silicon Valley, there is an untapped opportunity to recruit and repatriate experienced talent back to Canada. Many of these individuals have played key roles in helping to grow and scale companies – a skillset sorely needed in BC tech companies.

The process of repatriating Canadians is far from straight-forward. It will require a concerted marketing and recruitment effort combined with streamlined processes for relocating ex-pats back to Canada. We recommend a Tech Ex-Pat Relocation Program that offers exemptions on certain taxes and duties that are often a deterrent for Canadians returning home.

## 2. Encourage Growth and Global Competitiveness

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### Background

Successfully growing more small companies into medium-sized companies is essential for the long-term competitiveness of the sector.

Startups are the fuel that drives vibrant innovation ecosystems, while scale up companies drive faster economic growth and greater profitability. Medium to large-sized companies create more stable, high paying jobs, attract larger investments, create new spin-offs and elevate the overall ecosystem. They can achieve the critical mass necessary to sustain research, development and commercialization activities, expand international exports and increase operational scale. Medium sized companies form a pool from which large anchor companies will emerge and support an ecosystem comprised of re-investable net income, growth financing and development of skilled talent - all essential elements to advance the provincial and Canadian economy.

One of the principle barriers to faster growth in the BC tech ecosystem is the relative size and scale of companies. BC's tech sector remains characterized by more small firms than large, with 81% of companies consisting of fewer than 10 employees and the 95% of companies consisting of fewer than 50 employees.<sup>9</sup> A consequence of this is an over-reliance on too few companies to drive economic output and growth. Thus, on a national scale our GDP and revenues are competitive, however on a global scale, our performance falls well short compared to US states such as California, Washington and other global hubs. Scale is major barrier that needs to be prioritized if BC wants to grow large \$100M+ tech companies that drive R&D, employment and innovation in the long run.

BC is at risk of losing out to more competitive regions unless small and mid-sized (SME) companies are incentivized to grow their business in our ecosystem - and this will require addressing the other pillars mentioned in this paper, mainly finding the best talent, capital and structures to increase R&D, and the means to export their products and services with a strong reference base.

Encouragingly in recent years the number of medium to large-sized companies has grown from 348 companies in 2009 to 447 companies in 2014. In the past two years, the number of medium to large companies grew by 16% compared to just 6% growth in companies with fewer than 10 people -- a group that still dominates the tech sector.<sup>10</sup> The composition of companies within BC's tech sector is maturing and this is a favourable trend that needs to continue to accelerate growth in the sector. We need to encourage further growth and scaling of companies by re-evaluating tax structures and incentives that may be keeping companies small. At the same time alleviating the time spent navigating tax regimes would allow for time focused on sales and business growth.

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<sup>9</sup> 2016 BC Technology Report Card, p6

<sup>10</sup> 2016 BC Technology Report Card, p9

## RECOMMENDATIONS

### ENCOURAGE COMPANIES TO GROW AND ACHIEVE GLOBAL COMPETITIVENESS

Successful ecosystems have significantly larger cohorts of medium and large sized companies. To compete globally and scale-up BC's tech ecosystem, we must employ a strategy that encourages the growth of small companies to become medium and large anchor companies by improving and supporting competitive tax structures.

- 1. Streamline the multitude of tax programs to encourage companies to grow and invest**
- 2. Consolidate provincial tax programs into a single R&D Labour Tax Credit**
- 3. Augment the R&D Tax Credit with a Technology Commercialization Tax Credit**
- 4. Simplify and extend the federal SR&ED program**

#### **1. Streamline the multitude of tax programs to encourage companies to grow and invest**

Canada and BC's numerous tax policies (SR&ED, corporate tax rates, capital gains exemptions, etc.) while advantageous for small businesses, namely Canadian Controlled Private Corporations (CCPCs), inadvertently encourage businesses to remain small to preserve their CCPC status, often at the expense of growth, investment and productivity.

We recommend streamlining programs focused on similar outcomes into a reduced number of programs that can be accessed by a broader range of tech companies regardless of size or ownership structure.

#### **2. Consolidate provincial tax programs into a single R&D Labour Tax Credit**

The eligibility for the Scientific Research and Experimental Development (SR&ED) tax credit is subject to an assessment of the scientific and experimental merit of the undertaking – which often is subjective in nature and not necessarily correlated with commercial success. While SR&ED provides refundable tax credits for Canadian Controlled Private Corporations (CCPCs), the program is much less generous for non-CCPC companies. In recent years, the differential in benefit has become more pronounced, and creates the conditions for aberrant behaviour at the margins of CCPC eligibility.

In contrast to the complexities of SR&ED, the Interactive Digital Media Tax Credit (IDMTC) is a straightforward tax credit on labour, providing a 17.5% refundable tax credit on labour expenditures, regardless of whether the company is a CCPC or non-CCPC. This straightforward approach aligns well with the broader tech sector, where the major input is labour and programs like the IDMTC effectively serve as an Input Tax Credit, incentivizing companies to invest in expanding their labour pools.

As part of goal of streamlining tax programs, we recommend the replacement of the Provincial SR&ED tax credit and the IDMTC tax credit with a simplified R&D tax credit based on labour. This R&D tax credit would be calculated based on labour expenditures – providing the benefits of both a more straight

forward administration and creating the conditions which would not inadvertently favour remaining small at the expense of growth.

### **3. Establish a BC Technology Commercialization Tax Credit**

Canadian technology companies have historically benefited from a support system that favours R&D, often at the exclusion of supports for sales and marketing. This has adverse effects on commercialization success and the willingness of companies to invest in the necessary expertise and talent to grow the commercial success of their companies.

We recommend augmenting the R&D Tax Credit with a Technology Commercialization Tax Credit that would provide refundable tax credits towards eligible commercialization costs up to a maximum amount of 50% of the eligible R&D tax credit.

### **4. Simplify and extend the federal SR&ED program**

On a federal level, the SR&ED tax credit programs are very important to BC's tech companies, particularly early-stage startups, which make-up a disproportionate number of BC technology companies. However, the program has become increasingly complicated with eligibility and refundability considerations that are often at odds with the objective of growing companies.

We recommend:

- Introducing a flat rate, refundable SR&ED credit with no reduction based on income or capitalization
- Eliminating ownership structure as a criterion to determine cash refundability; rewarding companies of all sizes and descriptions for undertaking R&D in Canada, and removing disincentives to attract foreign investment.
- Streamlining eligibility, simplifying the application process and enforcing the same consistency of programming and reporting requirements across the country

### **3. Expand Access to Procurement and Global Markets**

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#### **Background**

Growing BC tech companies need to be better positioned to access global export markets and customers to succeed. While there has been 37% growth in tech exports over the last 5 years, growing at 6.5% annually, the BC tech sector continues to lag in comparison to the national average in terms of exports and R&D. Tech accounts for only 5% of BC's total exports and in the Canadian ICT sector two-thirds of SMEs do not export.<sup>11</sup> As the BC tech sector is predominantly comprised of small companies, there is a need to further boost market access and exports.

Ironically, BC tech companies have found it easier to access and sell to global markets than to customers and governments in Canada. Creating opportunities for small tech companies to sell to local customers is critical – especially in establishing reference customers that are essential when approaching new customer and market opportunities abroad.

Improving the situation for BC tech companies requires more deliberate focus on fostering a home team advantage. Government procurement (including departments, agencies and crown corporations) represents a significant opportunity to further this home team advantage for small technology companies.

#### **RECOMMENDATIONS**

##### **EXPAND ACCESS TO PROCUREMENT AND GLOBAL MARKETS**

Small companies typically lack the scale and capability to successfully access markets and customers abroad. Successfully growing BC tech companies requires a deliberate focus by government to foster home team advantage, demonstrate support as customers and support expanded access to new markets.

##### **1. Expand the Build in Canada Innovation Program to BC**

##### **2. Introduce a pilot program for Set-Asides in government procurements**

##### **3. Improve access to existing government procurement programs**

- a) Share procurement information across governments to promote adoption by other governments
- b) Introduce a pilot program to measure government procurement of local tech
- c) Institute weighting for local tech as part the bid evaluation process

##### **4. Invest in market development programs that expand export activity**

- a) Improve the coordination of export and trade services across government
- b) Invest in industry accelerators to deliver programs that support smaller companies to export

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<sup>11</sup> BC Technology Report Card, p28

## **1. Expand the Build in Canada Innovation Program to BC**

The federal government's Build in Canada Innovation Program (BCIP) was designed to support the early commercialization efforts of entrepreneurs through a limited procurement program that would evaluate, provide feedback and connect early stage companies on how to do business with the Government of Canada.

We recommend introducing a similar program in British Columbia to support the adoption of products of early stage companies by the Province of British Columbia and its crown agencies.

## **2. Introduce a pilot program for Set-Asides in government procurements**

SME business is recognized across levels of government as a source of job creation and an economic contributor. However, more can be done at a policy level to support SMEs in their business growth. This includes mandating a portion of government procurement towards spending with SME tech companies.

We recommend a pilot Set-Aside program (similar to the US SBIR program) for SMEs for small-scale technology procurements by government, agencies and crown corporations. The Set-Aside program would remain a competitive process among eligible SMEs and would allow small technology companies to participate in "reasonable proportion" of opportunities in BC.

## **3. Improve access to existing government procurement programs**

It is far from easy for most SME tech companies to find, access and qualify for bid opportunities offered by government. We recommend enabling BC tech companies to better access procurement opportunities by offering procurement concierge services, including online and in-person guidance resources for tech companies looking to do business with government.

### **a) Share procurement information across government to promote adoption by other governments**

We believe there is an opportunity for government to share information on their adoption of local technology solutions across different government entities (municipal, provincial, federal and crown agencies), thereby serving as customer references to other government entities.

### **b) Introduce a pilot program to measure government procurement of local tech**

We recommend piloting a framework to measure annual procurement spends with BC and Canadian tech companies. This benchmark will provide more insight across levels of government and industry and a serve as a starting point for policy deliberations.

### **c) Institute weighting for local tech as part the bid evaluation process**

The RFP process should include a weighting framework to favour procurement bids that incorporate local tech companies as part of the proposed solution.



#### **4. Invest in market development programs that expand export activity**

Building on the appetite for programs such as CanExport, there is a growing need for more concierge services and market development programs to help companies in exporting.

##### **a) Improve the coordination of export and trade services across municipal, provincial and federal departments**

There is a need to improve and lower barriers to information exchange by government entities to be more effective in helping companies gain more awareness, exposure and access to available services and resources.

##### **b) Invest in industry accelerators to deliver programs that support smaller companies to export**

Stimulating significant market expansion and job creation requires a long-term view and partnership commitment by government and industry. We recommend the government continue to provide support to industry accelerator programs focused on scaling up companies, accessing new markets and increasing export activities.

## 4. Expand Access to Global Capital

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### Background

A healthy and robust capital ecosystem is critical in realizing the growth potential of BC's tech sector. Access to stage-appropriate risk capital is an important ingredient to fuel the long-term growth of tech companies.<sup>12</sup> Many of BC's leading tech companies relied on growth and venture capital investments at critical stages of their growth. A growing number of incubators and accelerators combined with a growing interest in technology entrepreneurship are giving rise to an increasing number of technology startups and a flourishing cohort of companies that require capital to succeed.

For many years, the BC Angel Tax Credit Program has been instrumental in supporting these startups with seed stage capital. Recently, there have been notable efforts to improve access to early stage venture capital. In 2013, the federal government launched the Venture Capital Action Plan (VCAP) that has since resulted in over \$1.3 billion of new venture capital funds. In 2015, the BC government announced the creation of a \$100 million BCTECH Fund with a similar goal of increasing the availability of venture capital in British Columbia.

Despite these efforts, access to capital continues to be a challenge for most BC tech companies. Startups in the US typically raise four times as much in capital as their counterparts in Canada. Despite being similar size in terms of population, Seattle outperforms Vancouver by nearly five to one in terms of total venture capital raised. As the number of startups and early stage companies has continued to increase, there is a growing demand for capital and a need to further strengthen the capital ecosystem in BC.

### RECOMMENDATIONS

#### EXPAND ACCESS TO GLOBAL CAPITAL TO GROW COMPANIES

Access to capital is critical in fuelling the growth of tech companies. To address the funding challenge at all stages of growth, we need a long-term view that builds on a strong foundation and positions BC to attract global capital in greater numbers.

##### 1. Invest in building strong programs to attract global capital

- a) Invest in a high impact, global capital-raising program
- b) Enhance concierge services for financing options and capital firms

##### 2. Enhance and expand the Angel Tax Credit program

- a) Create a National Angel Tax credit program
- b) Enhance the provincial BC Angel Tax credit program

##### 3. Continue to support existing venture capital programs

##### 4. Expand debt and lending options

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<sup>12</sup> The Expert Panel on Federal R&D (Jenkins 2011)

## **1. Invest in building strong programs to attract global capital**

### **a) Invest in a high impact, global capital-raising program**

To attract more global investment we recommend making concerted efforts to better market high-growth tech companies, and raising the reputation of BC as a destination for outstanding tech investment opportunities.

We recommend program funding for qualifying accelerators to develop and manage a specialized global capital program that selects, advises and matches top calibre companies to a network of global investors.

### **b) Enhance concierge services for financing options and capital firms**

We recommend government to further invest in the NRC-IRAP concierge service and establish a one-stop shop program for tech companies to better understand and access grant funding, financing options, investors and venture capital firms.

## **2. Enhance and expand the BC Angel Tax Credit program**

BC was the first jurisdiction in Canada to implement a Small Business Venture Capital program (widely referred to as the BC Angel Tax Credit program) that encourages angel investment in early stage companies by extending a 30% tax credit for investments in eligible small businesses. This program has been instrumental in supporting companies with seed stage capital requirements and essential in bridging the gap between “friends and family” financing and venture capital financing.

To build on the success of the program, we recommend the following:

### **a) Create a National Angel Tax credit program**

We recommend that the BC Angel tax credit program be adopted on a federal basis, creating a national angel tax credit program which will allow for more inter-provincial capital flows, freeing private capital from the sidelines and ultimately allowing companies to raise larger pools of capital. If the Federal Government provided a 15% credit, matched by Provinces that wished to do so, BC’s existing pool of tax credits would effectively be doubled.

### **b) Enhance the provincial BC Angel Tax credit program by:**

- Eliminating the annual contribution limit of \$200,000 per individual investor
- Extending the tax carry forward period for corporate investors from 5 to 10 years
- Increasing the maximum EBC credit for a corporation from the current \$5 million maximum to a \$10 million maximum (to be the same as a Venture Capital Corporation)

### **3. Continue to support existing venture capital programs**

The Venture Capital Action Plan (VCAP) has helped to catalyze over \$1.3 billion of new venture capital funds into the Canadian tech industry. We encourage the government to stay the course on programs like VCAP and the new BCTECH Fund, which will leverage additional private investment to enhance the capital ecosystem in BC.

### **4. Expand debt and lending options**

While venture capital and equity investment play a critical role in funding tech companies, there is a growing demand for alternative financing vehicles such as debt and project financing to support the short and medium term needs of tech companies. The banks in Canada have traditionally been reluctant to provide financing to companies that lack the balance sheet or track record necessary to meet their risk profile.

Federal programs such as those offered by Sustainable Technology Development Canada (SDTC) and Western Innovation Initiative from Western Economic Development have helped to provide important loan instruments that fund project commercialization and market expansion activities.

We recommend further expansion of these programs and encouraging the Business Development Bank (BDC) and Export Development Canada (EDC) to play a greater role in providing debt and loan instruments to support the growth of tech companies.

## **Conclusion**

In summary, we need to build a stronger foundation for BC's tech sector and incentivize continued growth and scaling of BC tech companies. With strategic actions that build capacity in our SME tech companies, reinforce our capital ecosystem, invest in talent attraction and development and improve access to customers, our province will be well positioned to realize the benefits of a fast growing global technology sector – bringing more wealth, stable high-paying jobs and the technology expertise needed to grow all industries in British Columbia.

Acting on this 4-Point Plan will be critical to accelerating the growth of the sector, solidifying our global competitive position and propelling a thriving economy over the coming years to a heightened level of innovation and economic prosperity in Canada.

In the upcoming months, the BC Tech Association will continue to work with government, academia and other stakeholders to advance these policy recommendations.

For more information please contact: [policy@bctechassociation.org](mailto:policy@bctechassociation.org)

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### **BC Tech Association Capital Advisory Council**

#### **BC Tech Association C-Councils**

Digital C-Council  
Games C-Council  
Anchor C-Council  
Emerging Cleantech C-Council  
Cleantech C-Council  
Saas C-Council  
Wireless C-Council  
IT/Web C-Council  
Software C-Council

### **Tech Sector Labour Market Partnership Program**

Information and Communications Technology Council  
Vancouver Economic Commission  
BC Innovation Council  
Workforce Development Committees  
Sub-sector Advisory Committees  
Research Universities' Council of BC  
PSE Co-op Program Directors  
Lifesciences BC  
BC Cleantech CEO Alliance  
DigiBC  
Association of Consulting Engineering Companies of BC  
Accelerate Okanagan  
VIATEC  
Innovation Island  
Kamloops Innovation

## About BC Tech Association

The BC Tech Association is guided by our vision of making BC the best place to grow a tech company. For more than 20 years, BC Tech (formerly the BCTIA) has been providing opportunities for the tech industry to collaborate, learn, and grow together. We are dedicated to connecting companies, developing talent, sharing stories, and advocating on behalf of tech companies to keep our industry thriving.

We serve as a platform to grow the tech ecosystem, building programs and initiatives that uphold our core values: Be of Service, Succeed Together, Pay it Forward. [www.wearebctech.com](http://www.wearebctech.com)

### **Affecting positive change, together.**

The BC Tech Association is a trusted voice for the tech sector in BC. Representing the broad cross-section of software, IT and services, communications, digital media, lifesciences and cleantech companies, we seek to advance the interests of the tech community by collaborating with many stakeholders and building a collective and unified voice.

Our focus is on nurturing an ecosystem – ensuring that BC tech companies can realize their full potential. As the fastest growing economic contributor to the BC economy, the tech sector is poised to play an essential role in BC and Canada’s future growth. Deliberate and strategic policies and investment will play an essential role in furthering our goal of an innovative, diversified and prosperous economy in BC and Canada.

### **Developing the BC Tech policy framework to guide advocacy efforts.**

We conduct our policy development process with one goal in mind: to create the political and economic conditions that will make BC the best place to grow a tech company. To us, that includes scaling tech companies, expanding our market share and attracting increasing amounts of capital and highly skilled talent.

We consult extensively with the BC Tech community, sector and business leaders, education institutions, investors and government colleagues. We host industry roundtables, conferences and other forums; and, in true tech startup fashion, we test our hypotheses in an agile learning framework.

The outcomes of these initiatives guide our ongoing policy framework, our 4-Point Plan for Growth, which outlines recommendations to shape and grow BC’s tech sector by addressing the key issues of investing in world-class talent, expanding access to global markets, encouraging growth and competitiveness and improving access to capital.