



BC TECH
association



BC's \$25 Billion Opportunity

A Transformation Agenda

SEPTEMBER 2022

10 Key Policy Recommendations

SCALE

OUTCOME:

ScaleUp BC's Tech Companies and increase Technology Adoption in every industry.

RECOMMENDATIONS

-  **Create a BC Transformation Fund of \$1B over ten years to accelerate BC's transition to the economy of the future.**
-  Invest \$3M over 3 years to capture better data about BC's new economy, particularly in the technology and innovation sectors.
-   Increase the refundable SR&ED credit to \$5M and expand the definition of qualifying investments to include the continuous improvement innovation.
-  Introduce a superdeduction for 150% of qualifying tech commercialization costs for BC-headquartered tech companies to promote market success and scale-up.
-  Establish a \$50M procurement fund for BC companies to strengthen BC's technology procurement and optimize for innovation and Value-for-BC.

TALENT

OUTCOME:

Increase the tech talent pool to fulfill BC's enormous economic growth potential.

RECOMMENDATIONS

-  Increase the tech-savvy talent pool with greater access to and investment in education and skills training by doubling annual investment in short course credentials and reskilling programs.
-  Support small businesses to scaleup with a \$10M investment over 4 years in targeted educational programming for entrepreneurs.
-  Fund an additional 2,000 tech-relevant public post-secondary graduates to meet industry demand.
-   Extend the up-front BC foreign buyers' housing tax exemption to GTS nominees and increase the allocation of PNP places for BC to unlock additional talent supply.
-  Establish a labour credit of 10% of the starting salary of a returning Canadian worker (resident for 3 years) refundable against the payroll tax liabilities of BC-headquartered tech companies to bring Canadians working abroad home.

A Call to Action

It is no surprise that BC's fast-growing tech sector is a leading economic driver of growth in BC; technology is a tool empowering businesses, people, and governments to tackle important problems and improve lives. BC's tech sector is delivering this strong performance while being held back by two limiting factors:

- A shortage of **talent**
- An environment that could better support **scale**



In a world that's changing fast the biggest risk is standing still."

Jeff Booth

Vancouver tech entrepreneur

BC's \$25 Billion opportunity is to tackle these two challenges effectively and double not only the size of our tech industry but also the technology adoption and innovation in every BC industry.

Reviewing the state of BC's technology and innovation economy in 2022, we see many things to celebrate:

- BC is one of the fastest growing startup ecosystems – we do not lack entrepreneurial drive.
- BC's research community is well funded and our universities are world class.
- BC does particularly well at identifying relevant problems to solve and deploying technology products and solutions through startup companies.
- The BC ecosystem has impressive expertise in key tech growth areas such as software, cleantech, agtech, digital media, AR/VR/MR, blockchain, fintech, healthtech, AI and quantum computing.
- Our ecosystem has matured and flourished, building ever closer connections and meaningful partnerships through initiatives like the Digital Technology Supercluster and the Cascadia Innovation Corridor.



Tech people are first and foremost entrepreneurs—thinkers and builders who reject the status quo and set out to scale next-generation solutions to previously intractable problems. They are the pioneers of the future economy."

Andrew Reid

CEO, Rival Technologies

BC is the top breeding ground in Canada for Tech unicorns and even in challenging times for the tech industry globally, for the top 0.1% of BC tech companies, growth continued. At BC Tech our concern is for the other 99.9%. That is why we focus on supporting more startups to grow into scaleups - companies with 100 or more employees. There were only 220 of these reported in the 2020 BC Tech KPMG report card - our goal is 1000 by 2030.

It might be the case that our industry's continued progress has created a sense that all is well, change is not needed, or is not urgent. But that would be to fundamentally misread the economic data.

OUR OPPORTUNITY

Technology is more than an industry.

It is the key driver of productivity across the entire economy and a powerful tool empowering business and governments to tackle some of the most important problems we face as a society, such as the climate crisis.

We can build many more BC anchor companies that grow and scale and stay in BC. We can strengthen the resilience and adaptability of our traditional industries by working together in partnership across industries. This is the path that will maximize local value-add, good jobs across the province and future revenues to government.

The 2020 KPMG BC Tech Report Card graded BC a 3rd straight A on economic output indicators. But our grade on input indicators remained at a B. The 2020 report card delivered a clear call to action to address two key weaknesses: **Talent** and **Scale**. The vast majority of BC Tech companies have 10 or fewer employees and the 2020 Tech Report Card reported limited change in a decade in the proportion of tech companies with 50 or more employees.

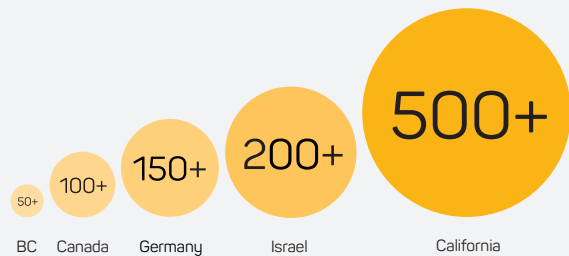
Companies with 50 or fewer employees can produce many economic and social goods: new ideas, products and solutions, purposeful employment, fast growth and engaging workplace cultures. They are rightly celebrated as success stories. But they are not yet at the scale where they can provide economic strength and stability for the long term. They are not yet the anchors that form the basis of every thriving tech ecosystem. And yet not every jurisdiction struggles in the same way.

This is a made-in-BC problem that needs a made-in-BC

solution. BC's failure to incent, encourage and develop scaleups, commercialization, senior talent and new graduates in sufficient numbers is a critical weakness at the heart of our ecosystem.

BC's Biggest tech companies are small:

The threshold to be one of the largest 10%* of tech companies in BC is an employee count of 50. The comparable threshold for Canada is 100 which trails Germany at 150, Israel at 200, and California at 500.



*Excluding microbusinesses



Imagine if all 400,000 B.C. businesses raised their productivity by 10 per cent. The result would be \$20 billion to \$25 billion of additional economic output every year."

Jock Finlayson
Business Council of BC



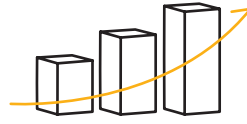
Talent

Access to talent continues to be the biggest constraint facing BC tech companies of all sizes.

Every year, technology businesses create many more job openings than they are able to fill. These jobs range from specialized technical skills to general business skills such as marketing, finance, legal, and sales. Concerningly, BC has a striking lack of experienced talent – those with a track record in growing companies from startups to scaleups.

And while BC's graduates are second to none, we are simply not keeping up with the quantity of people needed or the new skills and qualifications required by a fast-changing industry. We must invest more in people and grow BC's skilled workforce by funding more educational opportunities – starting with K-12 and right through to post-secondary and lifelong learning.

By choosing not to act we are sacrificing 30,000 jobs that could have been created by 2022.



Scale

As important as access to talent is, it will not be enough on its own.

Highlighted against BC's many clear strengths, our principal weakness stands out: BC's lack of anchor technology companies that have achieved scale. Without a thriving, vibrant core of anchor tech companies at the heart of our ecosystem, enriching the talent pool, creating spinoffs with new ideas, and providing proven pathways to scale, we'll be unable to make BC the best place to grow a tech company.

We are just starting to realize the potential of AI and data to transform decision-making, and the potential of the cloud and quantum computing to do so at a cost that is an order of magnitude lower than previous technology investments. BC's tech economy still has far to go to realize its potential, and we must significantly increase the pace of investment to catch up and then keep up with other world-leading tech ecosystems. Technology is a global business, and the world will not wait for BC.

By choosing not to act we are sacrificing billions of dollars in lost GDP.



We must empower the trinity of industry, academia, and government to work together better. The industry needs to be more open with its ideas and accepting of non-linear returns, academia needs to be more ambitious with their brilliant minds and push to bring their research to the world, and the government needs to facilitate innovation by providing incentives and enabling industry to lead.”

Ohad Arazi

CEO, Clarius Mobile Health

Why does tech and innovation matter?

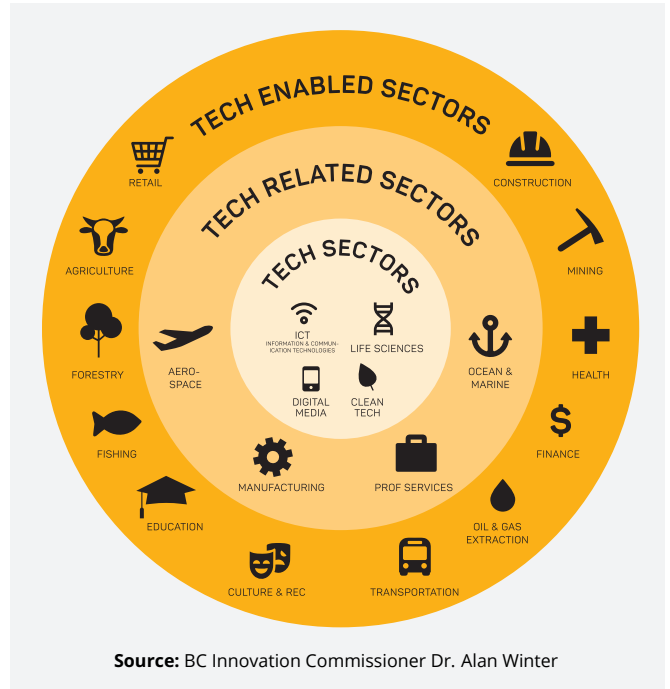
The health of its tech industry is widely recognized globally as the best leading indicator of the health and resilience of an economy as a whole and the major driver of non-speculative economic growth. This is why all forward looking governments invest heavily—most obviously the USA but many others:

France has been investing determinedly under President Macron to take the opportunity to replicate the success the USA and the UK have delivered through a focus on the tech sector.

South Korea and Sweden are recognized by Bloomberg as the most innovative countries in the world primarily based on the number, scale and concentration of their tech companies as well as the number of STEAM graduates.

China's *Made in China 2025* plan aims to develop home grown tech giants that will replace imports with home grown purchases and build global champions to export to the world.

New Zealand wants to take its tech and innovation sector from being the 3rd largest segment of the economy to the number 2 spot by 2025.



Canada's Federal Innovation Agenda is impressive in the scale of its ambition and many provinces across Canada have also seen the clear benefits and concrete returns that come from investment in technology and innovation.



At a human level, technology workers thrive in and drive positive change with curious, creative, practical, and entrepreneurial mindsets.

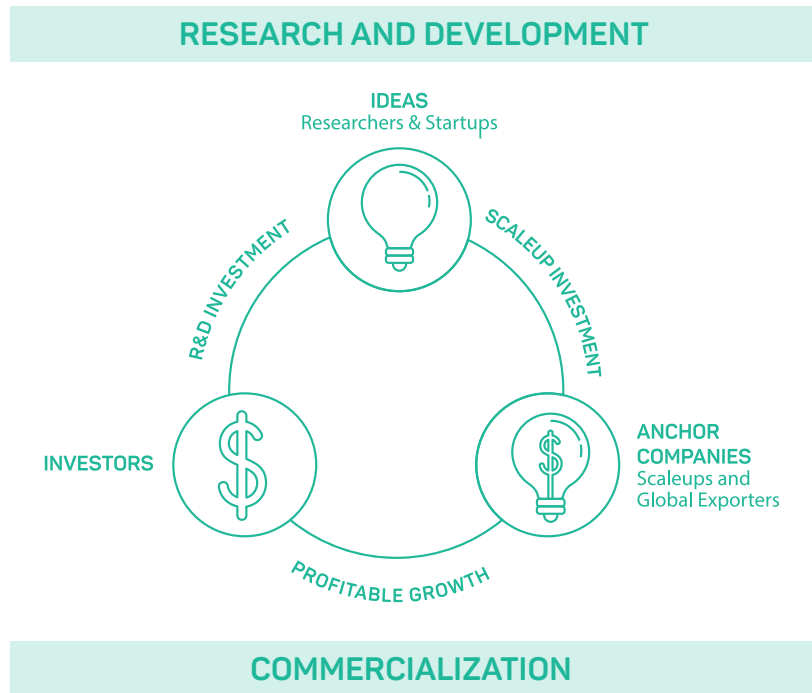
These approaches create amazing products, services, solutions and ideas in a culture of like minded people who also love their work: the tech industry creates human fulfillment and value as well as jobs and GDP. And when the local tech industry starts to deliver scaleups as well as startups, it means distinctive home grown solutions and contributions are having a positive impact on a global scale.

A thriving tech sector vaccinates the economy. Whatever economic challenges the future brings, society will have the talent, skills, and experience to rapidly innovate and scale solutions, adapting and thriving no matter the conditions.

The Virtuous Innovation Cycle

The cycle of money to ideas to money to ideas should be a continuous virtuous circle. Canada excels at the first half of the cycle: turning money into ideas, in the form of research and entrepreneurial startups. Our opportunity is to strengthen our performance in the second half of the cycle. Canada has been less excellent at turning ideas into money, in the form of profitable, scaled companies with global reach which can then in turn make further impactful investments in new ideas.

If we want different outcomes we will need to be willing to experiment with new and different incentives and mechanisms that enable the full virtuous cycle to be completed.



DEFINING A BC ANCHOR

A BC-based anchor company:

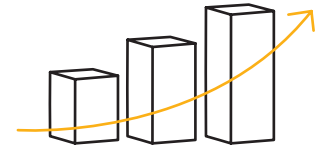
- Has BC-based executives with strategic decision making and resource allocation authority
- Employs 200+ employees
- Generates \$50M+ revenues
- Exports products, solutions, and services globally
- Makes significant investments - in facilities for research, manufacturing or distribution or through pursuing business acquisitions



Policy Recommendations

SCALE

BC has a thriving technology and innovation sector based on our greatest natural resource—our people. Together we have built an industry that is a key contributor to GDP and a leading driver of BC's economic growth.



Yet BC's economy structurally under-invests in R&D by global standards. At 1.4% of GDP we trail significantly behind the OECD average of 2.4% and also trail the Canadian average of 1.7%.

At the firm level, our companies experience difficulty scaling up to become anchors, we are much slower to commercialize than to develop products and services, and we see a productivity shortfall versus international competitor jurisdictions.

Shifting BC's technology sector composition towards more successful anchor firms will attract high-quality talent from BC and beyond, increase worker productivity, support smaller firms to grow, and bolster the tax base by creating rewarding jobs.



Healthy economies need local anchor companies because their presence helps all companies within the ecosystem to scale up. Talent is attracted to locations where career paths are possible, and gaining experience within different organizations, at different sizes and stages of growth, enables the whole talent ecosystem to become more robust and resilient."

Andrew Booth
Chief Financial Officer, AbCellera

There is a significant opportunity to support and encourage the scale-up success of BC companies and create incentives for larger businesses to further invest and build their future in BC. Our scale recommendations are:

1. A Transformation Fund for BC
2. Capture better data on BC's 21st Century Economy
3. Extend and continue incentives for R&D
4. Incent BC-headquartered commercialization to drive scale success
5. Use Procurement as a lever

1. A Transformation Fund for BC



Transforming the economy requires transformative investments and new investment decision mechanisms. We recommend the establishment of a BC Transformation Fund to parallel the Federal Strategic Innovation Fund to, create a mechanism to co-invest in innovation projects and proposals.

- Incent and encourage the creation and retention of IP in BC and the establishment and growth of head offices with strategic decision-making and resource allocation authority.
- Enable BC companies to achieve rapid commercialization and export growth of their innovative products and solutions.
- Incent and encourage homegrown companies to make and retain large scale investment in BC such as new manufacturing and distribution facilities.
- Provide shared ecosystem capital assets and lab facilities for research to enable sectors where BC is a world leader to intensify their collaboration, scale faster and stay rooted in BC.
- Harness made-in-BC innovation to deliver climate action targets through consortiums of BC researchers, technology companies and energy-intensive emitters.



RECOMMENDATION

Create a BC Transformation Fund of \$1B, with an investment of \$100M annually over ten years, to support commercialization, equipment investment, sustainable development, and collaborative R&D facilities.

2. Capture better data on BC's 21st century economy.



There is a clear link between the data that is collected and government policy and investment priorities. Where data is captured, policy and investment follow; where data is not captured there is an absence of policy and investment.

BC collects extensive information on the industrial sectors that dominated GDP and employment in BC in the 20th century, but very limited information on the industrial sectors that dominate GDP and employment in BC today and which will account for most GDP and job growth in BC over the next decade.

As policy development and program deployment must be grounded in data, this data gap is having significant and negative consequences on the BC government's ability to anticipate and address the economic challenges of BC today. With better data, better policy and programs could be developed.

The cost of addressing this data gap is small: an investment of \$3M over 3 years would go much of the way to closing the gap by focusing on the key priority areas of GDP, service exports, government revenue contributions, skills needs and geographical and demographic data from smaller communities.



"British Columbia has long enjoyed the advantages of circumstance – abundant natural resources, an attractive geographic setting, and favourable access to North American and Pacific Rim markets. However, these advantages have sometimes led to competitive complacency, which has left the province behind in areas such as innovation, productivity, value added product development and business investment in research and development.

BC has a clear choice going forward. We can hope that commodity prices, housing prices, tourism, and construction have sufficient strength to maintain the province's current level of prosperity; or we can proactively make investments in business innovation and cluster development across BC that will enhance the sustainable and clean growth of the province's emerging sectors and high potential firms and make BC more competitive in an increasingly dynamic global market."

Dr. Alan Winter

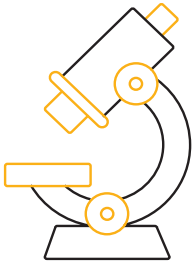
BC Innovation Commissioner | 2018-2020



RECOMMENDATION

Invest \$3M over 3 years to capture better data about BC's new economy, particularly in the technology and innovation sectors.

3. Extend and continue incentives for R&D



Canadian R&D leads the world in many areas, from life sciences to quantum computing to machine learning. BC firms value the support they receive from Scientific Research and Experimental Development tax credit programs and the contributions this support makes to business success. In Budget 2022 the Federal government committed to a comprehensive review of the SR&ED tax credit program. We recommend updating the expenditure thresholds which have not kept pace with either inflation or the increased cost of developing technology. We also recommend that the definition of qualifying R&D be expanded and guidance to CRA auditors be updated to better reflect the continuous improvement innovation that is essential to modern software development. Finally we recommend the ceiling on refundable SR&ED for Canadian-controlled private corporations be increased from \$3million to \$5million.



Canada's SR&ED regime is an incredible competitive advantage, encouraging home grown companies and attracting major global multinationals who invest heavily in expert teams tackling the most interesting technical problems."

Cameron Burke
Partner, Fort Capital



RECOMMENDATION

Increase the ceiling on refundable SR&ED for Canadian-controlled private corporations from \$3M to \$5M and expand the definition of qualifying investments to include continuous improvement innovation.

4. Incent BC-headquartered commercialization to drive scale success

"Having companies headquartered in BC isn't just 'a' success factor it is 'the' key success factor for scale and ecosystem strength.

Matt Switzer
Partner, Northwest Capital Partners



Head offices are a key source of regional prosperity, a magnet for talent, a large benefit to the tax base, and a generator of spinoff businesses and knowledge spillovers. BC must seize the opportunity to greatly increase its count of homegrown, locally-headquartered anchor companies and spur retention of IP created in BC.

Incenting commercialization activities will help BC tech companies compete in local and global markets, increase opportunities for people from diverse life and educational backgrounds to participate in the tech economy, and will directly help BC firms scale up.



RECOMMENDATION

Incent and fund technology companies as they scale with a superdeduction for 150% of qualifying tech commercialization costs for BC-headquartered tech companies.

5. Use Procurement as a lever

A key tool available to government to support its home team and strengthen the ecosystem is to use procurement as a lever. Success in local procurement is a strong confidence signal, improving a company's export prospects. Since exports are key to scaling up in a relatively small, open economy like British Columbia's, procurement can directly drive scale-up across multiple fronts.

There are already pockets of best practice adoption, but they have not spread fully across government. Paying due attention to what works (for instance at BC Hydro, which has done good work in this area) and replicating it across government will accelerate progress. The BC government's new *Startup in Residence* and *Sprint with Us* programs are excellent procurement experiments that are bringing value to government.

To fully utilize procurement as a lever and to accelerate progress in adoption of technology and innovation, BC should employ set-asides for BC companies. The adoption of Value-for-BC as a provincial procurement evaluation criterion is a key acceleration tool which would mirror the impactful adoption of Value-for-Canada in the federal government's evaluation criteria.



To better leverage Canadian procurement the federal government changed how companies bid on Canadian programs by including "value proposition to Canada" as an evaluated criteria in bids. This has resulted in a significant increase in economic benefits for Canada and Canadian companies."

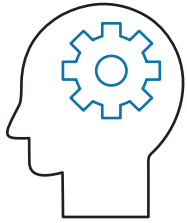
David Hargreaves
Senior Vice-President, Strategy, Seaspan

RECOMMENDATION

Ensure technology procurement strategy is optimizing on innovation potential as well as cost by engaging BC companies on flexible, problem-based projects, not only solution-prescribed RFPs, and increase set-asides for BC companies through a \$50M procurement fund and adoption of Value-for-BC as formal evaluation criteria.



TALENT



Tech companies contribute a great deal to BC's economic growth and to government revenues. Tech jobs pay well, which means the tax revenue from an average tech worker is 130% that of the average BC worker. This makes increasing tech employment a key way to increase government revenues that fund important investments and social programs. Yet BC's tech employers—tech and non-tech companies alike— are facing a constrained talent supply that limits job growth.

Every unfilled position, whether junior or senior, imposes a very significant set of opportunity costs from the local level to the provincial level: lost community spending and neighbourhood vitality, municipal and provincial tax revenue, and a missed opportunity to drive crucial cluster effects for the emerging future economy. BC must also do better to bring under-represented groups into the technology labour market.



It is so important to both invest in home-grown talent through quality education programs and maintain a flexible immigration policy to ensure a sustainable ecosystem and access to top talent for all players involved."

Amanda Mallow

Chief Human Resources Officer, Sophos



BC also lacks senior experienced talent, deep technical skills (such as data scientists) and commercial skills such as product/market fit and sales. Ideas and products do not exist in a vacuum, and for scale success a company needs senior talent that can design and execute a strategy that links the company's product to compelling customer needs in sufficiently large markets. This isn't a skill that can be taught in school; it must be learned through experience.

Our recommendations to increase the talent supply are:

1. Double annual investment in short course credentials and reskilling programs
2. Invest in targeted scaleup educational programming for entrepreneurs
3. Create more degree places at the post-secondary level
4. Attract talent to BC and Canada
5. Encourage expatriate Canadians to return

Increase talent supply in the short term

1. Double annual investment in short course credentials and reskilling programs

Investing in BC's tech talent pipeline is as important for BC's traditional industries as it is for BC's tech sector. Today every industry – from manufacturing to forestry to agriculture - is in the midst of a digital revolution – and in need of the tech-savvy workers that will enable industries to remain globally competitive.

Post-secondary places are an important part of the mix but not the only part. BC should double its annual investments in short-course credentials and the highly effective rapid re-skilling courses that enable workers - including many from under-represented groups - to re-train for a career in tech. These were a tremendous success as we addressed covid job disruption and should remain a key government spending priority going forward.



RECOMMENDATION

Increase the tech-savvy talent pool with greater access to and investment in education and skills training by doubling annual investment in short course credentials and reskilling programs.

2. Invest in targeted scaleup educational programming for entrepreneurs

In the 2021 Labour Market Outlook BC's government projected that technology jobs will be the number one source of private sector job growth in BC in the coming decade with 140,000 jobs being created. BC Tech's 2022 Report on Labour Market Supply and Demand in the Tech sector estimates job creation at 2 to 3 times that number.

We don't want those jobs created only in startups and multinationals, we want to see many of them in home-grown BC companies that skillup, scaleup and become the Anchor companies of tomorrow.

Companies at scale, who have roots in BC, are the companies that deliver long-term economic strength and stability. They are more likely to create multi-year sustainable jobs, attract investment capital, invest in R&D, remain anchored in the community and create economic growth and prosperity for those communities.

But BC's small business entrepreneurs face specific challenges, from sourcing the right executive and technical talent with 'scaling' experience, to accessing financing, and identifying the global markets, customers and supply chains required for rapid and profitable growth. These challenges can be overcome through targeted scaleup educational programming for entrepreneurs.



RECOMMENDATION

Support small businesses to scaleup with a \$10M investment over 4 years in targeted educational programming for entrepreneurs.

With a \$10M investment over 4 years there is an unparalleled opportunity to build on the record of startup success in BC, enable more startups to grow into scaleups, and from there become anchor companies in the BC economy.

3. Create more tech-relevant degree places at the post-secondary level



BC's post-secondary institutions are graduating fewer engineering and technology-related degrees on a per capita basis versus OECD countries and other Canadian provinces. The investment in an additional 2,900 tech-relevant places at public post-

secondary institutions was an impactful first step to enable labour supply to move beyond the 'Constrained Growth' scenario set out in BC Tech's 2016 Tech Talent BC Report, but this investment is insufficient to meet the demand set out in the BC Government's 2021 Labour Market update or BC Tech's 2022 Report on Labour Supply and Demand in the tech sector.

"I am thrilled to see new narratives emerging about the B.C. economy that put an emphasis on the skills and training that the next generation will need to navigate a changing world. More than ever our future relies on our people and the investments we make to support them throughout their careers.

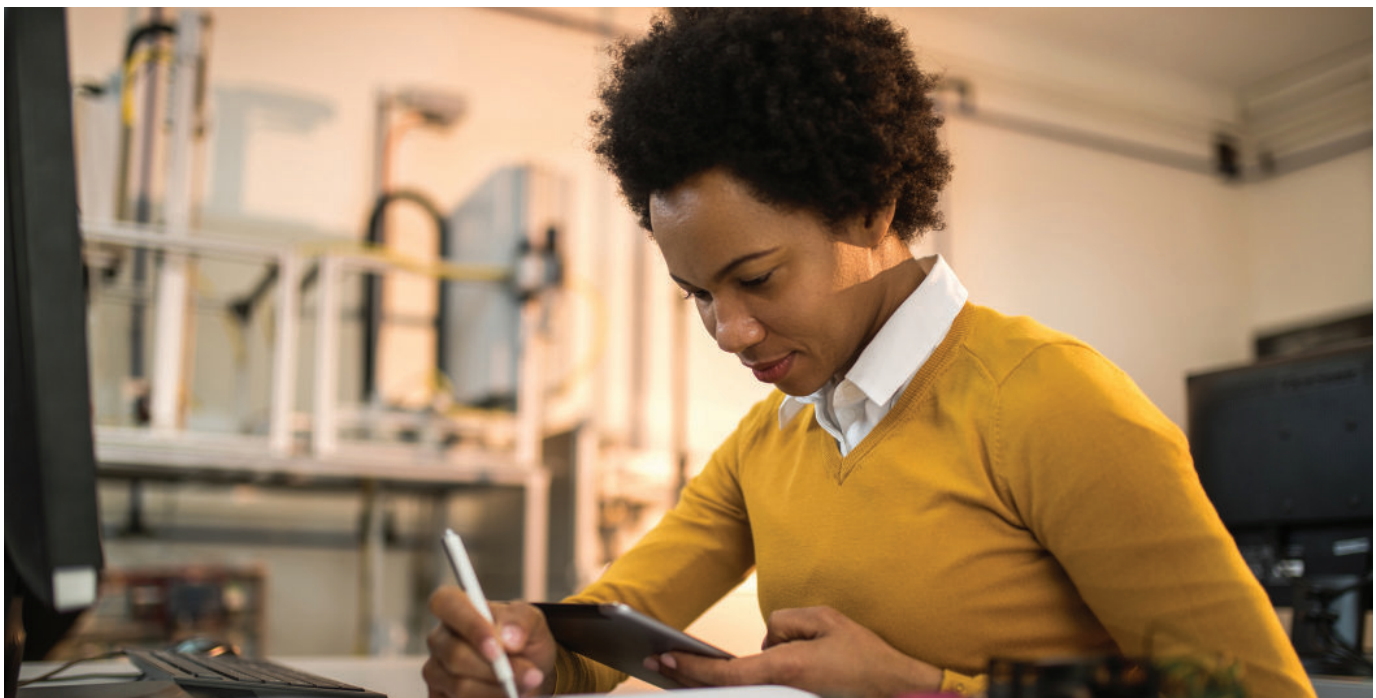
Joy Johnson

President of Simon Fraser University



RECOMMENDATION

Fund an additional 10,000 tech-relevant public post-secondary graduates to address the labour supply needs of BC's tech and tech enabled sectors.



4. Attract talent to BC and Canada

The federal Global Skills Strategy is a popular, well-functioning program that increases firms' access to top global talent. The employees hired through this stream are often highly-skilled and contribute to Canada's economy while making their lives here.

In 2017, the BC Government introduced the BC Provincial Nominee Program (PNP) Tech Stream. The program helps tech firms fill important vacancies with global talent in weeks, not months or years, and has been extremely popular, with high-demand job categories being refined in 2018 in response to labour market research.

Finally, as the BC Business Council has pointed out, while BC is one of Canada's fastest growing economies, it receives a lower per capita allocation of PNP places. This must change.

RECOMMENDATION

Extend the up-front BC foreign buyers' housing tax exemption currently available to PNP nominees to Global Talent Stream nominees, and increase the allocation of PNP places for BC.



There needs to be a more conscious agenda around fostering experienced and executive talent to sustain growth in mid-size companies. More broadly, a multi-pronged and segmented approach is necessary to address the challenges faced by companies in different growth phases. This will allow BC's tech sector to allocate its resources in a way that makes the most difference."

Laurie Schultz
Former CEO, Galvanize



5. Encourage expat Canadians to return



Canadians currently working abroad are a vital source of potential labour supply for BC's tech sector—some studies have estimated the number of Canadians living and working in Silicon Valley at up to 350,000. Many scaling companies cite challenges

in encouraging senior talent to return to Canada as a key barrier to success. We must address this challenge and attract these top Canadian workers to scale our BC-grown anchor companies.

"Some of the best tech talent in the world is Canadian. We need more of them to return to enrich BC with what they've learned, experienced and achieved elsewhere – and to build a tech powerhouse right here in BC.

Shamil Hargovan
Co-founder and CEO, Wiiv



LEARN FROM ELSEWHERE

■ QUEBEC

Quebec offers a provincial income tax exemption for foreign experts doing R&D or commercialization work in tech sectors.

The tax exemption is 100% of provincial income tax in years 1 and 2, 75% in year 3, and 50% in year 4.



RECOMMENDATION

Create a BC-headquartered technology labour credit equal to 10% of the starting salary of a returning Canadian tech worker who remains resident in BC for at least 3 years, refundable against a company's payroll tax liabilities.

A Career in Tech

A career in tech is quite different from the commonly understood stereotype. Here are the attributes demonstrated by the people the tech industry most values, promotes, develops and needs:

■ CURIOUS

Interested in exploring new ideas, finding new solutions & pathways, and unsatisfied with the status quo

■ CREATIVE

Enjoy generating ideas and deploying experiments to find out what works and what doesn't without hesitating through fear of failure

■ PRACTICAL

Focused on problems that matter, concrete defined improvements that build over time and impact people positively

■ INCLUSIVE

Interested in new perspectives, different ideas, quieter voices and novel frameworks

■ IMPATIENT

Quick to action, with a sense of urgency, excitement and interest in being first and fastest

■ ENTREPRENEURIAL

More interested in the path not taken than the well established highway

■ DETERMINED

Put in the hard work and hours needed with a whatever it takes attitude and a belief that if at first you don't succeed, try, try again

Growing the Talent Pipeline for the Future

Outside the scope of BC Tech's policy recommendations but a subject of strong interest and engagement for BC's tech community is ensuring we are also growing the talent pipeline, especially at K-12.

Concerted action to interest young people in STEAM (science, technology, engineering, arts, and math) topics will ensure they have the information, and more importantly inspiration and encouragement, to choose a career in tech after they complete their education.

Today's tech careers are very different than many imagine. BC's kids have the potential to lead the world in tech, but many are unaware of the wide variety of careers available, and what those careers actually consist of—especially girls and young people outside of larger urban centers. While coding is still important today, one of the first things that artificial intelligence will disrupt is the world of programming. Of more permanent relevance are foundational skills like:

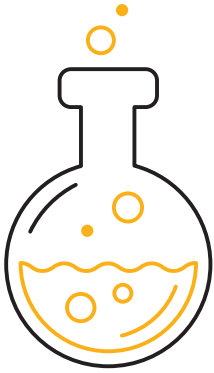
- STEAM fluency in areas like Science and Math
- Critical thinking and problem-solving, including ethical design thinking that puts the needs of the user at the center
- Entrepreneurship, innovation, and creative thinking; including experimentation and scenario planning
- Social skills including working with and getting results from others; ease and confidence with new technology tools and continuous life long learning



Rapid change and global influences in STEAM fields offer unique challenges and opportunities for K-12 educators. We are excited to work with BC Tech and its members to support educators with insights about today's careers in tech and the future of work. Together we can achieve our vision of student success by providing innovative, caring and responsive learning environments."

Aaron Davis

Director of Instruction, Vancouver School Board



A student interested in software development will want to consider if they are more interested in creating software, configuring software, or controlling software, each of which will take them down a very different qualification path to a very different career. Resources like myblueprint.ca are great innovations to help students, parents and educators navigate these pathways.

Emerging trends in technology and new thinking about the future of work are critically important, rapidly changing topics. Our support for STEAM educators can and must go much further to ensure they can confidently address these topics in the classroom. Government and school districts must provide support for students to learn computational thinking in the classroom and ensure educators are provided with the right professional development opportunities, as well as the necessary technology and the ability to use that technology (for instance by ensuring there are IT management resources available in schools).



Diversity and inclusion isn't an HR issue, it's an economic and shareholder value issue. Diverse inclusive teams deliver better results, anticipate and resolve problems faster and see opportunities others miss, driving competitive advantage."

Helen Sheridan
Chief Human Resources Officer,
STEMCELL



Our Shared Opportunity

Scaling up BC's technology and innovation economy will scale up BC.

It will bring new opportunities for growth, profitability and efficiency and economic sustainability to every industry. It will bring new opportunities for fulfilling, well paying jobs and employment security to every citizen.

For the future to look different than the past means adopting new tools, new tactics, new ideas and new voices at the table. It needs two key attributes which British Columbians have in abundance: hope and grit.

And above all else it requires that we all share the determination—and the confidence—that BC will be a global success in the economy of the future.



Here's what we need to do to help countries compete in the future economy:

1. Accelerate inclusive and sustainable growth, including building the foundations of the digital economy to help countries compete in the future.
2. Foster resilience to global shocks and threats—including strong safety nets and social protection programs that focus on helping the poor.
3. And invest more—and more effectively—in people to prepare them for the jobs of the future."

Jim Yong Kim

Former President, World Bank Group



ABOUT BC TECH

BC has over 11,000 tech companies employing more than 200,000 people and an estimated 100,000 more employed in tech jobs in non-tech companies. BC's tech sector is expected to create the most new jobs of any Industrial sector in the next decade according to the BC Government's Labour Market Outlook 2021.

BC Tech is the largest member based non-profit in BC with more than 900 members. BC Tech is dedicated to:

- **Advocating on behalf of BC's Tech Sector**
- **Supporting more BC Tech companies to grow and scale into the anchor companies of tomorrow**
- **Attracting more talent into tech and increasing the diversity of BC's tech talent pool**

BC Tech's vision is a BC that values technology as a positive force for good – for the economy, for society, for our future. Today, every company is a tech company.



wearebctech.com

To learn more, contact us at hello@wearebctech.com