Innovating in Ontario

June 2020 – Munich Tech Days
A 30 second tour of Ontario, Canada

Located in the heart of North America
- 14 million people and over 200 languages spoken
- Connected to over 150 international destinations
- Ontario is larger than France and the U.K.
- An hour away by air to New York City, Washington or Chicago

Canada’s economic powerhouse
- 7th largest economy in North America by GDP
- 39% of the country’s population and GDP
- 47% of Canada’s goods produced in Ontario
- Home to 62% of international head offices in Canada

Access to markets
- Free trade deals with 46 countries reaching 1.7 billion consumers
Talent: From STEM to Skilled Trades

6 TOP 300 GLOBAL UNIVERSITIES
ACCORDING TO US NEWS AND WORLD REPORT

UNIVERSITIES IN THE GLOBAL RANKING

UNIVERSITY OF WATERLOO GRADUATES ARE 2ND MOST FREQUENTLY HIRED BY SILICON VALLEY COMPANIES ACCORDING TO THE WALL STREET JOURNAL

TOP 25 GLOBAL COMPUTER SCIENCE PROGRAMS

#15 UNIVERSITY OF WATERLOO
#25 UNIVERSITY OF TORONTO
ACCORDING TO US NEWS AND WORLD REPORT

42,261 STEM GRADUATES PER YEAR

BETTER EDUCATED THAN ANY OECD COUNTRY

68% OF ONTARIO ADULTS possess a post-secondary education - a rate higher than any OECD country. Our universities and colleges provide a stream of high-quality talent. The University of Toronto ranks among the top 20 global universities and University of Waterloo graduates are the second most frequently hired by Silicon Valley companies.
University of Waterloo: operator of the largest post-secondary co-op program in the world with over 6,700 employers that include Amazon, Snapchat, Facebook, Microsoft and more. It is also a place for innovation with a focus on autonomous vehicles and artificial intelligence.

University of Toronto: continues to be the highest ranked Canadian university and one of the top ranked public universities in the five most prestigious international rankings. There is also ground-breaking research being done in areas of digital health, agritech, artificial intelligence, and robotics.

Carleton University: Carleton is doing extensive research within the ICT sector, with recent announced partnerships with companies such as Huawei and Nokia with a focus on 5G advanced communication technology.

Queen's University: one of Canada's top universities focused on supporting innovation through Queen’s Innovation Centre, and providing critical research within The Centre for Advanced Computing (CAC) and Centre for Energy and Power Electronics (ePOWER).

Ryerson University: over 140,000 alumni worldwide, many of which studied ICT-related topics. Also, 95.3% of Ryerson graduates report employment two years after graduation. Ryerson is also home to incubators such as The DMZ which is Canada's top university business incubator.

Sheridan College: a college with campuses in Mississauga, Brampton and Oakville that offers 130+ career-focused programs, many of which are technology-oriented including game design, script development, 3D animation, programming and more.
Ontario’s Unique Automotive, IT and Finance Clusters

Automotive Manufacturing
- #1 North American assembly in 2017 building 2.2M vehicles
- Only sub-national jurisdiction globally with 5 OEMs (FCA, Ford, GM, Honda, Toyota)
- 700+ supplier companies (including Magna, Linamar, Martinrea, Woodbridge and more)
- 500+ tool and die makers
- Numerous Auto R&D Centres
- MOU with Michigan to support Automotive Partnerships and Technology Collaboration

Information Technology
- 2nd largest tech cluster in North America with over 20,000 establishments and 280,000 workers
- 5,000+ start-ups with key hubs in Toronto, Waterloo and Ottawa
- 42,000+ STEM Grads per year from Ontario universities
- Global Skills Strategy program allows easy entry for foreign-skilled IT talent
- 150+ languages spoken

Financial Services
- Toronto is the 2nd largest Financial Services hub in North America after New York
- Global center for Fin-Tech, Insure-Tech and Blockchain with leading companies such as WealthSimple, Borrowell, Ethereum and many more.
R&D Cost Advantage - Ontario

• Scientific Research and Experimental Development Tax Incentive Program (SR&ED)
  • Up to 35% refundable tax credit
• Ontario Innovation Tax Credit (OITC)
  • 8% Refundable tax credit
• Ontario Business Research Institute Tax Credit (OBRITC)
  • 20% refundable tax credit
• Ontario Research and Development Tax Credit (ORDTC)
  • Non-Refundable 3.5% credit

After-Tax Cost of $100 R&D Expenditure
Small and Medium Sized Manufacturers

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<th>R&amp;D Expenditure (general)</th>
<th>R&amp;D Expenditure (at eligible Ontario research institutes)</th>
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<td>Gross expenditure</td>
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<td>Actual after-tax expenditure</td>
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Funding Opportunities - Examples

• Canada – Germany 3+2 collaborative call for proposals on Innovative Artificial Intelligence Solutions for Industrial Production

• Eureka Program – Canada is an associate country
  • Advanced materials 2020-2021 multilateral call for proposals
  • EUREKA Clusters – Joint call for proposals in artificial intelligence

• Canada – Germany 2020-21 collaborative industrial research and development call for proposals (NRC IRAP-ZIM Call 7)

• NGEN Supercluster funding for Projects ($1m - $20m), Pilots ($100k - $500k), Feasibility Studies ($50k - $200k)

• Autonomous Vehicle Innovation Network: Funding to test and develop autonomous and connected vehicle solutions
Putting it together – AI in Ontario

Current Trends:
• Ontario is comprised of over 300 AI firms and institutions, creating a hub of AI-based innovation.
• To support continued growth, Ontario is investing $50 million in the Vector Institute, which will also be supported by the federal government. In addition, more than 30 companies in the private sector are anticipated to invest $80 million.

Applications of AI in Ontario:
Retail: Integrate AI is building an AI-powered platform for B2C enterprises to make customer interactions more natural and valuable.
Health: Deep Genomics is aiming to become the world's first AI-based medicine company.
Law: Blue J Legal is using artificial intelligence to make the law more transparent and accessible.
Cybersecurity: Mindbridge provides an advanced fraud detection solution for enterprises based on AI, machine learning and big data.
Manufacturing: Canvass Analytics is providing predictive analytics for Industry 4.0
ONejKAEO IS OPEN FOR BUSINESS

Thank you for your time

Timely Customized Business Intelligence to inform investment decisions – including data on key business costs in comparison to competing jurisdictions, duties and relief programs for imports and exports, available talent pools and more.

Tailored insight on business immigration pathways, employee settlement services, talent partnerships with colleges and universities and more.

Ready partnerships within the larger government community to understand relevant local policies and programs and certifications or compliance checks.

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Early investment-specific assessment and facilitation, of federal, provincial and municipal incentives available to offset expected business costs.

Easy access to local professional services to meet an investor’s corporate and commercial needs – legal expertise, banking and financing, tax and financial planning, marketing, public relations and more.