

The Way Forward

— on technology



Sector Work Plan



What is the Technology Sector Work Plan?

As part of **The Way Forward**, industry and the Provincial Government have partnered, through the Cabinet Committee on Jobs, to support economic growth and foster private sector job creation. As part of this work, the Government of Newfoundland and Labrador, the Newfoundland and Labrador Association of Technology Industries, the Newfoundland and Labrador Environmental Industry Association, the Atlantic Canada Aerospace and Defence Association and the Canadian Manufacturers and Exporters Newfoundland and Labrador have led the development of the Technology Sector Work Plan. The Work Plan includes actions that each of the partners will take to achieve the collective goal of growing the technology industry and stimulating new private sector employment.



Vision for Technology Sector Growth



Together, we will pursue opportunities and remove barriers to support technology sector growth. Our collaborative actions will accelerate the conditions necessary to foster innovation and adopt new technologies, stimulate new and existing business activity and increase private sector technology jobs for residents in Newfoundland and Labrador.



Growth Objectives

This work plan outlines steps necessary to reach the following technology growth objectives:

- Increase technology sector business activity in Newfoundland and Labrador by 2022;
- Provide 40 high performing technology firms (20 per year for the next two years) with intensive supports to assist them to scale; and,
- Increase private sector jobs that support the creation, development and adoption of technology throughout Newfoundland and Labrador by 2022.

Through activities in this work plan, Newfoundland and Labrador will be better positioned to maximize private sector job creation and economic growth as set out in **The Way Forward**.

Sector Partners

The Technology Sector Work Plan was collaboratively developed by representatives of:

Government of Newfoundland and Labrador

Newfoundland and Labrador Association of Technology Industries

Newfoundland and Labrador Environmental Industry Association

Atlantic Canada Aerospace and Defence Association

Canadian Manufacturers and Exporters Newfoundland and Labrador

Newfoundland and Labrador Oil and Gas Industries Association

OceansAdvance

Government of Canada

Memorial University, including the Faculty of Engineering and Applied Science, Marine Institute, Genesis Centre and C-CORE

College of the North Atlantic

What Growth Potential Does the Technology Sector Offer the Province?



Technology has the potential to contribute jobs to communities throughout our province. Technology firms develop and deliver innovative applications and solutions that help support many other sectors such as telecommunications, education, health care, mining, oil and gas, aquaculture, energy, fisheries, agriculture and forestry. We have tremendous growth potential in areas such as clean technology, information and communications, advanced manufacturing, aerospace and defence, oceans technology and health care innovation.

As this industry grows, there are some things that you should know:

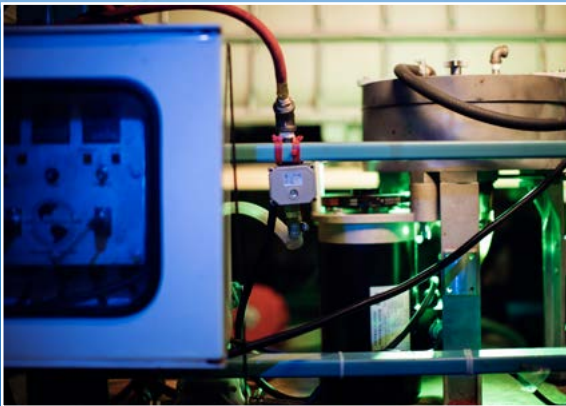
- We have gained global recognition for our innovative technology applications and solutions in areas such as subsea imaging, fraud detection software, training simulation, remote sensing, environmental monitoring, offshore and onshore geotechnics, water and wastewater solutions, wireless communication, wireless power, energy efficiency and airborne intelligence, surveillance and reconnaissance.
- Newfoundland and Labrador has been recognized as the “crossroads of the world.” Our strategic location has positioned our province as a centre of excellence for marine and cold ocean technologies, research and testing.
- According to the federal Department of Innovation, Science and Economic Development, by 2025 there will be more than 50 billion connected devices in the world. Technology is changing the way people work and live, business lines and entire systems of production.
- As part of **The Way Forward**, the Provincial Government and industry have come together through unprecedented collaboration to develop a plan to realize the full potential of the industry by supporting high performing firms and the ingenuity of our entrepreneurs, including women and young people and people who wish to immigrate to Newfoundland and Labrador. This will generate employment for the people of our province.



How We Are Working Together to Grow the Technology Sector

Together, industry, post-secondary institutions and the Provincial Government, with input from federal representatives, have identified key challenges and opportunities related to: human resources, labour and culture; business development and risk management; research, innovation and diversification; market access and development; and public education. What follows on the coming pages are the actions we will take together to accelerate growth in the technology sector in Newfoundland and Labrador.





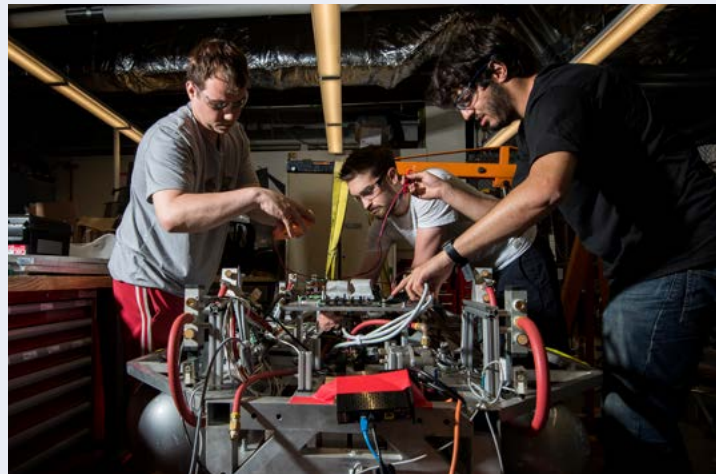
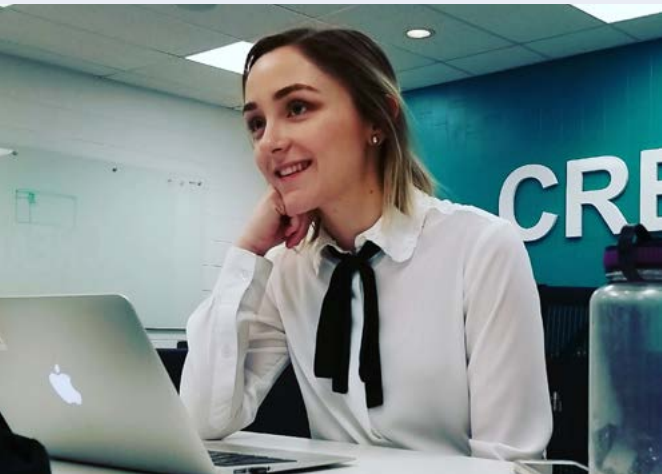
Human Resources, Labour and Culture



- ▶ Develop a Technology Sector Attraction and Retention Strategy to address employment issues, strengthen the human resource capacity (including emerging training needs) of the industry and undertake new initiatives to attract and retain workers. (Completion target: 2018-19)
Lead: NEIA, NATI, CME, ACADA, Noia, OceansAdvance
Partner Organizations: TCII, AESL, ISEDC, ACOA, MUN, CNA, MI

- ▶ Enhance the development of K-12 student technology skills through engagement with the technology industry, including increased exposure to coding and participation in youth technology experience programs. (Completion target: Immediately)
Lead: EECD
Partner Organizations: NEIA, CME, ACADA, NATI, TCII, ACOA, MI

- ▶ Prioritize the technology sector for Newfoundland and Labrador Provincial Nomination Program immigration supports. (Completion target: 2018-19)
Lead: AESL



- ▶ Provide sector-specific provincial immigration supports to employers in the technology industry, including seminars on provincial immigration pathways, in collaboration with industry partners. (Completion target: 2018-19)
Lead: AESL
Partner Organizations: NEIA, NATI, CME, ACADA, Noia, OceansAdvance

- ▶ Introduce a Study and Stay Program to attract and retain international students, including in the technology sector, in Newfoundland and Labrador. (Completion target: 2018-19)
Lead: AESL **Partner Organization:** ACOA
- ▶ Enhance immigration pathways for international graduates from technology-related fields and skilled workers with experience in the technology sector. (Completion target: 2018-19)
Lead: AESL
- ▶ Expand ways to share information with educators, students and job seekers about careers in technology. (Completion target: 2019-20)
Lead: EECD, AESL, ACADA, CME, NATI, NEIA, Noia, OceansAdvance, CNA, MUN, MI
- ▶ Provide skills training funding to support entry into occupations in the technology sector and provide supports for unemployed skilled trade workers to retrain for technology-related occupations. (Completion target: 2018-19)
Lead: Individual residents
Partner Organizations: CNA, MUN, AESL, MI
- ▶ Support technology sector employers to train/up-skill new and existing employees. (Completion target: 2018-19)
Lead: NEIA, ACADA, CME, NATI, Noia, OceansAdvance
Partner Organizations: AESL, MUN, CNA, MI, TCII
- ▶ Support activities that focus on long term development of technology talent and applied research. (Completion target: 2019-20)
Lead: MUN, CNA, MI
Partner Organizations: AESL, NEIA, CME, ACADA, NATI, Noia, OceansAdvance
- ▶ Explore new ways to connect and communicate Newfoundland and Labrador technology sector employment opportunities through the hosting of Connector and meet and greet events and forming cooperative employment partnerships with post-secondary institutions. (Completion target: Fall 2018)
Lead: NEIA, ACADA, CME, NATI
Partner Organizations: GC, MUN, CNA, MI, OCIO

Business Development and Risk Management



- ▶ Develop an industry-led mentorship program whereby established firms partner to support new and existing technology entrepreneurs. (Completion target: Fall 2018)
Lead: NATI, NEIA, CME, ACADA, OceansAdvance, Noia, GC
Partner Organizations: ACOA, TCII, IC

- ▶ Support new and existing technology firms to acquire foundational business skills. (Completion target: Fall 2018)
Lead: NATI, NEIA, CME, ACADA, OceansAdvance, Noia, GC
Partner Organizations: ACOA, TCII, CNA, MUN, MI

- ▶ Promote access to procurement opportunities for local technology sector firms through the provisions of trade agreements and procurement legislation where such opportunities are for the purposes of economic development. (Completion target: Summer 2018)
Lead: IIAS, GPA, TCII, OCIO

- ▶ Provide industry with the opportunity to present innovative ideas to the Procurement Advisory Council, which could result in the adoption of procurement policy or practices that enhance opportunities for trialing new and innovative technologies within the public sector. (Completion target: Fall 2018)
Lead: GPA, IIAS **Partner Organizations:** TCII, OCIO





- ▶ Identify and develop opportunities to leverage clean technology and related supports for development and adoption within industries. (Completion target: 2018-19)
Lead: NEIA, TCII
Partner Organizations: CME, ACADA, NR, ACOA, MAE

- ▶ Work with 40 high growth technology firms (20 per year for the next two years) for intensive supports to assist them to scale. (Completion target: 2018-19)
Lead: TCII
Partner Organizations: NEIA, ACADA, CME, NATI, Noia, OceansAdvance

- ▶ Continue to identify, refine and implement business financing and supports from research to commercialization, consistent with the Business Innovation Agenda. (Completion target: 2018-19)
Lead: TCII
Partner Organizations: FIN, NR, GAC, NRC, ISEDC, ACOA, WPO, ACADA, NATI, NEIA, CME, Noia, OceansAdvance

- ▶ Develop a capabilities index for the technology sector in partnership with the industry to assess the performance, strengths and abilities of the sector to help determine how to grow technology businesses in the province. (Completion target: 2018-19)
Lead: TCII, NR, FLR
Partner Organizations: CME, ACADA, NATI, NEIA, Noia, OceansAdvance

Research, Innovation and Diversification



- ▶ Host an annual technology industry-academic-federal-provincial meeting to promote technology research, innovation and diversification. (Completion target: 2018-20)
Lead: TCII
Partner Organizations: ACOA, ISEDC, NRC, GAC, NR, IIAS, FIN, CME, ACADA, NATI, NEIA, OceansAdvance, Noia, MI, MUN, CNA, OCIO
- ▶ Support businesses to use the Canadian Manufacturers and Exporters' Technology Assessment and Adoption Diagnostic tool to help identify effective technology solutions and accelerate the adoption of technology. (Completion target: Fall 2018)
Lead: CME, NEIA, NATI, ACADA, OceansAdvance, Noia
Partner Organizations: MUN, CNA, TCII, NR, MI
- ▶ Plan and develop an 'Innovation Centre' in which technology associations are co-located with research and development organizations, start-ups and business support communities to facilitate and advance technology collaboration and innovation. (Completion target: 2019-20)
Lead: ACADA, NEIA, NATI, CME, MUN
Partner Organizations: TCII, NRC, GC, Noia, ACOA, OceansAdvance, OCIO
- ▶ Establish methodology to define and measure technology sector development and growth in Newfoundland and Labrador. (Completion target: Summer 2018)
Lead: FIN, TCII, PCO
Partner Organizations: CME, ACADA, NATI, NEIA, Noia, OceansAdvance, GC
- ▶ Identify and develop opportunities to leverage Big Data and analytics. (Completion target: On-going)
Lead: NATI, TCII
Partner Organizations: Noia, CME, OceansAdvance, MUN, ACOA, C-CORE, ISEDC, NR, OCIO
- ▶ Engage in technology challenges to develop innovative solutions and stimulate the technology sector. (Completion target: 2018-20)
Lead: ACADA, NEIA, NATI, CME, TCII, NR, FIN
Partner Organizations: ISEDC, ACOA, WPO, MUN, CNA, OCIO, MI

Market Access and Development

Identify gaps in market intelligence and opportunities for new and existing market development. (Completion target: 2018-19)

Lead: Trade NL, Regional Trade Network, TCII, NR



Public Education

Develop a targeted Newfoundland and Labrador technology branding strategy to increase awareness of technologies being developed in the province and to highlight technology firm success. (Completion target: 2019-20)

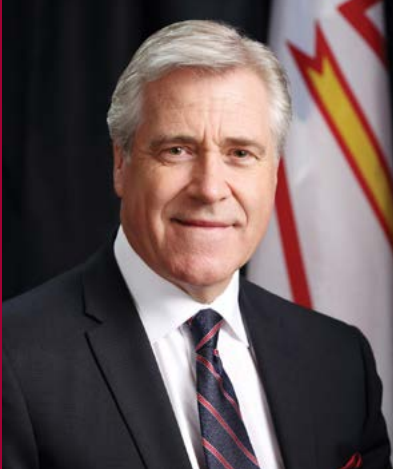
Lead: CME, ACADA, NATI, NEIA, OceansAdvance, Noia

Partner Organizations: TCII, NR, ACOA, ISEDC, MUN, GC, C-CORE, PYC

Acronyms

ACADA	Atlantic Canada Aerospace and Defence Association
ACOA	Atlantic Canada Opportunities Agency
AESL	Advanced Education, Skills and Labour
CNA	College of the North Atlantic
CME	Canadian Manufacturers and Exporters
EECD	Education and Early Childhood Development
FIN	Finance
FLR	Forestry and Land Resources
GAC	Global Affairs Canada
GC	Genesis Centre
GPA	Government Purchasing Agency
IC	Innovation Council
IIAS	Intergovernmental and Indigenous Affairs Secretariat
ISED	Innovation, Science and Economic Development Canada
MAE	Municipal Affairs and Environment
MI	Marine Institute
MUN	Memorial University of Newfoundland
NATI	Newfoundland and Labrador Association of Technology Industries
NEIA	Newfoundland and Labrador Environmental Industry Association
Noia	Newfoundland and Labrador Oil and Gas Industries Association
NR	Natural Resources
NRC	National Research Council Canada
OCIO	Office of the Chief Information Officer
PCO	Planning and Coordination Office
PYC	Premier's Youth Council
TCII	Tourism, Culture, Industry and Innovation
WPO	Women's Policy Office

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“Our vision for the future of Newfoundland and Labrador is a place where potential is realized and opportunities abound. Through unprecedented partnerships with high potential industries, we are fostering the economic growth, innovation, and job creation needed to support bright futures for the people of our province.”

Premier Ball



www.gov.nl.ca/technologysummit

