

INDUSTRIAL RESEARCH ASSISTANCE PROGRAM (IRAP)

Helping small and medium-sized businesses grow

July 2019



The National Research Council of Canada

MANDATES

- Business innovation
- Policy solutions for government
- Advancing knowledge

RESOURCES

- 2,151 scientists, engineers, technicians, other specialists
- 255 IRAP industrial technology advisors
- 179 buildings in 22 locations



Support for research

OVER 100 YEARS OF RESEARCH EXCELLENCE



MULTI-DISCIPLINARY RESEARCH FACILITIES AND STAFF



The NRC research centres

Transportation and Manufacturing	Engineering	Life Sciences	Emerging Technologies	Chief Digital Research Officer
Aerospace	Construction	Aquatic and Crop Resource Development	Advanced Electronics and Photonics	Digital Technologies
Automotive and Surface Transportation	Energy, Mining and Environment	Human Health Therapeutics	Herzberg Astronomy and Astrophysics	
	Ocean, Coastal and River Engineering	Medical Devices	Metrology	
			Nanotechnology	
			Security and Disruptive Technologies	

IRAP INDUSTRIAL RESEARCH
ASSISTANCE PROGRAM

Helping small and medium-sized businesses grow



National Research
Council Canada

Conseil national de
recherches Canada

Canada 

Industrial Research Assistance Program

Mandate

STIMULATE WEALTH CREATION for Canada through innovation

Mission

ACCELERATE THE GROWTH of small and medium-sized businesses by providing them with a comprehensive suite of innovation services and funding

Vision

BE THE MOST IMPACTFUL PROGRAM of its kind in the world, where Canadian firms go first to transform their ideas into commercial success

IRAP at a glance

2018-19 Overview

- Total invested in SMEs: \$293.4 million
- Total IRAP reach (funding and advice): 8,159
- Number of firms funded: 3,541
- Jobs supported: 15,662
- Assessments completed for OGDs: 1,350
- 255 Industrial Technology Advisors

Services

- Technical and business advisory services
- Financial assistance
- Linking SMEs with local and international opportunities

Impact on clients

- 27% increase in revenues
- 18% increase in employees



**LOCATED ACROSS
CANADA IN 120 COMMUNITIES**

IRAP organizational chart



DAVID LISK
Vice President, IRAP

EXECUTIVE DIRECTORS



CHRIS RYAN

IRAP Pacific
& Yukon



**LAURAL
PORTH-JONES**
(Acting)

IRAP Prairies
& Northwest Territories



MIKE CURRY

IRAP Ontario



**LLYNNE
PLANTE**

IRAP Quebec



**ROBERT
FAULDER**
(Acting)

IRAP Atlantic
& Nunavut



**BRAD
GOODYEAR**

IRAP Division
Services



**MELANIE
CULLINS**

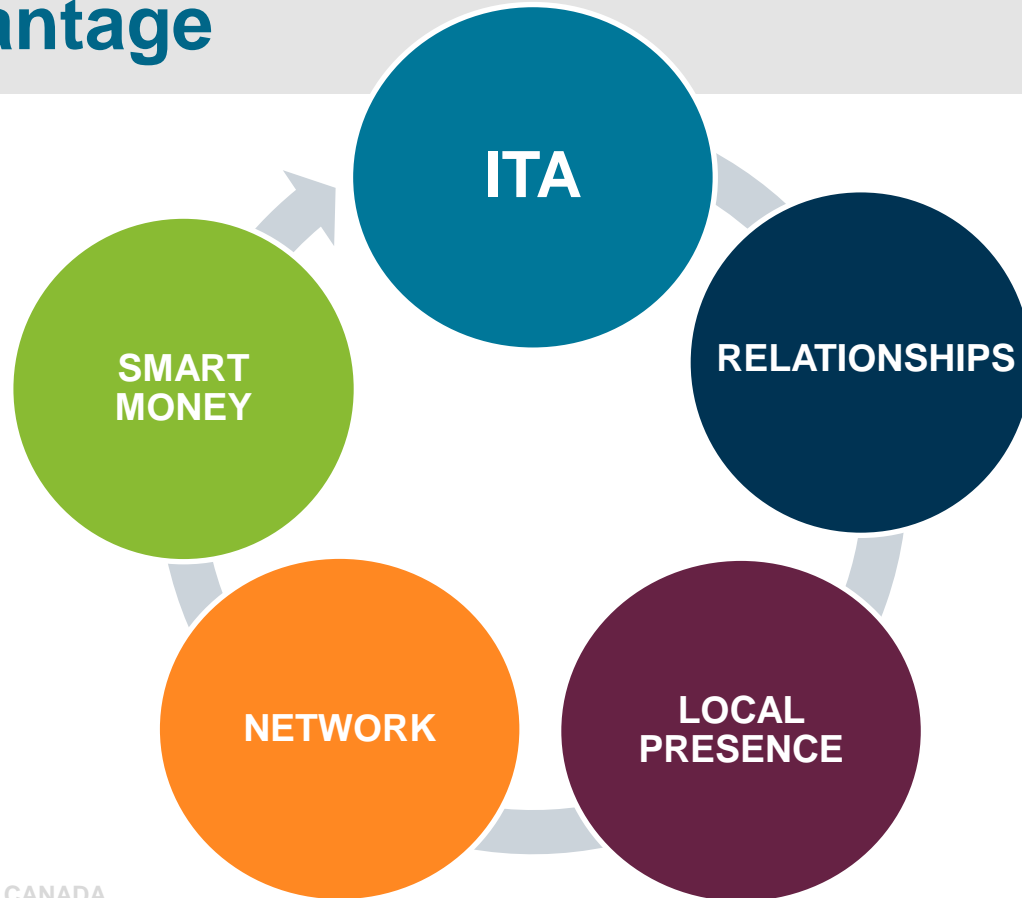
International

Helping businesses prosper

WE HELP REMOVE PAIN POINTS FOR BUSINESSES INCLUDING:

- Capital and financing
- Human resource talent
- Export market access and knowledge
- Technology (adaptation and insight)
- Market knowledge/intelligence
- CxO talent
- Productivity enhancement
- Strategy development

IRAP advantage



Industrial technology advisors

- Private sector experience
- Later in career cycle (typically 20+ years experience)
- Senior managers and entrepreneurs
- Most have an engineering or science background



Advisory services

OUR ITAs WORK WITH CLIENTS THROUGH EVERY ASPECT OF THE INNOVATION PROCESS, PROVIDING

- technical and business advice;
- referrals to other programs and services;
- linkages and networking with appropriate resources/ expertise searches;
- strategic intelligence



IRAP engagement model



ADVISORY SERVICES

- Business advice
- Linkages
- Strategic intelligence
- Technical expertise

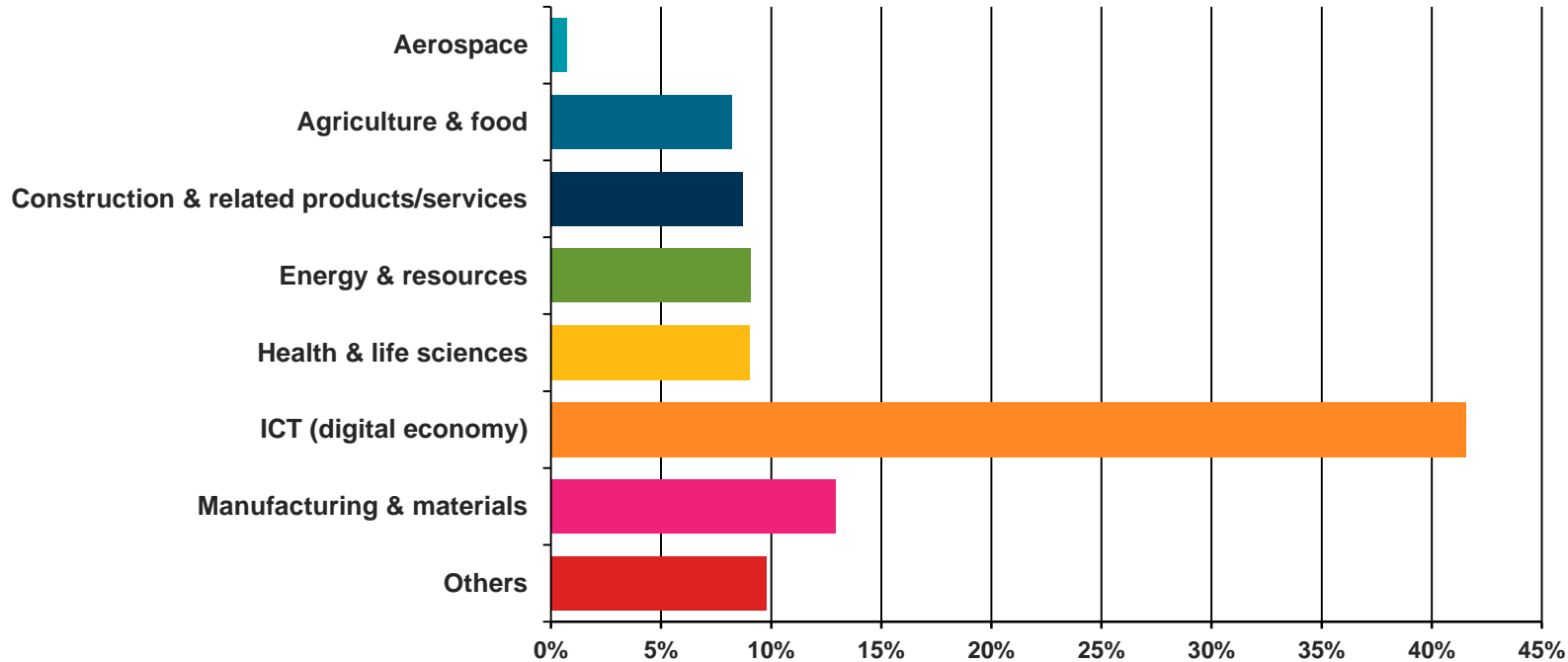


- IRAP R&D projects
- Youth employment
- International



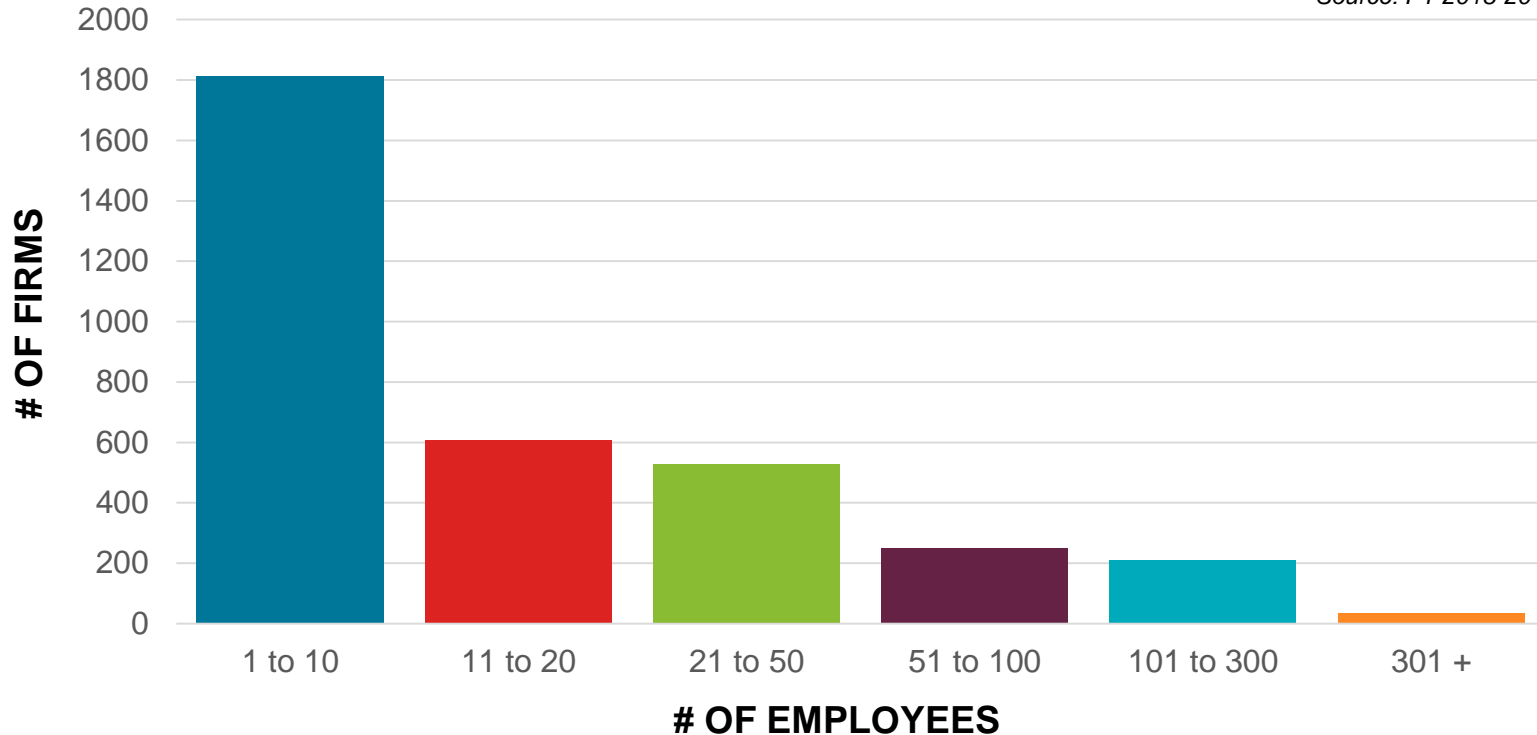
IRAP clients by industry sector

Source: FY 2018-2019



IRAP clients by company size

Source: FY 2018-2019



IRAP sector teams

- Link innovative Canadian SMEs to global value chains
- Support SME growth by providing access to current technology and business market intelligence on priority industry sectors
- Increase the positive impact of NRC on innovative SMEs.
- Contribute to the competitiveness of Canadian industry.
- Strengthen Canada's innovation system.



**Advanced Manufacturing
Aerospace • AgriFood
BioMedical • BioProducts
CleanTech • Construction
ICT • Mining**



IRAP offers funding to Canadian SMEs that have the potential and willingness to grow through innovation

Who can we select?

BASIC ELIGIBILITY

- Incorporated SME operating in Canada
- 500 or fewer employees
- Objective to grow through innovation

ASSESSMENT OF THE BUSINESS

- Business opportunity
- Management & financial capabilities
- Potential to achieve expected outcomes
- Plan to commercialize results



Who can we select?

ASSESSMENT OF THE PROJECT

- Project plan and challenges
- R&D team's capacity to achieve success
- Potential impact on the firm and Canada



A woman with her hair in a bun, wearing a striped shirt, is sitting at a desk and looking at a tablet. A man with grey hair, wearing a dark blue shirt, is sitting next to her, also looking at the tablet and gesturing with his hand. They are in a modern office with large windows in the background.

GROW GLOBAL

International co-innovation opportunities for Canadian SMEs

- Connect to programs and expertise
- Improve competitiveness
- Tap into emerging markets and innovative developed markets

Helping SMEs succeed globally

IRAP CONNECTS CLIENTS TO THE GLOBAL VALUE CHAIN

- Large enterprise initiative
- Sector teams
- Tools to support international growth

SUPPORTED PROGRAMS:

- EUREKA
- Eurostars™
- Canadian International Innovation Program (CIIP)
- CanExport



Working with stakeholders

IRAP offers program delivery expertise and advisory services to other federal and provincial organizations including:

- Program design
- Proposal assessments
- Program management
- Full program delivery

1,350

technical and business
assessments for OGDs



SUCCESS STORIES

International collaboration opens doors to Canadian smart health innovators



"This is the way of the future – to tackle big challenging problems through innovative R&D collaboration with many different players around the world. Our ITAs have worked hard to really know us, and identified where we might have difficulties in such a complex venture. They have a great sense of what is likely to work."

David Kuik
CEO, Norima Consulting

High tech real estate enterprise thrives on time-tested mentorship

“The support from NRC IRAP allowed us to stretch and hire long before we could have.”

Lauren Haw
CEO, Zoocasa



Overcoming growth hurdles



“In my 30-year career, I’ve never seen a program that responds so well to the needs of investors and innovative SMEs, and creates value for both those groups.”

Claude Martel
CEO, Inno-centre

Breakthrough in custom metal fabrication supports advanced research

“The R&D we need to grow and succeed is risky and unusual. NRC IRAP has really helped us leap into the future of advanced manufacturing.”

Doug Milburn,
Co-founder and Director of Sales & Marketing,
Protocase Inc., Sydney, Nova Scotia



THANK YOU



Budget 2018 – Implications for IRAP

\$700 MILLION OVER FIVE YEARS

with \$100 million for the first year and \$150 million per year ongoing, for IRAP to help Canadian entrepreneurs and small business owners develop innovative technologies and successfully commercialize them in a global marketplace.

IRAP IS ENABLED TO SUPPORT PROJECTS FOR UP TO \$10 MILLION to overcome challenges Canadian companies face in scaling up. (The existing threshold was \$1 million for R&D projects)