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

<table>
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<tr>
<th>Transportation and Manufacturing</th>
<th>Engineering</th>
<th>Life Sciences</th>
<th>Emerging Technologies</th>
<th>Chief Digital Research Officer</th>
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<td>Aerospace</td>
<td>Construction</td>
<td>Aquatic and Crop Resource Development</td>
<td>Advanced Electronics and Photonics</td>
<td>Digital Technologies</td>
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<td>Automotive and Surface Transportation</td>
<td>Energy, Mining and Environment</td>
<td>Human Health Therapeutics</td>
<td>Herzberg Astronomy and Astrophysics</td>
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<td>Ocean, Coastal and River Engineering</td>
<td>Medical Devices</td>
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<td>Security and Disruptive Technologies</td>
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Helping small and medium-sized businesses grow
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
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

- ITA
- RELATIONSHIPS
- SMART MONEY
- NETWORK
- LOCAL PRESENCE
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

- Business advice
- Linkages
- Strategic intelligence
- Technical expertise

- IRAP R&D projects
- Youth employment
- International

ADVISORY SERVICES

NATIONAL RESEARCH COUNCIL CANADA
IRAP clients by industry sector

- Aerospace
- Agriculture & food
- Construction & related products/services
- Energy & resources
- Health & life sciences
- ICT (digital economy)
- Manufacturing & materials
- Others

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.
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
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
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)