# National Research Council of Canada Industrial Research Assistance Program (IRAP)

**Germany (ZIM) – Canada (IRAP) Information Sessions** 

**Germany, January 29 – February 7, 2019** 





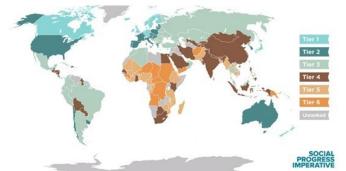
## **INNOVATION IN CANADA**

# Canada is open for collaboration WITH SOLID ECONOMIC AND SOCIAL FOUNDATIONS

#### **SOLID FOUNDATIONS**

- > Strong economic base
- An open economy
- > A welcoming business environment
- > World-class research and universities
- > Highly educated workforce
- Multicultural country, universal health care, clean, modern cities, high quality of life

#### **SOCIAL PROGRESS INDEX – 2018**



#### **STRENGTHS**

- > Low inflation, interest rates, deficit
- > Most open G20 in trade and investment
- > Extensive market access NAFTA, CETA
- > 5<sup>th</sup> best country to do business (Forbes)
- > 3<sup>rd</sup> on the Global Entrepreneurship Index
- Lowest business tax costs G7: 48% lower than US (KPMG)
- > Lowest business costs in the G7 for R&D intensive sectors
- > One of the soundest banking system in the world (WEF)
- > Most highly educated workforce among OECD
- > 1st in life satisfaction G7 (OECD)
- ➤ Leader in hosting migrants ranked 7<sup>th</sup> (UN)
- > 7<sup>th</sup> happiest country in the world (UN)

Source: The Social Progress Imperative



### **New chapter in Canadian Innovation Policy**

#### An integrated approach Innovation Science Advance talent To spur the technologies development, innovations & & businesses of tomorrow economic prosperity & a better living for all Skills





#### **Experimenting with new measures**

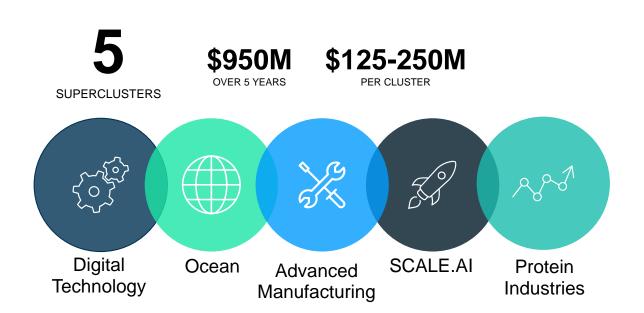
- Innovative Solutions Canada (Canadian SBIR)
- New IP strategy
- Focus on technology adoption by high growth, high potential, small and medium-sized businesses

#### Coordinating innovation support - "Flagships"

- National Research Council's Industrial Research Assistance Program (NRC IRAP)
- Strategic Innovation Fund 2.
- Regional Development Agencies
- Canadian Trade Commissioner Service

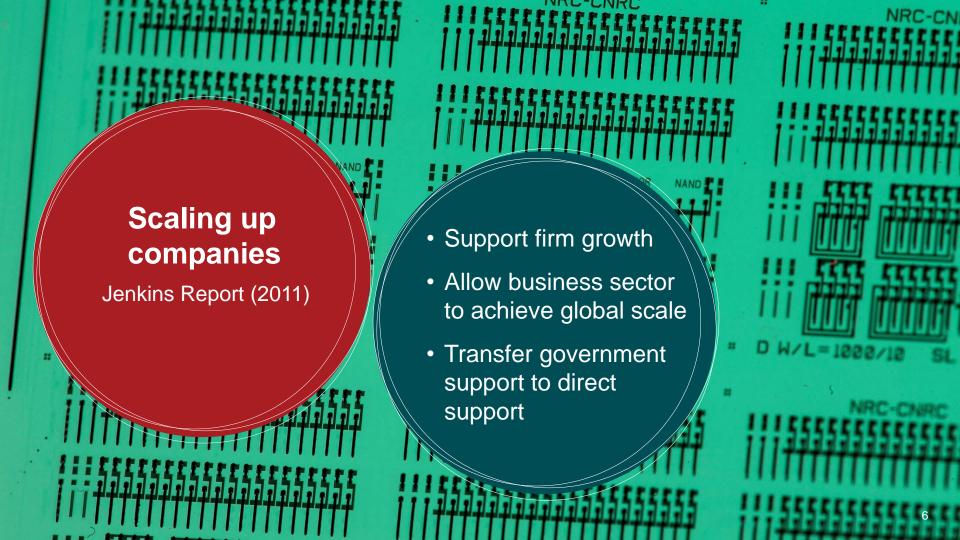


## **Innovation Superclusters Initiative**



- Up to \$950M over five years for selected industry-led innovation superclusters
- Industry partners match program contributions at least dollar for dollar





# NATIONAL RESEARCH COUNCIL OF CANADA





NRC supporting growth and export companies

#### Research facilities

- 3,700 skilled & innovative researchers and staff
- 14 Research Centres at 22 locations

#### **IRAP**

- Supports technology SMEs through funding to share their risk
- 2000+ companies in contributions (2017-2018)
- \$1B annual expenditures (\$192M funding for SMEs in 2017-2018)



152 **RESEARCH HOSPITALS** 

**72 UNIVERSITY AND COLLEGES**  34 **FEDERAL DEPARTMENTS** 



### NRC R&D Divisions and Research Centres

### **Transportation and Manufacturing**

- Aerospace
- Automotive and surface transportation

### **Engineering**

- Construction
- Energy, mining and environment
- Ocean, coastal and river engineering

#### **Life Sciences**

- Aquatic and crop resource development
- Human health therapeutics
- Medical devices

### **Emerging Technologies**

- Advanced electronics and photonics
- Digital technologies
- Herzberg astronomy and astrophysics
- Metrology
- Nanotechnology
- Security and disruptive technologies
- 3,700 personnel
- 178 buildings in 72 locations

# INDUSTRIAL RESEARCH ASSISTANCE PROGRAM (IRAP)

Helping small and medium-sized businesses grow



Stimulate wealth creation for Canada through innovation

Mission

Accelerate the growth of small and medium-sized enterprises (SMEs) 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

### Where is IRAP?

Located across Canada in 120 communities



## IRAP at a glance

- Since 1947
- Serving 8,000 + clients (2017-18)
- Clients across all industry sectors
- Funding 3,000 + clients (2017-18)
- Field staff: 255 Industrial Technology Advisors (ITAs)
- Partner Organizations: 200 +



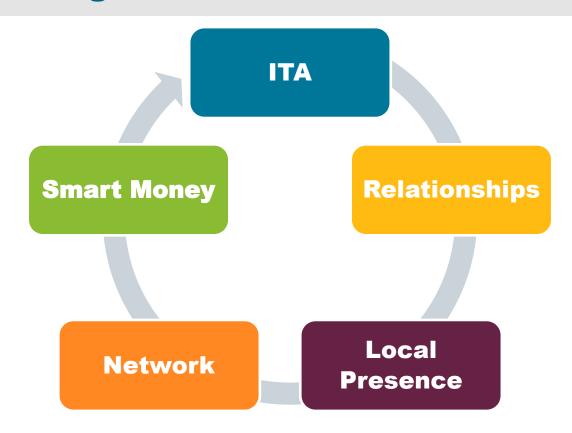
# **Advisory services**

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

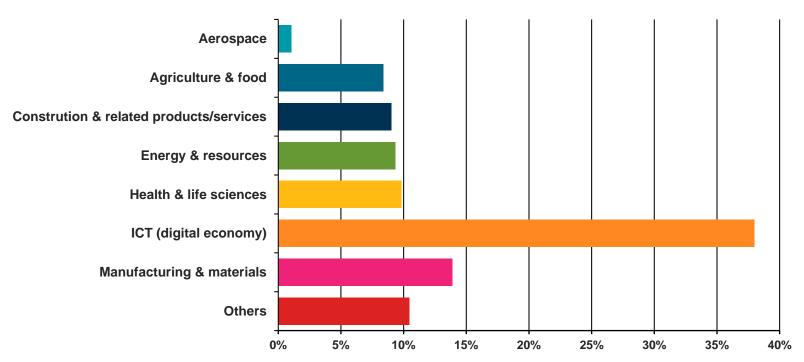


# **IRAP** advantage



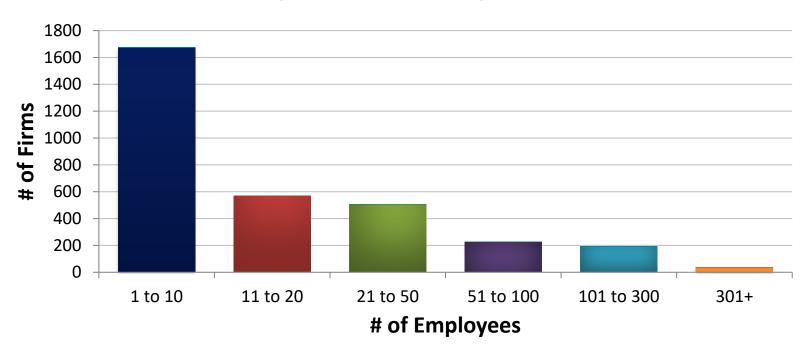
# **IRAP** clients by industry sector

Source: FY 2017-2018



## **IRAP** clients by industry sector

### Firms funded by size (# of employees)



### **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.

- CleanTech
- Construction
- ICT
- Advanced Manufacturing
- BioMedical
- BioProducts
- Aerospace
- Mining
- AgriFood



### Who do we fund?

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

#### **Basic eligibility:**

- For profit SME incorporated in Canada
- > 500 or fewer employees

#### Assessment of the business:

- business opportunity
- management & financial capabilities
- potential to achieve expected outcomes
- plan to commercialize results

#### **Assessment of the project:**

- project plan and challenges
- > R&D team's capacity to achieve success
- potential impact on the firm and Canada



### IRAP INTERNATIONAL PROGRAMS

**Supporting SME co-innovation partnerships** 

## Helping SMEs succeed globally

### Connecting clients to the global value chain

- "Large enterprise" initiative
- Sector Teams

### **Tools to support international growth**

- Canadian International Innovation Program (CIIP)
- Member of Eurostars<sup>™</sup>
- Increased participation in EUREKA
- CanExport



CANADIAN INTERNATIONAL INNOVATION PROGRAM

PROGRAMME CANADIEN DE L'INNOVATION À L'INTERNATIONAL

R&D PARTNERIN ABROA PARTENARIATS EN R-D







### IRAP funding programs - international

#### **Canadian International Innovation Program (CIIP)**

Supports SMEs' R&D collaboration with international partners in China, India, Brazil, South Korea and Israel.

#### **EUREKA**, **Eurostars**

Supports SMEs' R&D collaboration with European partners.

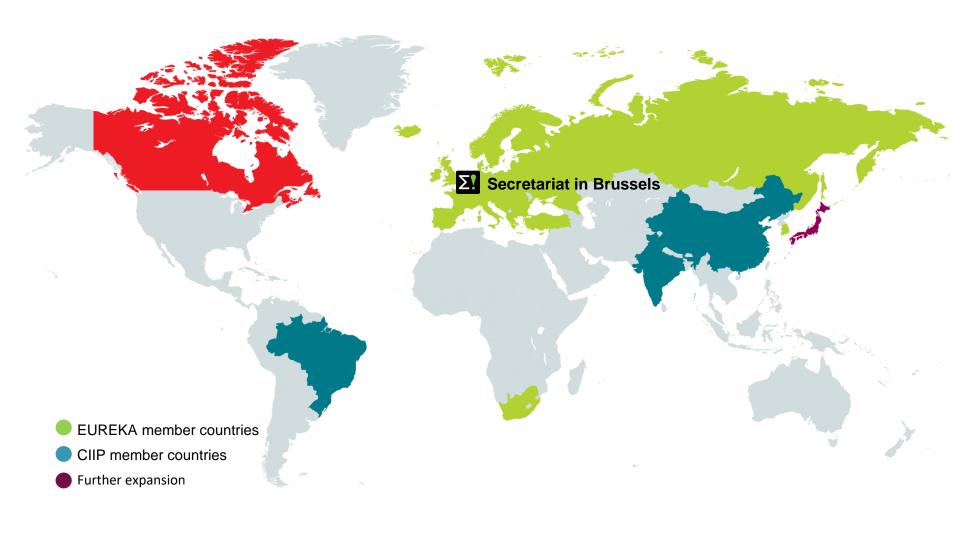
#### BMWi (ZIM), BMBF

Supports SMEs' R&D collaboration with German partners.

#### **CanExport** (co-managed by Global Affairs Canada)

Supports SMEs develop export markets.





# German Federal Ministry for Economic Affairs and Energy (BMWi) ZIM





Partnership NRC-IRAP and BMWi's ZIM program

First three calls for proposals resulted in 6 projects funded to date

further projects pending

4th call was launched on October 15, 2018 with projects expected to start in spring of 2019





### **Eligibility and Project Requirements**

- Joint industrial R&D projects focusing on developing innovative products, processes, or technology-based services
- All technological and application areas with strong market potential
- Project should have an obvious advantage and added value resulting from the cooperation between the participants
- Canadian and German SMEs (<500 employees)</li>
- Research institutes and other companies are welcome as additional participants or subcontractors according to each country's funding rules
- Project duration should not exceed two (2) years



### **Structure and Timeline**

	Date
Launch of 5 <sup>th</sup> Call for Proposals	March 5, 2019
* Canadian Expression of Interest Deadline	April 26, 2019
Final Joint Proposal Deadline	June 28, 2019
Funded projects expected to start	October, 2019



# THANK YOU

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