



NRC-CNRC

*From **Discovery**
to **Innovation...***

NRC-Industrial Research Assistance Program (NRC-IRAP)

Canada China Environmental Forum

Lynne Plante, Regional Director (Ontario)

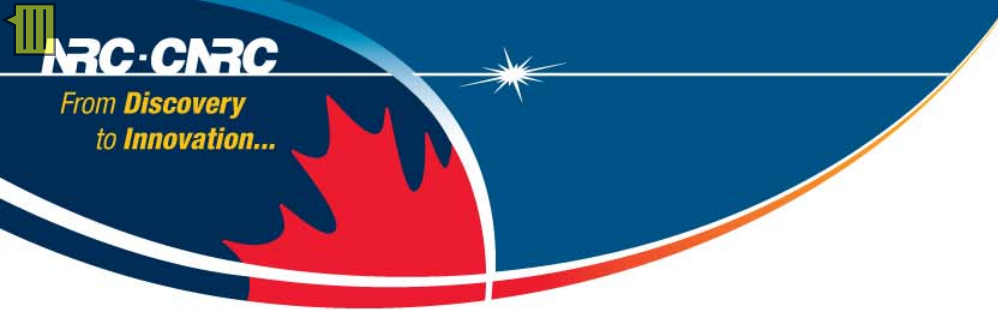
June 8, 2009



National Research
Council Canada

Conseil national
de recherches Canada

Canada



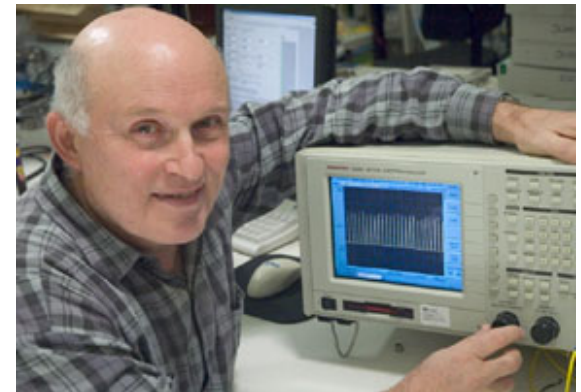
Program Overview

Supporting innovative *Canadian firms grow stronger, grow faster, grow bigger, through technology

- Customized **advisory services** and contributions to Canadian Small and Medium sized Enterprises (SMEs) to support and enhance their innovative S&T projects.
- Range of **complementary S&T** and business services through linkages to many other organizations to meet SME developmental needs.
- **Contributions** are specifically towards specialized labour costs and clients typically co-invest at least 50% of the total project costs.



Médicago, Québec, PQ



BTI Photonics, Ottawa, ON

**Small- and medium-sized firms with up to 500 employees*



NRC-IRAP Sites Across Canada





Experience

- 240 field staff
- 75% have Masters or PhD
- 80% have specialized industrial experience
- 45% have run their own R&D facility
- 65% have some experience in working at other federal government labs or departments
- 34% have been entrepreneurs

Outreach

- Field staff are located in 147 offices / 100 communities
- Each work with 42 clients per year
- 11 of their clients will receive funding from NRC-IRAP
- Typically make 105 client site visits a year

Services

- R&D project advice
- Competitive technical intelligence
- Networking and linkages
- Project follow-up
- Financial resources

**Industrial Technology Advisor - ITA*



IRAP Business Model

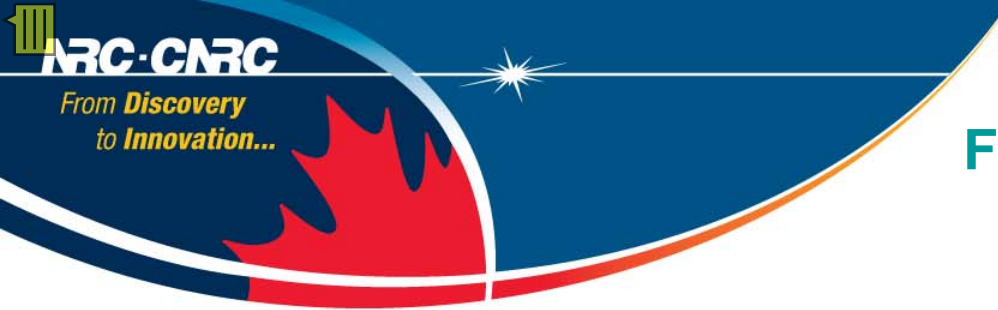




Services to Firms

- R&D Project Advice
- Competitive Technical Intelligence
- Networking Opportunities and Linkages
- Project Follow-up

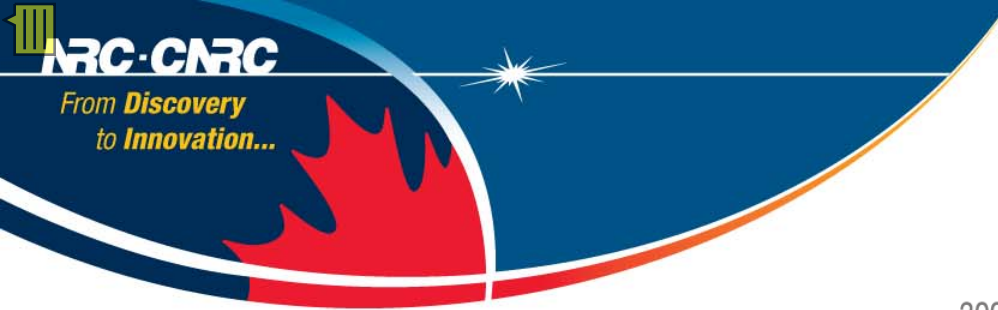




Funding Opportunities & Programs

- Contributions to Firms for R&D Projects
- Contributions to Innovation Partners
- Youth Employment Strategy

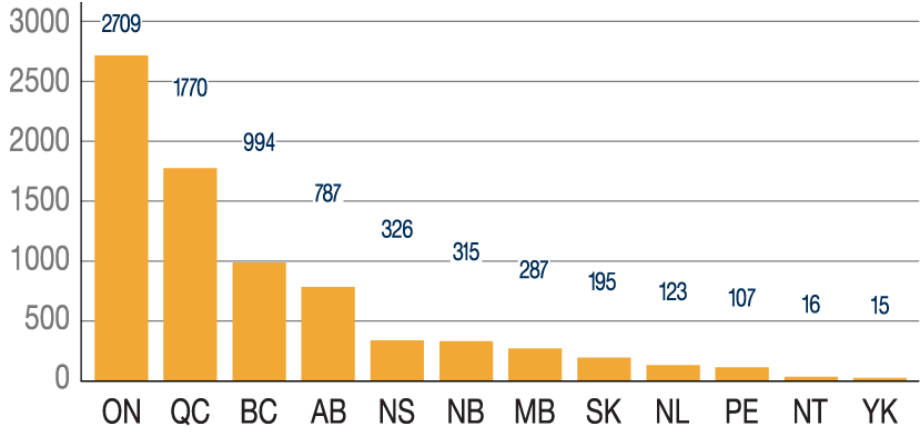




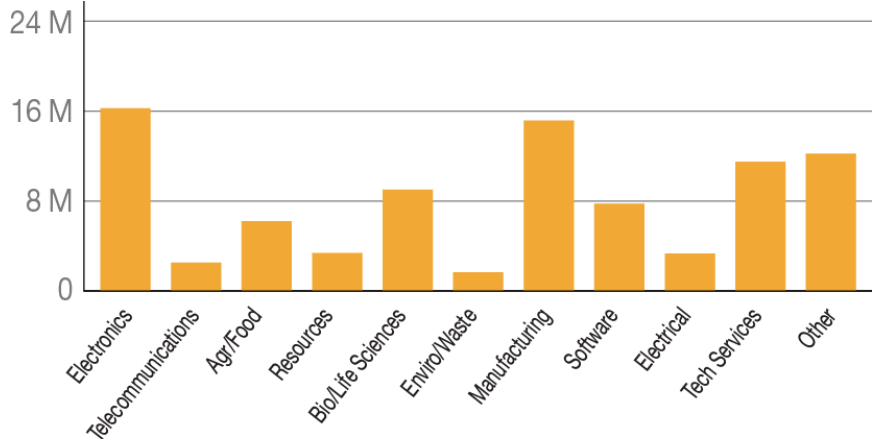
What are the challenges faced by our clients?

- 78% of NRC-IRAP clients have fewer than 50 employees – and most (60%) of them have fewer than 20
- Do not typically have large, developed R&D departments nor technical expertise on hand
- Management capacity challenges
- Limited network nationally and internationally
- NRC-IRAP worked with some 7,645 clients in 2007-2008; of which 1,971 received some form of funding
- Given current economy, are having difficulty accessing or sourcing investment capital

NRC-IRAP's Number of Clients by Province in 2007-2008



Total Expenditures by Industry Sector in 2007-2008 (\$ in Ms)



IRAP Goal for International Collaboration

- Help SMEs develop technology partnerships, alliances
- Develop and improve technology innovation
- Globalize technology and market understanding
- China is one of our top priorities

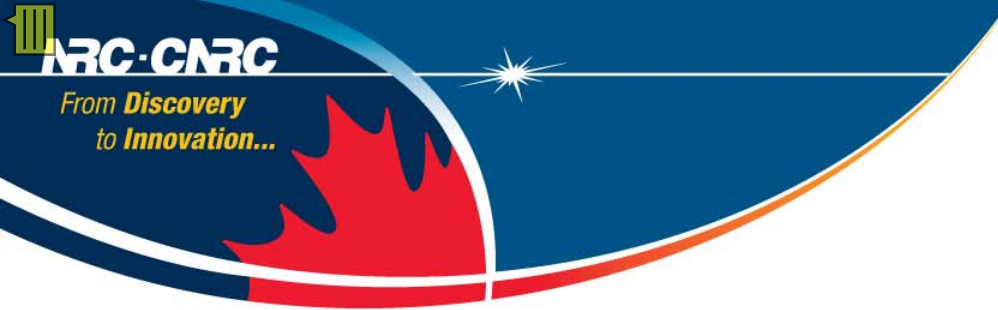


Leveraging Partners

Globally and Locally – we help our clients succeed!

- Strategic international linkages for firms
- Strategic provincial linkages
- Strategic organizational linkages





IRAP's Global Network

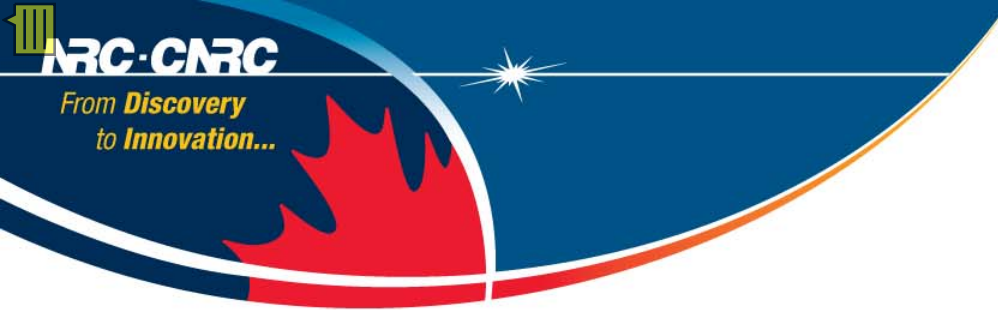
- Strategic Partnerships in Europe and Asia
- Partnerships in China:
 - Ministry of Science and Technology, Beijing, Shanghai, Guangdong Municipal S&T Departments
 - Promoting collaboration in R&D and commercialization by SMEs and research organizations in both countries
 - Successful collaboration in fuel cells and hydrogen, ICT, multimedia and security technologies

An Example of IRAP Achievements

Hydrogen Fuel Cell Collaboration with China

- 2 Major Joint R&D Projects under MOST NRC Fuel Cell and Hydrogen Joint Research Program:
 - World class players: NRC IFCI, Ballard Power systems, SFU and UBC, Shanghai Jiaotong University, Shanghai Tongji University and Shandong Donyue Chemical
 - Projects aimed at developing low cost new materials, and if successful, will help industry reduce the fuel cell cost by 8%.
 - Full industry support and participation

- Business Success:
 - Ballard Power System provided 2 fuel cell buses to Beijing and participated in Shanghai's Fuel cell vehicle program
 - Canadian companies made sales of over \$10 million dollars in fuel cell, testing equipment, hydrogen storage tanks, fueling stations, and related CNG business
 - Westport, IMW and Placan built JVs with Chinese partners



Opportunities for you

IRAP - China Collaboration

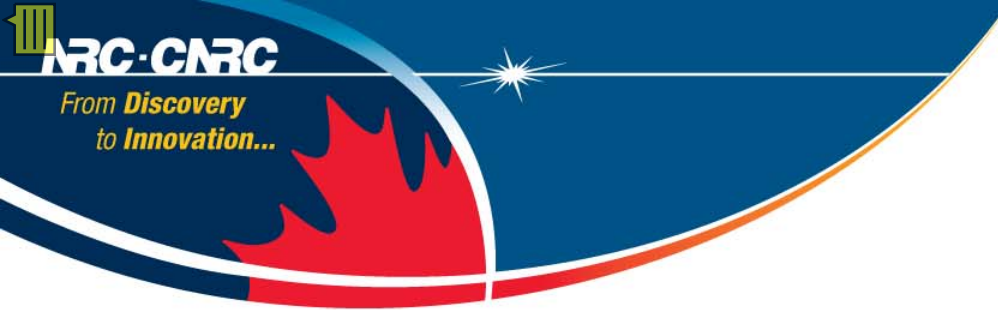
- Contact:

Qing Yu

International Science & Technology Advisor

Manager, Asia

Email: qing.yu@nrc-cnrc.gc.ca



What about this newly announced funding?

2009 Federal Budget
Canada's Economic Action Plan

**Additional
\$200 M
over two years**

Purpose	2009-2011	Projected Impact
Contributions to firms	\$170 M	1,400 firms
Graduates through YEP	\$30 M	1,000 post-secondary graduates
With existing organizational structures and existing operating dollars		

NRC-CNRC

From *Discovery*
to *Innovation...*

Contact us

- For information on NRC-IRAP
- To reach an ITA



Call our toll-free number:

1-877-994-4727

A graphic in the top left corner featuring a stylized globe with a red maple leaf shape on its lower right side. The globe is set against a dark blue background with a white horizontal line and a white starburst. The text 'NRC-CMRC' is written in white, bold, sans-serif font across the top of the globe.

NRC-CMRC

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to *Innovation...*

Science — at work for — Canada



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Canada 