

## Networks of Centres of Excellence of Canada Réseaux de centres d'excellence du Canada

# NCE Secretariat Launch of New Programs for 2007

July 2007

Jean-Claude Gavrel, Director

The NCE is a joint initiative of Industry Canada, NSERC, SSHRC and CIHR.



## Today's Agenda



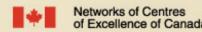
- Overview of the NCE Secretariat
- S&T Strategy 2007
- New Suite of NCE Programs
- CECR LOI Competition
- Questions and Answers



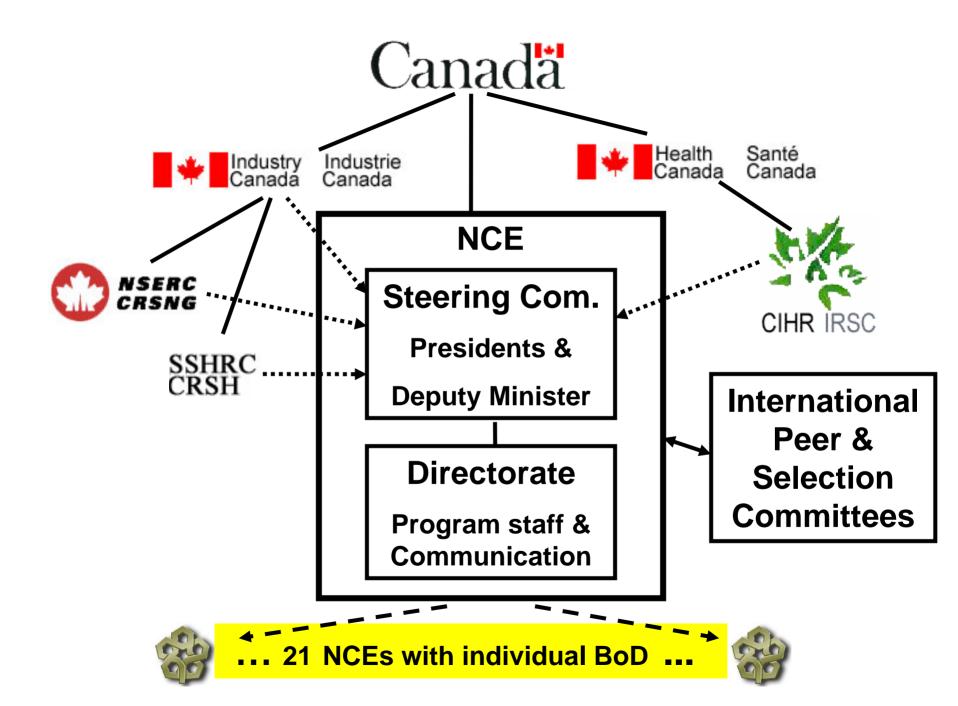
## **Program Created in 1989**

#### The NCE mission:

"To mobilize Canada's research talent in the academic, private and public sectors and apply it to the task of developing the economy and improving the quality of life of Canadians"







#### **NCE Scale**

- 21 Networks operating as "Virtual" Institutes
  - 3 in Advanced technologies, 3 in Engineering/Design
  - 3 in Natural resources & Environment
  - 7 in Health & Biotech, 5 in Human/Society Development
- Mobilizes approximately 7,000 People:
  - 1,600+ university professors and researchers
  - 400+ industry and partner researchers
  - 5,000+ research associates and students
- Brings together 1200+ Canadian organizations
  - 110 universities and hospitals
  - 190+ government agencies (federal/provincial)
  - 900+ industry and other partners
- Approx 300 International Linkages
- NCEs are funded for maximum of two 7-year cycles



\$82M Gov Matched by Partners





## NCE Impacts (Typical 7 year cycle)



Over 27,000 refereed publications

2,300+ students trained in research & innovation (per year)



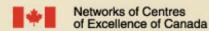
**Approx 320 Patents issued or filed** 

**Approx 540 Licenses granted or in negotiation** 



70 Spin-off companies

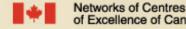
Numerous Research Findings applied in new Policies and Practices (Knowledge Translation)





## NCE's "Entrepreneurial" examples

- NCE IP commercialization and Benefit to Canada Clause
- Management of collaborative university research by industrial consortia (1989):
  - Precarn/IRIS and Paprican/Mechanical Wood Pulp NCE
- Support for Proof of Concept Development:
  - IRIS TGAP (1995), CIPI TEN
- Federal Provincial Aboriginal Industry Partnerships for Sustainable Development: SFM (1998)
- Novel Models for Entrepreneurial Training
  - CBDN IP training (2000)
  - MITACS new internship model for math PhD's with Industry and Provincial support (2004)







#### Three Components of Federal S&T Strategy

#### Entrepreneurial Advantage

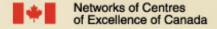
- Fostering a Competitive and Dynamic Business Environment
- Pursuing Public-Private Research and Commercialization Partnerships
- Increasing the impact of Federal R&D Assistance Programs

#### Knowledge Advantage

- Focusing Strategically on Research in National Interest
- Maintaining our G-7 Leadership in Public R&D Performance
- Enhancing value for money, Accountability and Responsiveness of Three Granting Councils
- Exploring New Approaches to Federally Performed Science and Technology

#### People Advantage

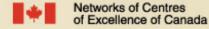
- Enhancing Opportunities for Science and Technology Graduates
- Increasing the Supply of HQ and Globally Connected S&T Graduates
- Getting Canadians excited about Science and Technology





### **Budget 2007 & NCE Secretariat:**

- Public-Private Res. & Commer. Partnerships (Entrepreneurial Advantage)
  - Centres of Excellence for Commercialization and Research (CECR) (\$165M in 07-08; \$30M in future)
  - Business-led NCE (B-NCE) (\$11M starting in 08-09)
  - Private Sector Advisory Board for CECR and B-NCE
- Enhancing Opportunities for S&T Graduates (People Advantage)
  - Industrial R&D Internship program (\$4.5M over 2 years)
  - Expectations to eventually support 1000 Internships

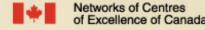






## A Suite of "NCE" Programs

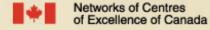
- "Classic NCE" (\$82.4M per year)
  - Research-driven partnerships with longer-term goals
  - 2 X 7 years, Complete Funding for res., admin, KT &TT
- CECR (\$165M for 3-5 years)
  - Public-private research & commercialization partnerships
  - 5 years, renewable in some cases,
  - Funding for operating & commercialization (50%-75%)
- B-NCE (\$11M in 1st year)
  - Private sector problem-driven research partnerships
  - 4 years for 1<sup>st</sup> phase, funding for res., admin, and KT/TT
- Industrial R&D Internships (\$4.5M over 2 years)
  - R&D terms for graduate & postdocs in industry setting
  - Cost shared @ 50% managed by NCE or others





## **Timing of New Programs**

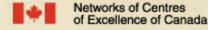
- Centres of Excellence for Commercialization and Research (CECR):
  - 1st Competition now for awards before March 31, 2008
- Business-Led Networks of Centres of Excellence
  - Competition to be announced Fall 2007 for awards in Fall 2008
- Next "NCE classic" Competition (in development)
  - (Four renewal and two mid-term competitions currently on-going)
  - Program evaluation and international review due Fall '07
  - Most likely fall-winter '07-08 announcement
  - Awards in late 2008 for up to 3 new NCE
- Industrial R&D Internships
  - 1st competition in fall '07 for awards in Winter '07-08





#### **Useful Considerations**

- NCE Secretariat manages programs on behalf of NSERC, SSHRC, CIHR and Industry Canada
- Programs are application- or sector-oriented, and not limited by discipline – multidisciplinary
- Government has identified four key priorities that apply to CECR and B-NCE:
  - Energy, Environment, ICT and Health
- NCE has 18 years of experience in governance, and best practices for HQP training and KT/TT





## **CECR Program**

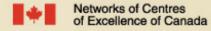
- "To create internationally recognized Centres for Commercialization and Research"
- "To maximize the benefits of Government investment in R&D"
- "To encourage the private sector to increase its investment in science and technology"
- Must be in one or more of the following priority areas:
  - Natural Resources and Energy; Environmental Science and Technologies, Information and Communication Technologies, Health and related Life Sciences & Technologies

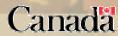




#### What is "World Class Excellence"

- Recognized by international peers
- Able to attract and retain top internationally recognized researchers, business leaders, postgraduate and post-doctoral students
- Able to attract investment from many diverse sources including foreign direct investment and venture capital
- Able to generate the "WOW!" factor





## What is meant by Commercialization?

 Create, grow and retain companies in Canada that are able to capture new markets with breakthrough innovations

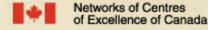
 Accelerate the commercialization of leading edge technologies, goods, services in priority areas where Canada can significantly advance its competitive advantage





## **The Competition Process**

- Two stage review, involving a Private Sector Advisory Board (PSAB), individual peer review and input from other stakeholders, including provinces, granting organizations and federal science-based department/agencies (SBDA)
- Stage 1 Letter of Intent (LOI)
  - Reviewed by NCE staff for compliance
  - Reviewed by PSAB for recommendation to NCE
     Steering Committee three granting agencies Pres.,
     Industry Canada DM and CFI President (observer)





## **Competition Process – Stage 2**

- Applicants of LOI selected by Steering Committee will be invited to submit full applications to be reviewed as follows:
  - LOI circulated to provinces, granting orgs and SBDA for comments and priorities
  - Individual expert panels (EP) set up for each invited applications with site visit
  - Applications, EP reports and other inputs are submitted to PSAB for final recommendations
  - NCE Steering makes final decision and submits Centres selected for funding to Government



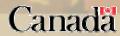


#### The CECR Evaluation Criteria

#### (1) Benefits to Canada

- High priority of issues
- Significant economic, health, envir. or social benefits
- World class stature of Centre
- Strength of domestic collaboration and spillover benefits
- Optimization and leveraging of resources
- For Commercialization Aspects:
- Creation, growth and retention of companies in Canada
- Acceleration of commercialization of leading edge technologies, goods and services







#### The CECR Evaluation Criteria

#### (2) Track Record and Potential of Applicants

- Past achievements and ability to contribute to the Centre's programs
- Ability to train and retain world class researchers in areas and technologies critical to Canada and for private and public sector
- Likelihood that Centre will attract top international talents
- Ability to attract investment

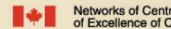




#### The CECR Evaluation Criteria

#### (3) Strength of the Business Plan

- Excellence, focus and coherence of the program
- Extent of Partnership with various levels of government and private sector
- Effectiveness of the plan to manage and exploit IP
- Likelihood of sustainable productive Centre
- Quality of proposed governance & management
- Accountability and effective financial decision making



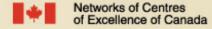


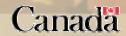


#### **Content of Letter of Intent**

- Cover Letter from Host Institution (or Centre) 1-2P
- Application Form
- LOI Proposal
  - Articulation of the Centre proposed benefits to Canada;
     Vision, Goals and Objectives
  - Information to help assess the track record and potential of the key individuals leading the Centre
  - Business Plan for the Centre: its program, partnerships,
     IP and commercialization, and management
     5P
- Budget Form

Note: Budget may be submitted for period of 3 to 5 years

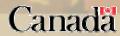




## **Letters of Support**

- No limit on the number of letters BUT:
  - Maximum 2 pages per letter
  - Consider Strategic Quality vs. Quantity
- Should include letters from Funding Partners as follows:
  - If Centre currently receives support from Provincial or other govt agency, letter confirming the terms of support
  - If Centre currently applying for Govt funding, letter confirming application received and being considered
  - For Industry support, letter indicating level of interest, minimum funding being considered and any conditions that may affect decision







## **Timeline for CECR Competition**

Competition Launched June 26 '07

LOI Deadline Aug 20

PSAB/Steering Review Sept 11

Invitation Stage 2
 Sept 14

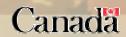
Full Proposal Deadline Oct 31

Expert Panel Site Visits Nov 7-16

PSAB/Steering Decision
 Dec 1

Funding and Agreements Finalized Mar 31 '08





## Questions?



