

Infrastructure, Policy and Innovation

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Atlantic Canada Opportunities Agency



**Atlantic Canada
Opportunities
Agency**

**Agence de
promotion économique
du Canada atlantique**

Canada

Framing the Question ...



The daydreams of cat herders



Key considerations ...

- Organizational mandate / resources
 - internal capacity vs research partners
- Program, policy interests, priorities
 - strategic planning, program renewal
- Knowledge base / existing research, intelligence / environmental scan
- Political direction, priorities



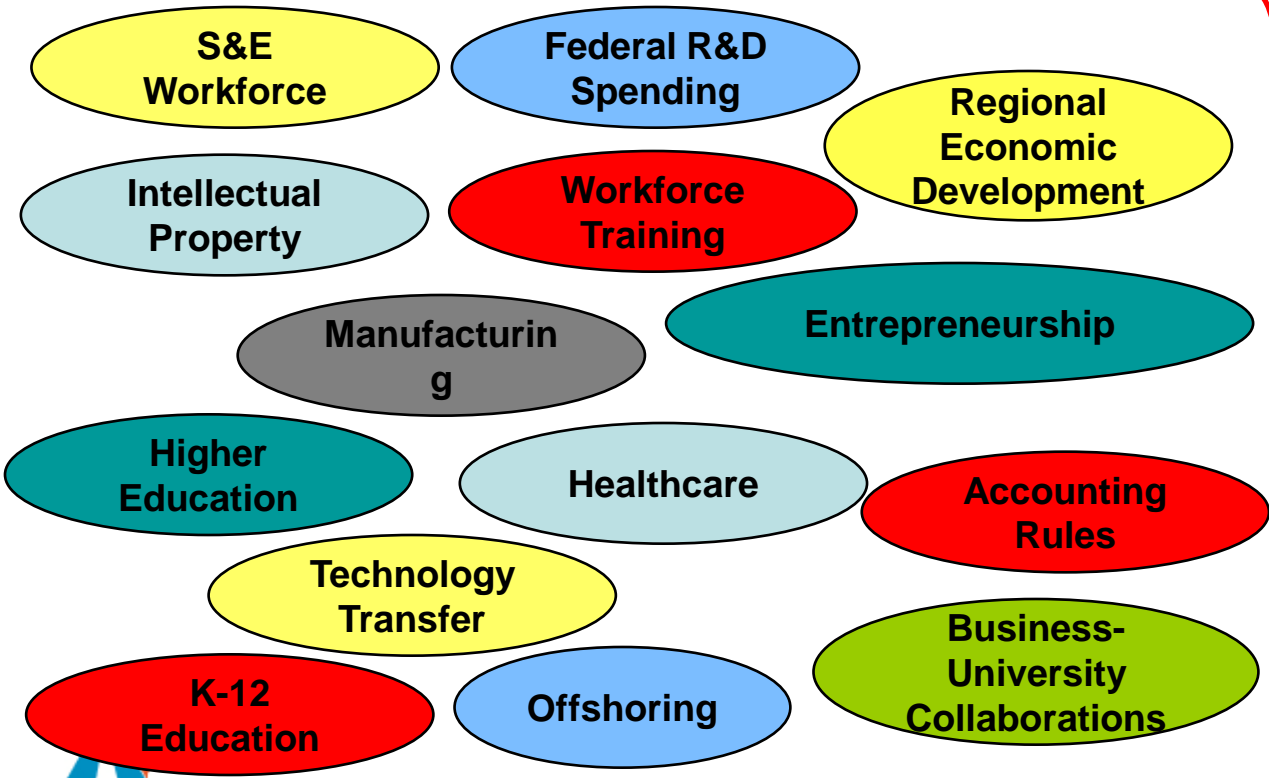
Key considerations ...

- Knowing who you are as a region, as an innovation ecosystem:
 - objective assessment of your assets, your relationships, your culture, your shortcomings
 - what are your sources of comparative advantage
 - how is your region perceived from outside?
 - what gaps you need to address
- What's important to you and your stakeholders



Innovation ecosystem – shifting the debate

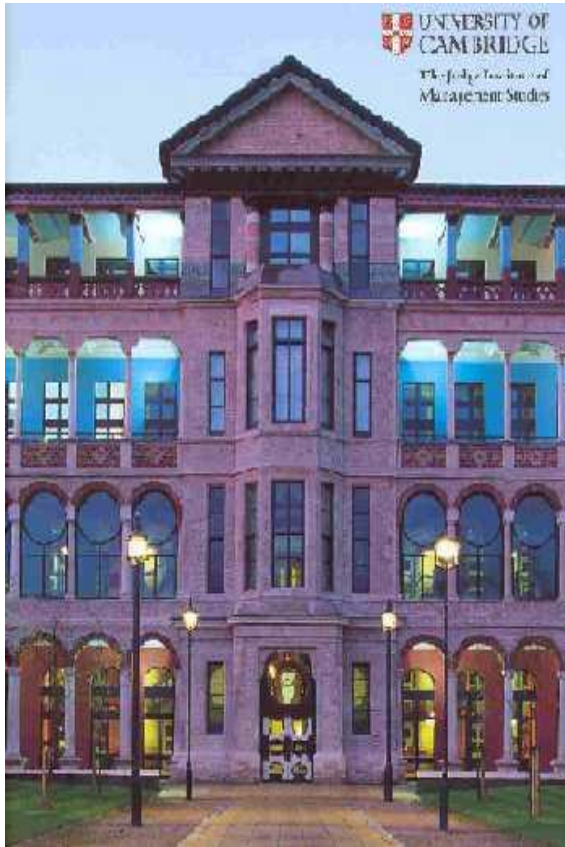
Many Policymakers See Discrete Issues, Narrow Constituencies



US Council Sees a Concerted Focus for National Innovation Policies with Broad Constituencies

**21st Century
INNOVATION
POLICY**

Characteristics for High Technology Regions



- Universities and centres of academic excellence
- Entrepreneurs with marketable ideas and products
- Business angels and established seed funds
- Sources of early stage venture capital
- Core of successful large companies
- Quality management teams and talent
- Supportive infrastructure
- Affordable space for growing businesses
- Access to capital markets
- Attractive living environment and accommodation
- Social and Business Networks

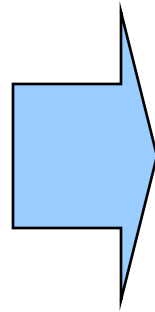
source :- Gibbons - Stanford University 1998



Strategic Plan Eastern Netherlands

National priorities:

- Physical space for enterprise
- Properly functioning labor markets
- Excellent innovation climate



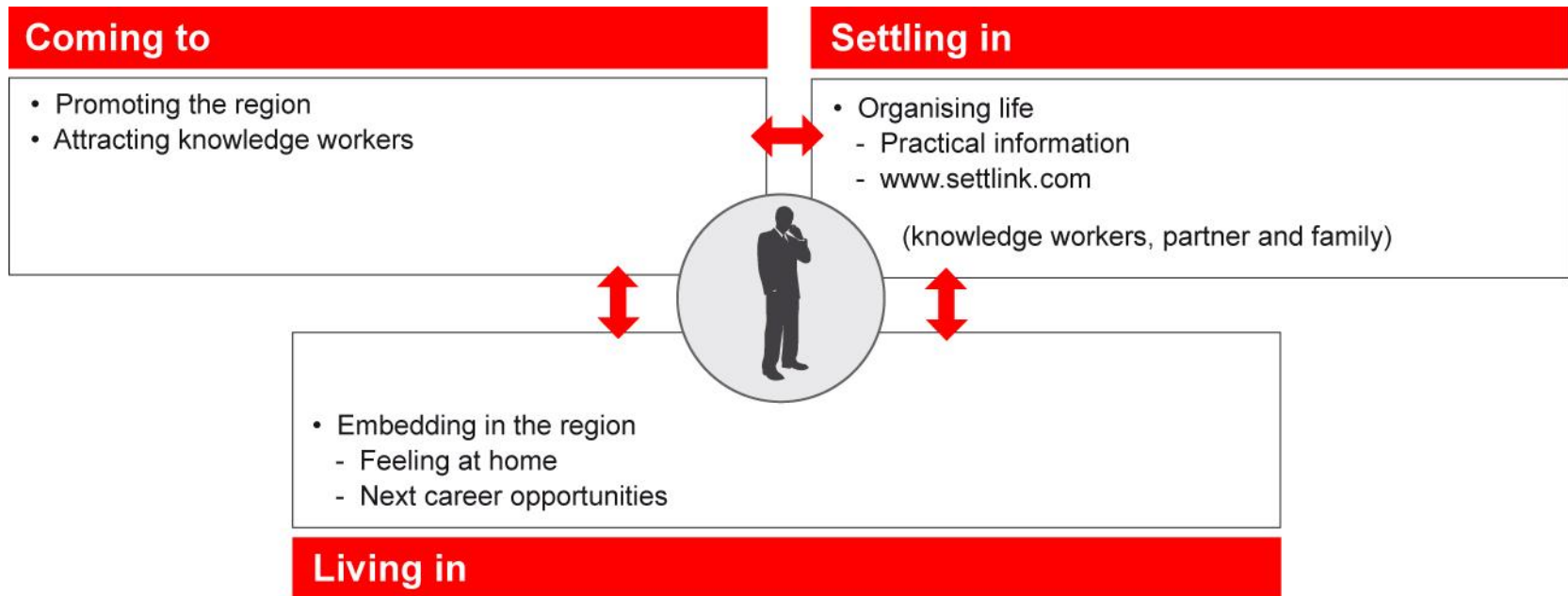
Regional strengths:

- Room for growth
- Leading knowledge centers
- Supportive and active local and regional governments
- Strong mix of international and SME companies in food, technology, health



BRAINPORT PEOPLE

Programme International Community



The building of innovation strategy for Helsinki region

- After the depression of 90's and the ICT bubble an consensus emerged that only by **combining all resources** Helsinki region will survive in global economy
- People from University of Helsinki, Nokia, Tekes, Sitra and Culminatum make an initiative to create a new innovation strategy for Helsinki region
- The strategy process was organized by Culminatum in 2003-2004.
- A grand total of more than 300 innovation participants were involved in various aspects of formulating the strategy
- Culminatum Ltd Oy Helsinki Region Centre of Expertise is a development company owned by the Uusimaa Regional Council, the cities of Helsinki, Espoo and Vantaa, and the universities, polytechnics, research institutes and business community of Helsinki region.



Improving the international appeal of research and expertise

- The most important achievement is the establishment of the new **Aalto* University**.
- The Aalto University is formed through the merger of Helsinki University of Technology, Helsinki School of Economics, and the University of Art and Design.
- The capital of the university foundation will be formed by donations of at least € 700 million, 500 m from the government and 200 m from Finnish industries and other financiers.
- The university will start to operate in August 2009.



* Alvar Aalto (1898-1972), a famous Finnish architect and designer.

The Need for Evaluation ...

- Need to know “Where we are” in order to measure “What we have achieved”
- To answer the question: “How would we know if we succeeded?”
- Need Clear Metrics are needed
- Regular Evaluation Gives Policymakers timely information to help formulate policy



ACOA's Approach to Innovation ...

Focus on strengthening the region's innovative capacity and the contribution of S&T to its economic development and competitiveness in global markets:

- Develop private sector capacity and participation in technology-based business
- Strengthen the region's innovation system and support greater alignment, linkages and collaboration among innovation stakeholders at the local and regional level
- Capitalize on existing industry and research excellence and support focused strategic initiatives
- Strengthen and expand technology transfer performance across the region
- Promote the necessary connectivity between the innovation agenda and international initiatives and opportunities, the skills development and demographic change priorities, including immigration, community development, and the Agency's advocacy mandate



ACOA S&T Research ...

- Policy Research:
 - Research and innovation capacity in SMEs
 - Gazelles in Atlantic Canada
 - R&D taxation
 - Innovation benchmarking
 - Industrial R&D performance
 - Early stage / start-up performance / failure
 - Sector-oriented research



ACOA S&T Research ...

- Policy Outreach / Engagement
 - Research Money conferences (St. John's, June)
 - 5th Annual Technopolicy Conference
 - Leaders Panel on Innovative Commerce
 - OECD Regional Studies, Innovation Strategy
 - ISRN Conference
 - roundtables (ie. Improving Competitiveness and Productivity)



Canada's GERD has a serious case of the blues ...



- **Canada's R&D performance in doldrums with third lackluster year in a row (Research \$, December)**
 - *“Statistics Canada has released its final and most substantial collection of R&D data of the year and it doesn't paint a pretty picture. It shows that Canada's gross domestic expenditures on R&D (GERD) are projected to be virtually stagnant for the third year in a row and are actually in decline when measured in 2002 constant dollars. What's more, industrial R&D spending — the focus of both federal and provincial S&T policy for the past several years — is barely increasing, managing just a 1% rise (before inflation) between 2007 and 2008.”*



Canada's R&D HotSpot??

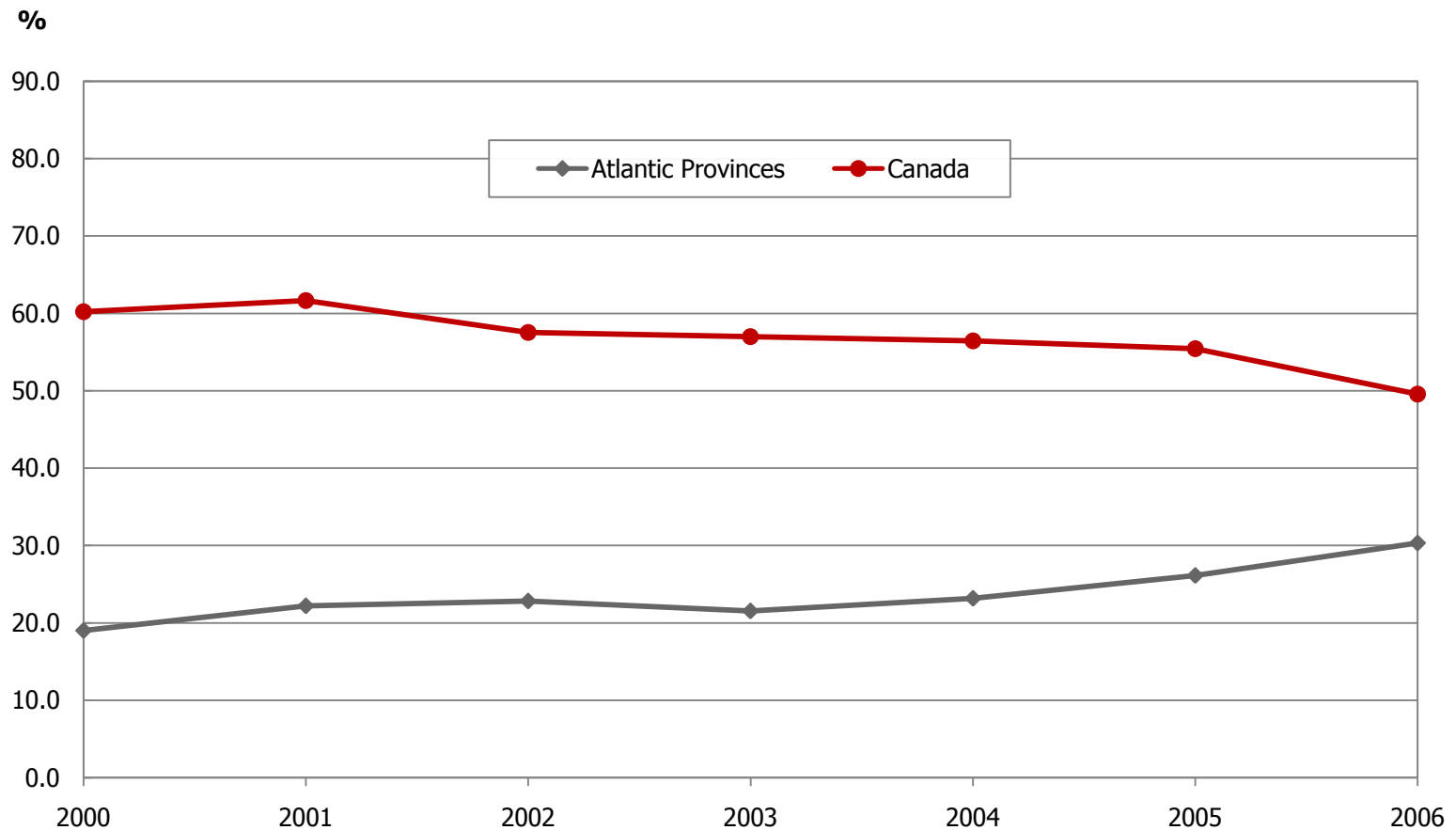


The highest gains were realized in Nova Scotia, Prince Edward Island and New Brunswick with increases of 6.6%, 6.1% and 5.8% respectively. Newfoundland's R&D outlays dipped slightly in 2006, after a spectacular 54.3% gain in 2005.



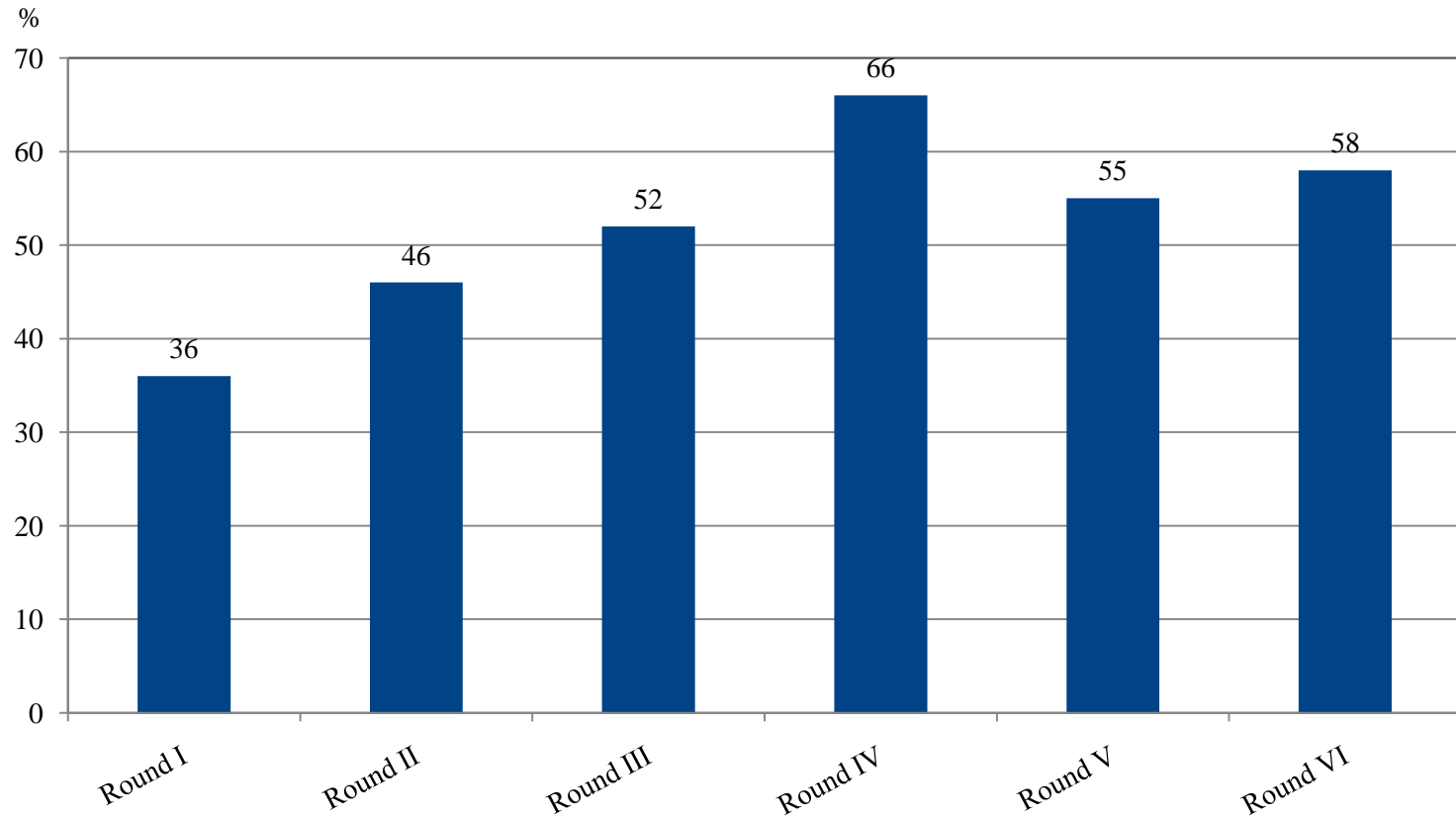
RESEARCH
MONEY

Business Expenditures on R&D as a % of GERD Atlantic Canada and Canada, 2000-2006



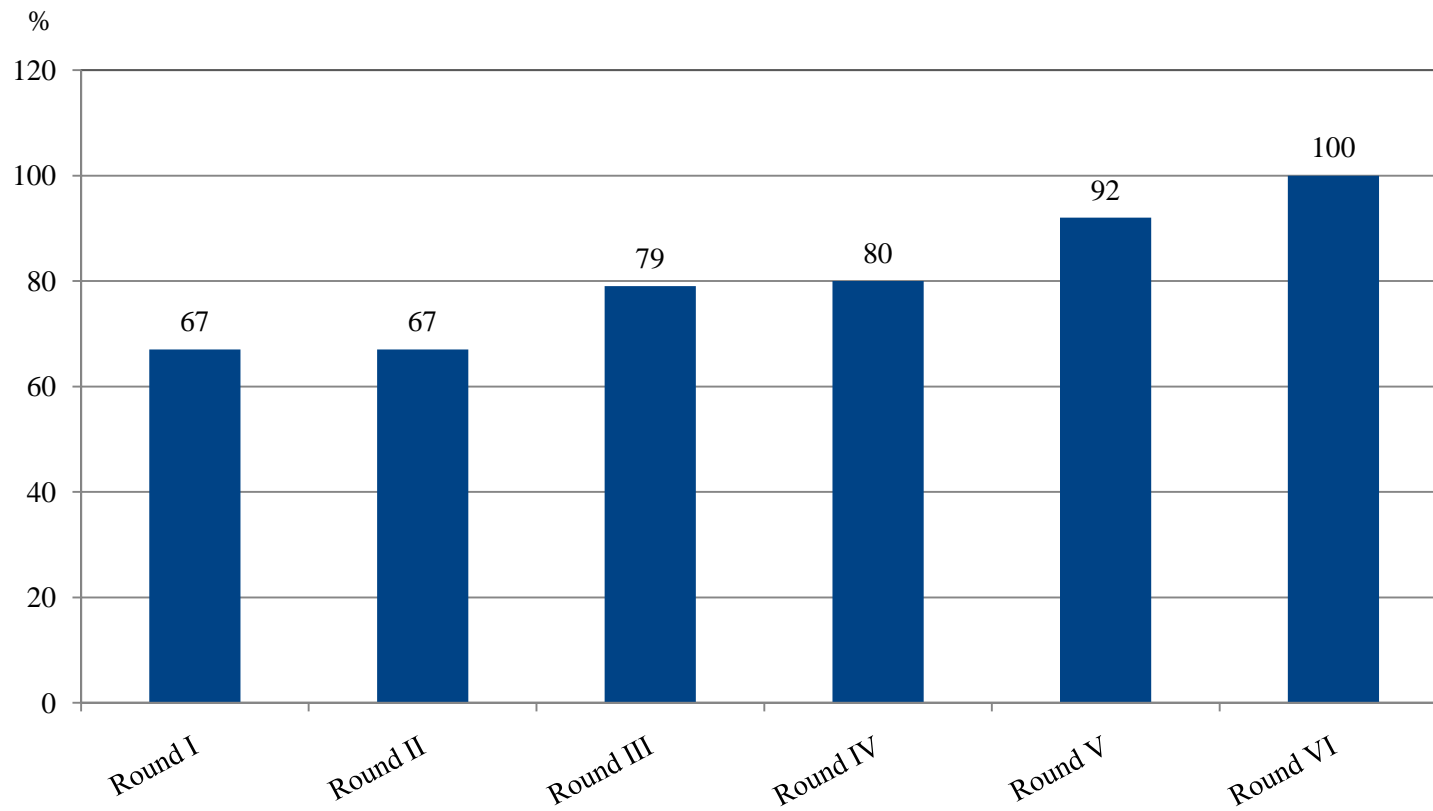
Source: Statistics Canada

AIF Approved Projects from Commercial Proponents



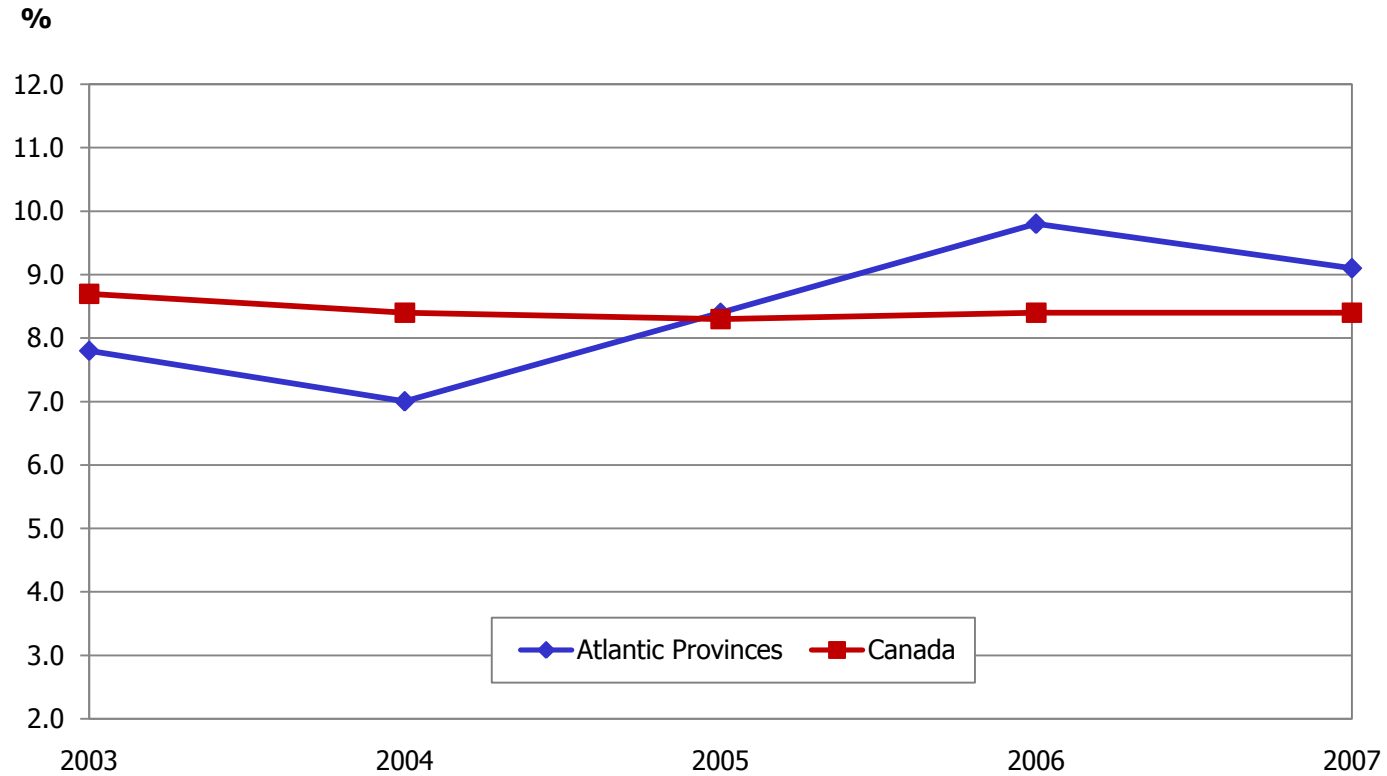
Source: AIF ACOA Database

AIF Non-Commercial Projects with Private Sector Partners



Source: AIF ACOA Database

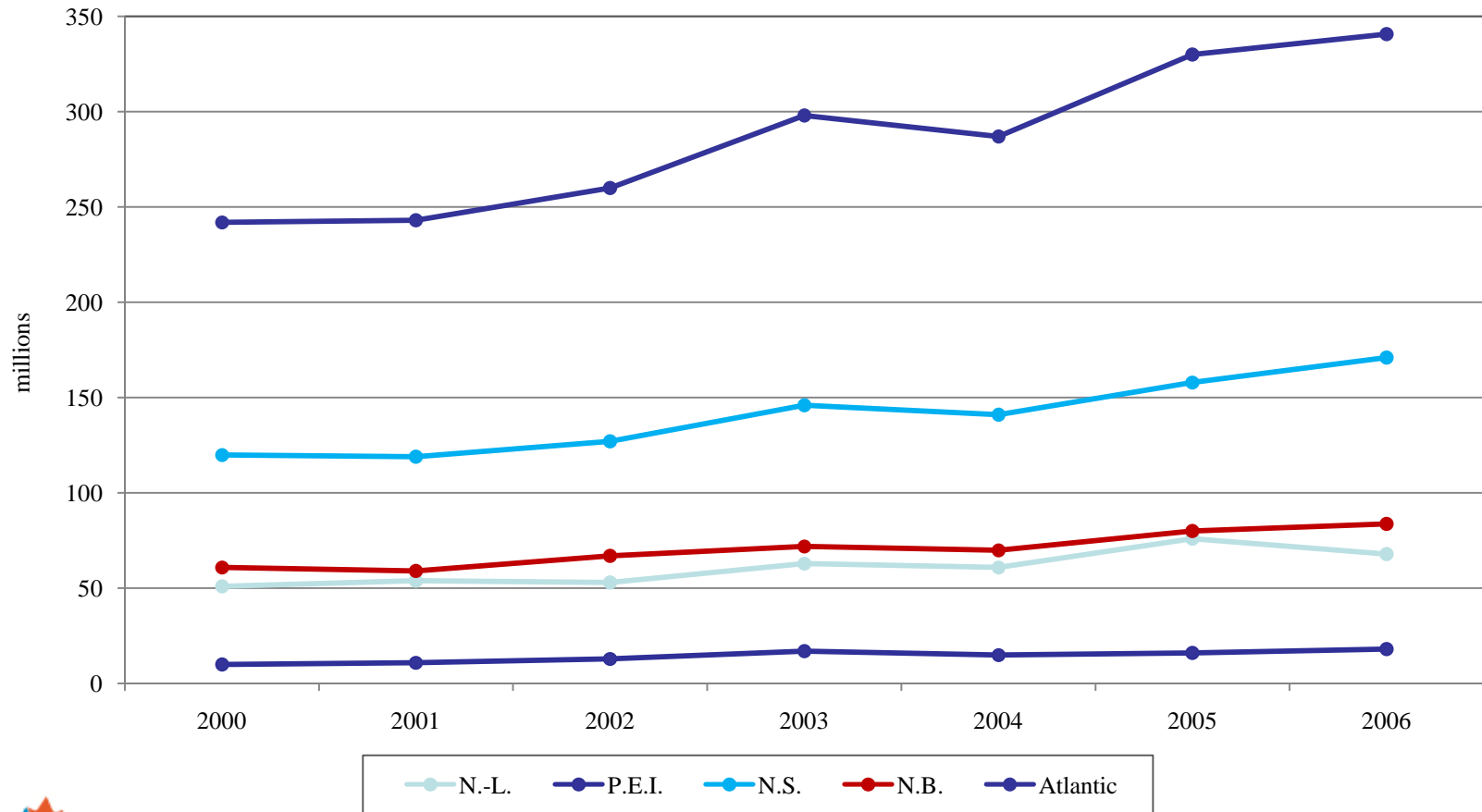
Business Funding of Higher Education on Research and Development Atlantic Canada and Canada, 2002-2007



Source: Statistics Canada



R&D Expenditures by Higher Education, Atlantic Canada and Canada, 2000-2006



Source: Statistics Canada

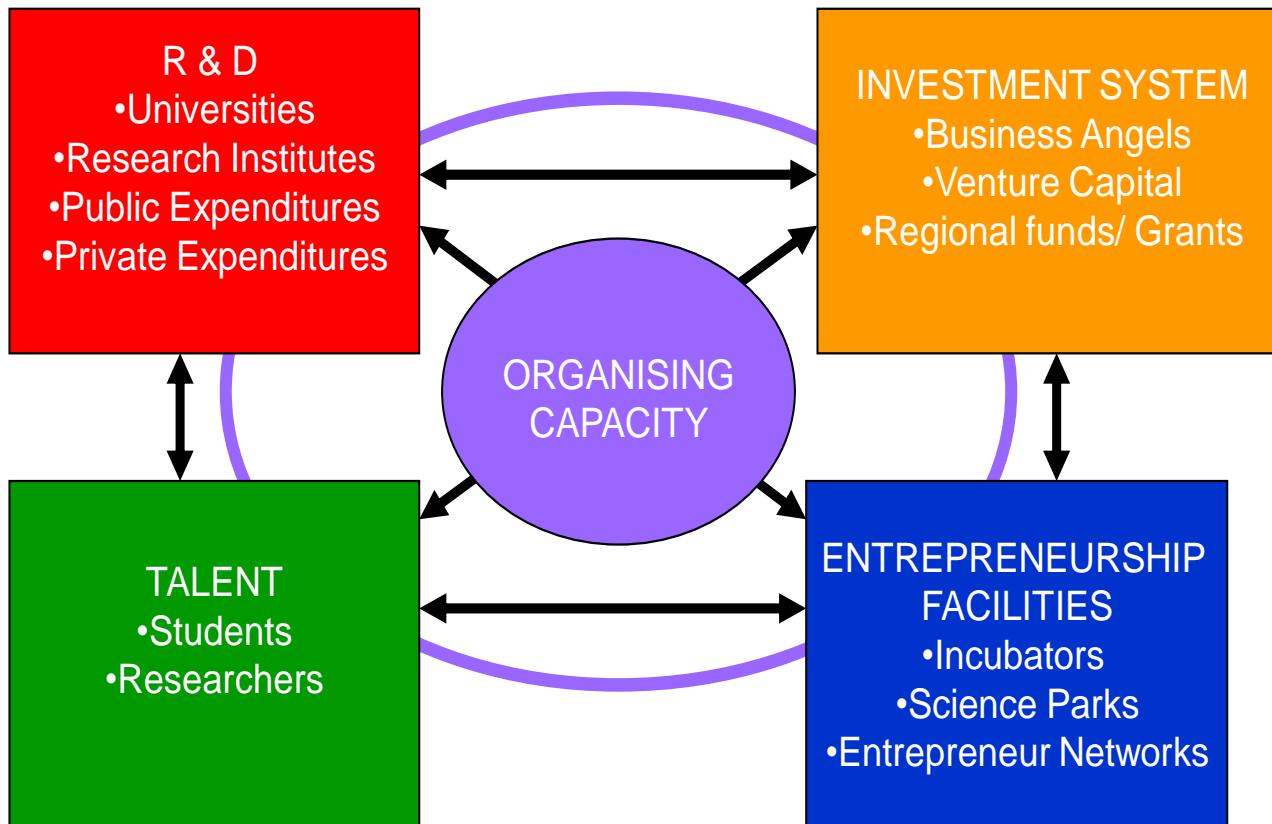
ANALYZING INNOVATION SYSTEM PERFORMANCES IN ATLANTIC CANADA

Assessing the innovation systems of Atlantic Canada's provincial regions through applying the Technopolicy Model for regional innovation performance measurement to these regions.

THE TECHNOPOLICY NETWORK

Global Community for Regional Innovation Policy





Study of Atlantic Canada Innovation Systems Performance

- Public R&D capacity in the region is excellent
- Organising Capacity needs to be put in place in all regions
- IP arrangements at universities must be organised to create an incentive towards commercialisation for both the researcher as well as the university.
- Create an entrepreneurial culture through introducing scientific entrepreneurship curricula at universities, highlight role-models and have entrepreneurs teaching at universities
- Excellent Entrepreneurship Facilities are needed to increase scientific entrepreneurship in the region
- To create more public private partnerships in R&D, companies and research institutes must meet each other physically as well.
- The amount of risk capital available in the regions is not a problem – rather the problem is to find enough projects to be funded.



Looking Ahead – Key Considerations

Global economy / Canada's fiscal situation

This region has made significant progress, however challenges remain:

- Developing private sector capacity and participation in technology-based business;
- Strengthening the region's innovation system and support greater alignment, linkages and collaboration among innovation stakeholders at the local and regional level;
- Capitalizing on existing industry and research excellence and support focused strategic initiatives;
- Strengthening and expanding technology transfer performance across the region; and
- Promoting the necessary connectivity between the innovation agenda and international initiatives and opportunities, the skills development and demographic change priorities, including immigration, community development, and the Agency's advocacy mandate.



Thank You

