

# **Bridging the Productivity Gap**

## **Association of Canadian Public Polytechnic Institutes (ACPPI)**

### **Challenge/Opportunity**

- Innovation and bringing commercial opportunities to market are key to enhancing productivity
- Canada lags behind many developed countries in terms of overall innovation performance. Canada's productivity is near the bottom of the G-7 and our competitiveness is ranked 11<sup>th</sup> in the world.
- Industry, in particular, small- and medium-sized enterprises (SMEs) hold the key to economic development and economic growth but are poorly positioned to conduct applied research and bring innovation to commercialization.

### **ACPPI - The Background**

- Eight Canadian public polytechnic institutes located in Canadian centers of economic growth/activity have formed a unique alliance to address these challenges.
- The ACPPI members include British Columbia Institute of Technology (BCIT), Southern Alberta Institute of Technology (SAIT), Northern Alberta Institute of Technology (NAIT), Seneca College, George Brown College, Humber Institute of Technology and Advanced Learning, Sheridan Institute of Technology and Advanced Learning and Conestoga Institute of Technology and Advanced Learning.
- ACPPI members have a solid track record of higher education (certificates/diplomas/degrees), technical skills training, advanced training and a long history of working closely and successfully with industry. As well, ACPPI members have demonstrated a growing capacity for applied research and technology development, providing a "total solution" for industry challenges as evidenced by an increasing number of ongoing projects.
- ACPPI members focus on solutions for industry and are complementary to universities.
- The economy needs industry to succeed and ACPPI members are well positioned to do applied research and commercialization. The eight ACPPI members have a particular strength in:
  - Manufacturing;
  - Construction and building;
  - Information technology and telecommunications;
  - Advanced electronics;
  - Health and biotechnology;
  - Energy; and,
  - Health sciences and services.
- ACPPI members have a strong history of responsiveness to market needs and industry identified problems/challenges.

## **The ACPPI Solution**

Targeted government investment can support specializations being cooperatively developed with industry by the polytechnics. Funding incentives would accelerate applied research and technology development towards market-relevant innovation and commercialization that would not occur otherwise. ACPPI proposes Government investment to accelerate Canada's commercialization success by implementing four strategies:

### **1. *Adjusting Research Funding Approval Criteria***

- Target research funding to national commercialization goals: adjusting research funding approval criteria to give equal weight to researchers with a balance of strong academic credentials and industry-experiences, and joint proposals
- Most federally funded research programs are targeted to individual university researchers or approve funding for researchers with strong academic publishing records. These criteria exclude the commercialization and applications strengths that industry-experienced polytechnic faculty bring to development of commercial applications.
- New approaches/rules should target applied research, collaborative teams (with industry, universities, government research agencies etc.), and reduce the emphasis on academic credentials for a balance of academic credentials and industry experience.

### **2. *Funding Specialized Capital Resources***

- Funding incentives would tip the balance of research towards market-relevant innovation that would not occur otherwise.
- A federal capital investment of \$24m per annum over 5 years could support commercialization research in sectors referenced above. This fund would be accessed through a competitive proposal process by polytechnics in cooperation with industry collaborators.

### **3. *Funding Applied Research Leadership***

- Establish a funding program to create 25 to 50 college commercialization leadership teams (funding at \$500,000 annually over 7 years and/or Chairs at \$250,000 annually over 5 years).

### **4. *Encouraging Industry/Institute Cooperation***

- Establish a Commercialization Development Fund to encourage market driven commercialization research between Canadian SMEs and institutes.
- Such an initiative would stimulate cooperative commercial development, encourage an increased SME commitment to R&D and expand the national network of commercialization innovators.

## **Bridging the Productivity Gap**

- Together, industry, the polytechnic institutes, other research organizations and government can work to achieve the government's goal of enhancing innovation and productivity by bringing innovations to market, in a strategic and cost-effective manner. This approach builds on the strength of each sector of the economy and ensures Canada's competitiveness.