

## CANADIANS AS GLOBAL INNOVATORS

Canadian discoveries and breakthrough technologies have been driving global progress for decades.

- From the telephone to the BlackBerry® – Innovative Canadian communications technologies have connected the world.
- From insulin's discovery to development of the pacemaker – Canadian innovators have pushed medical frontiers with life-saving treatments.
- From the robotic Canadarm to Dextre – Canadian ingenuity has brought space exploration and space science to new levels.

Canadians recognize they must continually work to "change the game." Today more than ever, Canadians are determined to push the boundaries of the possible – to go beyond market adaptation to market transformation. That's why the pace of Canadian innovation is accelerating.



## CANADA'S INNOVATION STRENGTHS

Canadian businesses and their partners are maintaining leadership in long-held areas of strength including information and communications technologies (ICT) and aerospace. They're also pioneering technologies in genomics, nanotechnology and photonics. And they're building exceptional strength in the key science and technology-based industries shaping the 21st century: health, energy and cleantech.

### INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT)

An early global leader in ICT, Canada continues at the leading edge of discovery in software, telecommunications and digital media. Canada's broadband and wireless technologies continue to transform world markets in seamless access, mobile data networks, smart antennas and software-defined radio. Canadian companies and their international partners dominate in simulation, gaming, special effects and animation technologies for the global entertainment, military and health markets. And Canadians are recognized as trailblazers in data mining applications, security and authentication, biometrics, web 2.0 and encryption.



### HEALTH AND LIFE SCIENCES

Canada's health science research community consists of over 30,000 investigators in 16 medical schools, and over 100 teaching hospitals and research institutes. Canadian innovators are internationally recognized for research and product development excellence in genomics, proteomics, vaccine development, medical devices, regenerative medicine (stem cells), protein engineering, immunotherapies and drug delivery systems. Canada has the second highest number of biotechnology companies in the world with the majority focused on human health, giving Canada a strong record of achievement in biopharmaceuticals. Canada has been rated the best country in the Group of Seven (G7) industrialized nations for cost-effective clinical trials and medical product testing.

