

## CCSIP R&D Business Plan: Leveraging Canada-California R&D Expertise in Green ICT to Reduce Carbon Emissions and Slow Global Warming

Climate change is a key global challenge and priority. Information and communications technologies or ICT (including microelectronics, photonics, wireless technologies, telecommunications networks and services, software and multimedia applications) currently generate global carbon emissions equivalent to the aviation industry.

However, in an interesting duality, the novel application of these technologies could help to reduce worldwide greenhouse gas emissions by up to 30 percent<sup>1</sup>.

McGill University, the California Institute for Telecommunications and Information Technology (CALIT2) at University of California (UC) San Diego and Irvine, and Prompt (Quebec, Canada) aim to seize this opportunity.

With support from CCSIP, they are bringing together 10 Canadian universities (including the Universities of British Columbia, New Brunswick, Ottawa, Toronto, Waterloo, École polytechnique de Montréal, École de technologie supérieure, Concordia University and Université du Québec à Montréal), two UC campuses and CANARIE, Canada's Advanced Research and Innovation Network, to establish a bilateral R&D consortium for the development of green ICT that will help reduce carbon emissions.

The multidisciplinary team will develop an R&D business plan that defines the objectives, strategies and investment required to launch a consortium. As the global market for green ICT is expected to exceed US\$600 billion by 2013, the potential economic benefits of this bilateral R&D collaboration are significant. For example, energy-efficiency efforts over the last 30 years in California created 1.5 million new jobs and payrolls of \$45 billion.

Longer-term, the consortium promises to enable the creation of new expertise and the development of novel technologies that deliver health and environmental benefits to both jurisdictions.

<sup>1</sup> Insight Research Corporation: [http://promptinc.org/template/ngi\\_pdf/ICT\\_Carbon\\_Credit\\_Ecosystem\\_Bauer\\_Insight\\_Research\\_Corporation.pdf](http://promptinc.org/template/ngi_pdf/ICT_Carbon_Credit_Ecosystem_Bauer_Insight_Research_Corporation.pdf)