



CANARIE Announces \$3 Million Call for Proposals to Fuel the Development of Advanced Computing and Networking Technologies that Reduce Carbon Emissions and Help to Slow the Rate of Global Warming

June 1, 2009 (OTTAWA, Ontario) - CANARIE today announced a \$3 million Call for Proposals to fuel the development of advanced computing and networking technologies that reduce carbon and greenhouse gas emissions from the world's Information and Communications Technologies (ICT) infrastructure (including computer hardware, software and networks), and enable collaboration on promising green IT solutions that will help slow the rate of global warming.

The CANARIE Green IT Pilot Program will help Canadian innovators to capitalize on emerging opportunities in Green ICT - a global market that, according to Insight Research Corporation, is expected to reach over US \$600 billion by 2013. Specifically, it aims to facilitate national and international collaborative research projects that demonstrate the

- technical feasibility and usability of relocating computers and other cyber infrastructure to zero-carbon data centres that are connected by optical networks, and powered solely by renewable energy sources such as the sun or the wind, and
- business case for providing carbon offsets (and/or equivalent services) to university researchers and IT personnel who reduce their carbon footprint by relocating computers and instrumentation to zero-carbon data centres

CANARIE expects to award up to \$2 million for major zero-carbon data centre pilot projects; and about \$1 million for the development of business cases and smaller projects. The outcomes of this pilot project could influence the development of 'Canadian-designed' green ICT approaches, products and services that could be marketed around the world. As countries such as the United States, Britain, Singapore and Australia consider injecting billions of dollars into green and broadband strategies, these initiatives could help put Canada 'in the global game', stimulating business development opportunities and opening new markets for Canadian companies.

"This Call for Proposals aims to capitalize on Canada's expertise in ICT and the development and use of advanced networks to accelerate the adoption of low-carbon ICT infrastructure and management strategies," said Guy Bujold, President and CEO of CANARIE. "It will enable innovators to collaborate on the development and validation of novel green technologies, assess the feasibility of zero-carbon data centres, and propose cost-effective and environmentally sound IT strategies that could benefit companies in many sectors. This

Quick Facts: Green ICT

Green ICT is the study and practice of using computers and telecommunications in a way that maximizes positive environmental benefit and minimizes the negative impact of carbon (Australian Computer Society).

It is estimated that:

- The ICT industry alone produces carbon emissions that are equivalent to the carbon output of the entire aviation industry (*An Inefficient Truth*, Global Action Plan, 2007)
- One small computer server generates as much carbon dioxide as an SUV with a fuel efficiency of 15 miles per gallon (*An Inefficient Truth*, Global Action Plan, 2007)
- A typical US university produces up to 500,000 metric tons of carbon per year, of which up to 300,000 tons is generated from cyber-infrastructure and ICT (EDUCAUSE)
- The ICT industry has the potential to reduce current global greenhouse gas emissions by as much as 30% (Smart 2020)
- Green ICT could help to save the global industry US \$800 billion in annual energy costs by 2020 (Smart 2020)

reinforces CANARIE's commitment to partner with industry, academia and government to address global sustainability challenges such as climate change."

"This Call for Proposals underscores CANARIE's critical role as a change agent in the ICT landscape", said Brian Fry, Vice-President of Sales and Marketing for RackForce, a leader of green data centres based in Kelowna, BC. "It will provide enormous lift for companies such as RackForce that aim to develop, implement and promote the use of green data centres to reduce our carbon footprint. For example, winning project teams could influence the development of new standards, discover new ways to optimize zero-carbon data centres, and help to stimulate increased uptake of green ICT approaches. This represents a win for industry-and for society."

The deadline for initial proposals is June 29, 2009 at 5PM EDT, with full applications to be submitted by September 10, 2009 at 5PM EDT. Selected proposals will be announced in October 2009. For additional information on this program, please visit: http://www.canarie.ca/funding/greenit/call_for_proposals.html.

About CANARIE

CANARIE Inc., based in Ottawa, is Canada's advanced network organization. It facilitates the development and use of its network as well as the advanced products, applications and services that run on it. The CANARIE Network serves universities, colleges, schools, government labs, research institutes, hospitals and other organizations in a wide variety of fields in both the public and private sectors. By promoting and participating in strategic collaborations among key sectors, and by partnering with peer networks and organizations around the world, CANARIE Inc. stimulates and supports research, innovation and growth, bringing economic, social, and cultural benefits to Canadians. The national organization was created in 1993 by the private sector and academia under the leadership of the Government of Canada. CANARIE Inc. is supported by membership fees, with major funding of its programs and activities provided by the Government of Canada. For additional information, please visit: www.canarie.ca.

About RackForce

RackForce is a leading provider of green data centre infrastructure and network services from its strategically located facilities in the heart of British Columbia, Canada. Through its advanced data centre design, automated systems and virtualization expertise it provides highly reliable on-demand servers, collocation and connectivity to a world-wide customer base. For additional information, please visit: www.rackforce.com.

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