



## Computing Goes Green

### Building the World's First Carbon-free Network

**Project Name:** GreenStar Network

**Project Lead:** École de technologie supérieure (ÉTS), Montréal

**CANARIE Contribution:** \$2M

**Participants:**

- Canadian Standards Association
- University of Calgary Grid Research Centre, Alberta
- RackForce Networks Inc., Kelowna, BC
- Prompt, Montreal, Quebec
- Cybera Inc., Alberta
- Université de Québec à Montréal, Quebec
- iDeal Consulting, Ottawa, ON
- Communications Research Centre, Ottawa, ON
- Inocybe Technologies inc., Gatineau, Quebec

**What is the Greenstar Network?**

The GreenStar Network is the world's first Internet network where the nodes are powered entirely by "green," renewable power. Through an alliance of Canada's leading IT companies, universities and international partners, the GreenStar Network is creating the tools, protocols, procedures, and use cases for a growing network of information and communications technologies service providers that offer customers the lowest price and greenest services.

The GreenStar Network allows data to be beamed across the network to wherever renewable sources are available; data is seamlessly transferred along the network to another operational node powered by renewable energy.

The CANARIE-funded GeoChronos environmental monitoring portal is one of the first cases using the GreenStar Network, and in June 2011, CANARIE successfully used the GreenStar Network to run a live videoconferenced annual general meeting from four locations across Canada.

Two solar-powered nodes have been launched, one at the Communications Research Centre in Ottawa and the other at Cybera in Alberta.

**Value to Research and to Canada:**

- Positions Canada as a leader in Green IT
- Supports the sustainable growth of information and communications technologies, the foundation of Canada's digital economy

**Did you know?**

The information and communications technologies industry contributes the same amount of greenhouse gases as the global aviation industry, but is growing at a rate of 6% per year. That means Green IT is an industry with enormous growth potential.



Map showing GreenStar Network locations



Find out more:

[www.CANARIE.ca/en/programs](http://www.CANARIE.ca/en/programs) or  
[www.greenstarnetwork.com](http://www.greenstarnetwork.com)

