

Success Story



Ontario Centres of
Excellence

Where Next Happens

CENTRE OF EXCELLENCE FOR ENERGY

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REGEN | Toronto

OCE sparks interest in REGEN's energy saving technology

Ontario's largest industrial facilities could slash their peak demand charge by up to 30%

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Chris Beaver
Executive Vice President
REGEN

For large industrial facilities across the province, energy isn't cheap. In fact, for Ontario's biggest energy consumers that are billed according to their peak demand (the highest amount of electricity over a 15-minute period), electricity costs can be staggering.

A typical industrial facility of 90,000 sq. ft. can reach a peak demand of 500 kW, costing \$4,000 a month. But with support from the Ontario Centres of Excellence (OCE), a Toronto-based company has developed a new innovative technology that can cut that monthly peak demand charge by 30%.

Resembling small radios, REGEN's controllers are installed on water heaters, air conditioning and other operating systems. They “talk” to each other wirelessly, telling each system when to operate or shut down for a few minutes at a time during peak demand periods. This conversation results in huge savings for potentially thousands of industrial factories and commercial facilities across Ontario.

But before flicking the switch on the market, REGEN needed to ensure it could deliver what it promised. “We were doing experimental installations, collecting data, and we thought we understood what was going on, but we needed a third party to look at it,” said Chris Beaver, REGEN's Executive Vice President.

Working with REGEN, OCE recommended Centennial College as a research partner to test the controllers in Toronto commercial buildings. The study proved to investors this

patent-pending technology had the potential to significantly improve the management of electrical loads. Centennial's rigorous testing also revealed that under certain conditions, overall energy consumption could be reduced significantly. These promising results led to joint research funding from OCE and the Ontario Power Authority.

This funding was then supported by crucial project management and marketing guidance, contacts and instructions on dealing with finance, engineering and technical support. REGEN also showcased its controllers at OCE's Discovery 08 conference and the Globe 2008 conference in Vancouver (Canada's largest environmental conference and exhibition), giving REGEN exposure to 6,500 entrepreneurs, researchers and investors.

“OCE came at a critical time for the growth of our company,” said Beaver. “It was essential that we have our data validated and that we were able to ensure that our controllers were significantly reducing peak demand – OCE with its contacts, networks and programs was instrumental in helping us ensure our technology worked and that our claims were valid.”

In the near future, REGEN foresees its controllers reducing energy peak demand in commercial facilities across North America. REGEN believes its controllers could eventually be used in households to reduce peak demand and optimize energy use on refrigerators, air conditioners and pool pumps.

