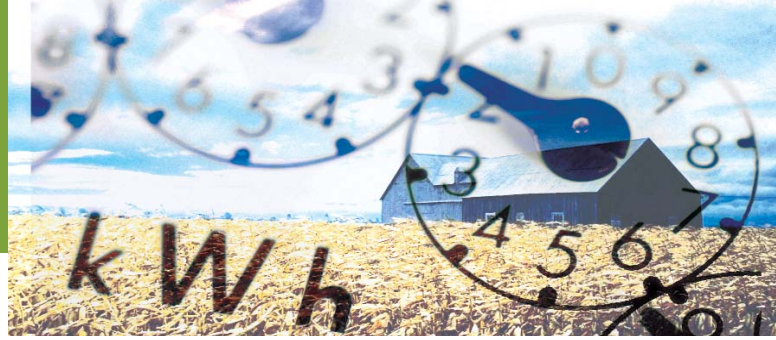


Electricity conservation on Ontario farms



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For sale: Farm-generated electricity



Ontario's largest farm energy co-operative is among the first Ontario farm operations to sign a 20-year contract to provide electricity to the Ontario electric power grid under the Ontario Power Authority's Standard Offer Program.

Ag Energy Co-operative will provide electric power generated from its 10 kW solar panel system on the roof of its office in downtown Guelph, Ontario. The 1,500-member association, established in 1988, represents about one-third of all the heat consumed by all Ontario farm operations, explains Mike Bouk, executive director of the association.

Under the Standard Offer Program, all generators with wind, biomass or waterpower projects will initially be paid a base rate of 11.0 cents per kilowatt hour (kWh) for electricity delivered to the local distribution company. Solar generators will be paid a fixed price of 42.0 cents per kWh for the full 20-year term of the contract.

Ag Energy Co-operative is one of the first 22 renewable generation Standard Offer contracts awarded by the Ontario Power Authority, in Guelph recently. The successful generators represent all four technologies – wind, solar, biomass and waterpower – and come from across Ontario.

“Co-op members will likely be biomass generators, but we've invested in solar generation because of our city location and to show our commitment to renewable electricity generation,” said Bouk.

“Because of our experience with the Standard Offer Program, we will also be able to help our members with setting and evaluating their own long-term contract,” he added. “We're serving our members as an actual renewable energy generator to the power grid and as an information resource.”

“One of the objectives of the Standard Offer Program for Renewable Energy is to remove barriers that have effectively prevented smaller, renewable energy projects from proceeding,” explains Jim MacDougall, manager, Standard Offer Program for the Ontario Power Authority.

“The pricing system should be simple and with minimal administrative costs for the farm generator.”

“In considering the Standard Offer Program, farmers also need to weigh carefully all aspects of selling power to the power grid. The OPA Web site provides a lot of detailed information about the program including cost, regulations, municipal zoning and technical criteria,” explained MacDougall.

Renewable electricity generation projects must have an installed capacity of not more than 10 megawatts and be connected to an eligible electricity distribution system in Ontario at a voltage of 50 kilovolts or less.

Starting May 1, 2007, 20 percent of the base rate will be indexed annually for inflation, raising the price to 11.04 cents per kWh based on last year's inflation rates. Projects that demonstrate they can operate reliably during peak hours will be paid an additional 3.52 cents per kWh for electricity delivered during peak hours. The government has set a target of having 2,700 MW of electrical power generated by new renewable sources by 2010.

More information is available on the Ontario Power Authority's Web site at www.powerauthority.on.ca/SOP.

Anaerobic Digestion and the Standard Offer Program

To provide additional technical support to the new Standard Offer Program, the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has prepared a specialized information package on the production of biogas from the anaerobic digestion of manure, energy crops and other agricultural or food-based materials.

Anaerobic digestion is one of the renewable energy generation sources on farms eligible for long-term contract pricing under the Standard Offer Program. Other renewable electrical power production sources include wind, water and solar systems.

The OMAFRA information sheet outlines the types of organic materials used in an anaerobic digestion system and the various end products, as well as information about the Standard Offer Program. The fact sheet and other information about biogas systems are available at:

<http://www.omafra.gov.on.ca/english/engineer/facts/04-097.htm>

<http://www.omafra.gov.on.ca/english/engineer/facts/biogas.htm>

Cash incentives for energy efficiency

Hydro One is offering financial incentives up to a maximum of \$50,000 per farm operation to increase energy efficiency.

Under its PowerSaver Business Incentive Program, Hydro One will reimburse farm operations for a portion of the cost of purchasing and installing technologies that increase energy efficiency of lighting systems, motors, heating and cooling equipment, temperature controls and livestock water bowls. The incentives start at \$150 per kW saved for pre-approved projects that result in measurable reduction in electrical peak demand.

Hydro One Networks must receive applications for projects by May 31, 2007, and the project must be completed by August 15, 2007. Applicants should apply as soon as possible as funds are limited.

Full details on eligibility, qualifying technologies, a fact sheet, application forms and guidelines are available at www.PowerSaver.com.

Renewable energy an Ontario farming tradition

Ontario farms have been a long-time source of renewable energy. As early as the 19th century, Ontario farmers used windmills to pump water. Most of the early feed and flourmills were powered by water.

Today, many farmers have woodlots and heat their homes with wood – another renewable energy source. Biogas generators could be found in the 1980s on Ontario farms, and during the same era, Ontario canola oil was tested as a tractor engine fuel at the University of Guelph. Since the early days of agriculture, Ontario farmers have generated their own

energy for heating, lighting, milling grains and water pumping.

As Ontario moves forward to build more renewable energy sources, the Ontario agriculture sector has proven experience with renewable energy sources in wind, biomass, biogas, biofuel, solar and waterpower for generating electricity.

Growing the Margins: Energy links electricity conservation and farm profitability

Farm energy experts from Ontario and other parts of Canada, the U.S. and Europe will gather in London, Ontario, April 11 to 13 to address the many energy conservation and energy generation issues facing the farm and food-processing sectors.

Among the key speakers at the *Growing the Margins: Energy conservation and generation for farms and food processors* conference will be Leona Dombrowsky, Ontario Minister of Agriculture, Food and Rural Affairs, and Ontario Minister of Energy Dwight Duncan.

The conference will include presentations on greenhouse technologies, waste as an energy resource, field crop opportunities and stimulating project development, energy from biomass, biogas for the food-processing sector, biofuels, energy conservation greenhouses, solar farming, on-farm energy conservation and audits and biogas opportunities.

Conference details and registration information are available at www.gtmconf.ca.