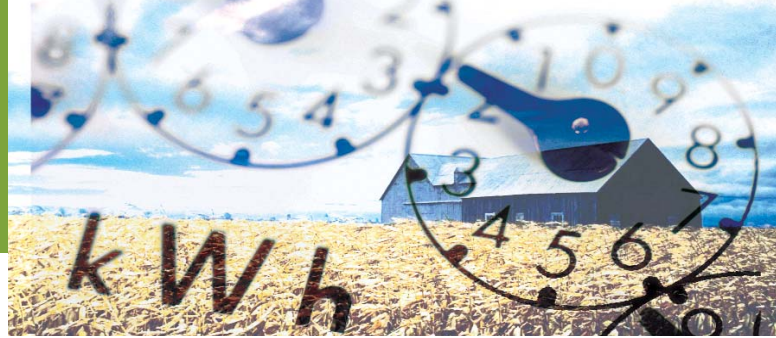


Electricity conservation on Ontario farms



Farm energy audits find 15 percent savings

Ontario farms may be able to save as much as 15 percent a year in electricity costs through conservation measures, according to recent audits of energy use on swine, poultry and dairy farms. This represented savings of \$2,100 a year based on average annual farm electricity costs of \$14,878 at the more than 60 audited farms.

Farmers consider electricity prices one of the most important issues facing the Ontario agriculture industry, according to the study. More than 60 percent of farmers audited ranked electricity prices among the industry's top three issues. Ninety-eight percent believe the price of electricity will continue to rise. In the preceding two years, the majority of audited farmers installed energy-efficient equipment on their farms. One-third of these farms had already spent more than \$5,000 on energy-efficient equipment.

and installation of new technologies, to establish a baseline to compare future improvements and to strengthen Ontario's farm energy management strategy.

"The audit provides vital up-to-date information about energy usage on Ontario farms that can be used in energy benchmarking farm operations and assessing individual farm operations," explains Sean Brady, director of program design for business markets for the Ontario Power Authority. "Energy audits are critical tools that identify ways to find energy savings."

Lighting and fans (exhaust and re-circulation) together accounted for more than 80 percent of the total identified savings, followed by VFD vacuum pumps, energy-efficient water bowls, creep heating (swine farrowing barns) and dairy milk cooling and wash-water heating.

The study found that almost all farms could benefit from lighting efficiency improvements, with average potential savings of \$1,520 per farm a year. Improvements in fan motors and exhaust hood efficiency had a potential annual savings of \$1,000 and variable frequency drive vacuum pumps, where applicable, represented another potential \$800 per year savings for dairy farmers.

The large audited farms had electricity costs of \$24,000 to \$46,000 a year; small farms paid \$3,300 to \$5,700.

In auditing dairy facilities, nine energy-savings technologies were identified that could potentially be implemented. These include lighting

(all types of dairy facilities), fans (facilities using mechanical ventilation), pre-cooler, heat reclaim, scroll compressors, variable speed milk pump and energy-free water bowls.

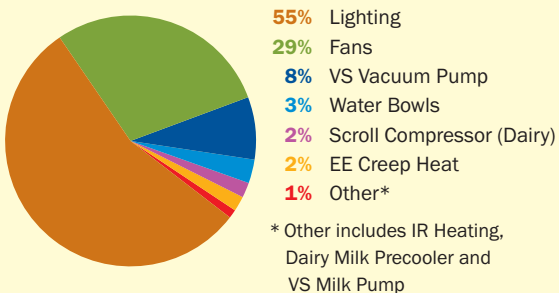
For swine operations, four common energy cost-saving technologies were identified that have the potential to reduce energy costs: lighting (all types of swine facilities), fans (facilities using mechanical ventilation), infrared heating (facilities where forced-air electric box heaters can be converted to infrared tube heating) and creep heating (swine farrowing facilities). Depending on the application, swine operations could save as much as 40 percent of current costs.

For poultry operations, the audit identified lighting, fans and infrared heating as the three most common technologies that could be installed to reduce energy costs.

Financial incentives to assist farmers who want to install energy-efficient technologies are available through the Hydro One PowerSaver Business Incentive program. Full details on eligibility, qualifying technologies, application forms and guidelines are available at www.PowerSaver.ca. Hydro One Networks must receive applications for projects by May 31, 2007, and the project must be completed by August 15, 2007.

The report of the On-Farm Energy Audit Program is available at www.conservationsbureau.on.ca (Conservation Fund Projects – On-Farm Energy Audit)

Total Opportunities for Annual Savings on all Audited Farms



The energy audits were sponsored and funded by the Ministry of Agriculture, Food and Rural Affairs, the Ministry of Energy, the Ontario Federation of Agriculture, Hydro One Networks and the Ontario Power Authority. The audits were conducted between June and October 2006 on 65 Ontario farm operations. The audit process was designed to find out how energy costs could be reduced by a mix of retrofits

Farm energy conference draws world experts

Ontario Minister of Energy Dwight Duncan will be one of the keynote speakers addressing the energy opportunities and challenges facing the Ontario farm and food processing industries at the April 11-13 Growing the Margins energy conference in London, Ontario. Mr. Duncan's presentation will be "Building an Energy Future for the 21st Century."

More than 90 farm energy experts from Canada, the U.S. and Europe will speak on a range of farm energy subjects including energy conservation and demand management, renewable fuel production, social, economic and environmental benefits and development partnerships. The conference will explore the technological, operating, policy, regulatory, financial and other challenges and opportunities facing farms and food processing and rural industries as they strive to improve their energy efficiency, better utilize by-products and ultimately improve their bottom lines.

Other speakers include Maria Van Bommel, MPP, Parliamentary Assistant to Leona Dombrowsky, Ontario Minister of Agriculture, Food and Rural Affairs, and Peter Love, Ontario's Chief Energy Conservation Officer. Markus Ott, Vice-president, German Biogas Association, will speak on the "Commercial Development of German Biogas Sector: Real Opportunities for Farmers."

Additional conference details and registration are available at www.gtmconf.ca

Applications to sell electrical power grow

The increasing number of proposals for small renewable electric generation projects to supply electricity to the Ontario power grid indicates the significant economic opportunities available in renewable energy for farmers, cooperatives and small businesses.

Twenty-two renewable energy projects were approved last month. These will generate more than 140 megawatts, enough to supply electricity to more than 30,000 homes. As well, more than 60 additional applications for projects have been received, and contracts will be awarded as these are evaluated.

"The Standard Offer Program for Renewable Energy has removed the barriers that were holding back the smaller, renewable energy projects from moving forward," says Jim MacDougall, manager of the Standard Offer Program for the Ontario Power Authority.

At the same time, each project proponent must carefully consider all aspects of selling electricity to the provincial power grid. Among the issues proponents must consider are: energy type most suitable for the project, the cost of design, building and zoning regulations, the environmental factors involved and the project's long-term profitability, says MacDougall. "Proponents need to invest time and effort into their proposals prior to making their application."

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.

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

Hydro One expands financial incentives for farmers

Hydro One Networks has expanded the list of energy-efficiency technologies available to its Ontario agriculture customers that it will financially assist under its PowerSaver Business Incentive Program. The financial incentive for custom projects has also been increased to \$250 from \$150 per kilowatt saved.

Effective immediately, the agriculture-specific technologies now include: energy-efficient 24" fans, creep heat pads and controllers for swine, and energy-efficient (less than 250 watts) livestock waterers for all livestock.

Under the incentive program, Hydro One will reimburse its farm customers for a portion of the cost of purchasing and installing energy-efficient technology to a maximum of \$50,000 per farm operation.

Applications from Ontario farmers represent 20 percent of all the applications for the Hydro One Business Incentive Program.

In addition to reduced electricity use and costs, farms that use energy-efficient equipment will benefit from higher profit margins, financial incentives for the technology improvements, improved productivity and reduced maintenance costs.

Hydro One Networks must receive applications for projects by May 31, 2007. Approved projects must be completed by August 15, 2007.

By fall 2007, similar financial incentive programs will be in place for farms across all of Ontario.

Details on qualifying technologies, eligibility, a fact sheet, application forms and guidelines are available for Hydro One customers at www.PowerSaver.ca