

Unlocking Millions in Energy Savings as Easy as Turning a Key

CASE STUDY

This week four of Thermal Energy International's (TEI) engineers travelled to the Resolute FP Canada Inc. ("Resolute") pulp and paper mill in Thunder Bay, Ontario to conduct an onsite survey and specification process to properly size and replace the facility's existing mechanical traps with high-efficiency GEM™ Steam Traps.

This event is the third stage of the massive \$11M heat recovery and steam conservation project that began more than a year ago. Since that time, TEI has been working in partnership with Resolute to fully define the project using the results of a detailed feasibility study to ensure it meets the facility's energy savings and greenhouse gas reduction goals.

In order to off-set the project costs TEI worked with Resolute through a successful competitive Ontario government grants application to Stream 1 of the TargetGHG program, funded by the Ministry of Research, Innovation and Science and administered by Ontario Centres of Excellence (OCE). The program is designed to encourage industries to adopt leading-edge emission reduction technologies from solution providers such as TEI.

The onsite survey will be followed by several standard procedures TEI will undertake over the next year in support of this project. So why go to all this trouble? Following a comprehensive process, Resolute concluded that TEI's expertise and unique mix of proprietary products provided an interesting approach to meeting the mill's energy efficiency and environmental conservation requirements. With our Venturi nozzle and 10-year No-Fail Performance Guarantee, TEI's GEM™ Steam Traps provide a 10% to 20% permanent reduction in steam costs. Combined with the FLU-ACE® direct contact condensing heat recovery system that reuses the heat normally lost through the process and boiler flue gas exhausts, TEI's products are expected to result in natural gas savings of more than 35% while reducing the mill's greenhouse gas emissions by more than 20%, or approximately 43,000 metric tonnes.

For each of our customers' major energy efficiency solutions projects, TEI offers up front project and business case development, onsite surveying, engineering, construction management, commissioning services, and government financing support, for a complete customer turnkey solution. And while the Resolute project will involve more than simply turning a key, the results will be well worth the effort.

Visit TEI at thermalenergy.com



About Thermal Energy International Inc.

Thermal Energy International Inc. (TEI) is an established global supplier of proprietary and proven energy efficiency and emissions reduction solutions to the industrial and institutional sectors. We save our customers money and improve their bottom line by reducing their fuel use and cutting their carbon emissions. Our customers include a large number of Fortune 500 and other leading multinational companies across a wide range of industry sectors.

TEI is a fully accredited professional engineering firm that is able to deliver unique turnkey projects with significant financial and environmental benefits for our customers.

Our proprietary products include: GEM™ - Steam traps; FLU-ACE® - Direct contact condensing heat recovery; and Dry-Rex® - Low temperature biomass drying systems.



FLU-ACE® Condensing Heat Recovery



GEM™ Steam Trap - Opal series



Unlocking Energy Savings as easy as *turning a key!*

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Discover our solutions at thermalenergy.com



GEM STEAM TRAPS

Thermal Energy International
enq@thermalenergy.com
www.thermalenergy.com



FLU-ACE[®]
HEAT RECOVERY SYSTEM