



## SECOND QUARTER REPORT Period Ended November 30, 2008

### MANAGEMENT DISCUSSION AND ANALYSIS

The following discussion explains material changes in the Corporation's financial condition and results of operations for the second quarter of fiscal year 2009, ended November 30, 2008. The quarterly financial statements constitute an integral part of the discussion and should be read in conjunction with these comments.

#### Description of Business

Thermal Energy has established itself since 1991 as an innovative technology company providing custom energy and emission reduction solutions. Our award winning energy recovery, conservation and bioenergy solutions provide significant financial and environmental benefits to our customers.

Thermal Energy engages clients through a unique mix of process, energy, environmental, financial and other expertise combined with the best technology solutions and financial offerings. The Company's client can expect compelling returns and solutions with an excellent track record of longevity, proven reliability and performance.

More information on Thermal Energy can be found at [www.thermalenergy.com](http://www.thermalenergy.com). FLU-ACE®, THERMALONOX™, THERMALOZOMAX™, GEM® and DRY-REX™ are trademarks of Thermal Energy. Common shares of Thermal Energy are traded on the TSX Venture Exchange under the symbol TMG.

In the second quarter ended November 30, 2008, the Corporation appointed Peter Bennett to the position of Sales and Marketing Director of GEM Ltd., responsible for the management of UK and European sales, marketing and business development activities. This includes expanding the market presence and growth of the GEM® steam trap product line throughout Europe and leveraging Thermal Energy's FLU-ACE® waste heat recovery and DRY-REX™ biomass drying solutions in the European market.

#### Discussion of Operations and Financial Conditions

##### Revenue and Gross Profit

**Total sales** for the second quarter ended November 30, 2008 were \$1,140,563, compared with \$618,290 in 2007.

**Gross profit (loss)** for the second quarter (Q2) ended November 30, 2008 at \$822,863 (72.14%) compared with (\$19,624) (0.032%) in 2007. The increase in gross profits on a comparative basis from the same period in 2007 was due to better margins on greater revenues associated with the GEM acquisition.



## Expenses

**Administration** expenses in the second quarter ended November 30, 2008 were \$644,552, an increase of \$393,658 or 156.90% over the \$250,894 incurred in 2007. The increase was mainly due to the addition of \$244,097 from GEM related costs and the remainder was due to increased costs of the Company associated with higher outside services of \$28,500 and Annual Meeting related costs of \$47,500.

**Selling, marketing and business development** expenses in the second quarter (Q2) ended November 30, 2008 were \$830,837, an increase of \$350,629 or 73.02% over 2007. Expenses decreased by \$96,871 and were offset by increases in expenses of GEM of \$447,500.

**Legal** expenses in the second quarter ended November 30, 2008 were \$59,797, compared to \$5,312 in 2007. The increase was due to \$24,000 related to the GEM acquisition and the balance related to matters pertaining to the completion of the GEM Business Acquisition Report, Management Information Circular for FY 2008 and advice on Power Purchase Agreement.

**Audit fee** provision in the second quarter ended November 30, 2008 was \$46,468, compared to \$15,744 incurred in 2007. The increase was due to work on the GEM Completion Accounts and the Business Acquisition Report in the amount of \$16,900 and \$13,950 for consultation and discussions regarding the accounting treatment and financial presentation of the Thermal-AUD contract.

**Insurance** costs in the second quarter ended November 30, 2008 were \$34,155 a decrease of \$7,408 compared to \$41,563 in 2007 due to a reduction of premiums.

**Amortization of property, plant and equipment** was at \$15,199 in the second quarter ended November 30, 2008 compared with \$7,918 in 2007, an increase of \$7,281, mainly due to GEM related costs.

**Patent and Trademark maintenance** costs were \$14,730 in the second quarter ended November 30, 2008, compared to \$6,295 in 2007. All Patent and Trademark costs incurred by the Company are expensed as incurred.

**Research and Development** costs were \$83,407 in the second quarter ended November 30, 2008, compared to \$22,474 in 2007. The increase was primarily due to the purchase of equipment for the purpose of conducting tests of the THERMALONox™ technology in China for reducing nitrogen oxide emissions (NOx) from coal-fired power plants and other industrial sources. Only a small amount of \$3,680 was related to GEM.

**Interest and bank charges** were \$34,868 in the second quarter ended November 30, 2008 compared with \$1,163 in 2007. Interest increased by \$33,705, \$9,072 from a bank loan in Canada, the balance from a bank credit line in the United Kingdom. Bank charges of approximately \$23,948 were mostly associated with accounts receivable discounting in the United Kingdom.

**Foreign exchange gain** on monetary assets and liabilities gain in the second quarter ended November 30, 2008 was \$12,048 compared with a foreign exchange loss of \$21,436 in 2007 due to more favourable Canadian currency rates against the US DOLLAR and British Pound Sterling.



**Interest revenue** amounted to \$31,306 in the second quarter ended November 30, 2008 compared with \$9,200 in 2007 as a result of higher levels of short-term investments.

**Finance revenue** was \$64,465 in the second quarter ended November 30, 2008 from the THERMAL-AUD™ project in Quebec.

**Net Loss** before other comprehensive loss was \$834,331 in the second quarter ended November 30, 2008 compared to a net loss of \$863,431 in 2007. Together with the changes summarized above, insufficient sales volume to cover the current level of fixed costs in the Company to produce a net profit continued. Management continues to work hard to control overhead costs but its main focus at the present time is a dedicated effort to secure much improved sales results and to provide an increase of capital projects including those relative to THERMAL-AUD™ financed projects in order to increase the level of revenues in future consolidated financial statements. This is discussed more fully elsewhere in this report.

### **Liquidity and Solvency**

At November 30, 2008, the Company had a working capital of \$5,519,843 compared to a working capital deficiency of \$2,093,061 at May 31, 2008. Current assets of \$7,876,377 increased by \$6,196,348 from May 31, 2008. The substantial improvement in working capital was the result of the private placement in June 2008. Cash and short-term investments increased by \$4,906,786, accounts receivable by \$829,294, contracts in progress decreased by \$156,000. Current liabilities at \$2,356,534 decreased by \$1,416,556 from May 31, 2008. The major changes were a decline in deferred revenue of \$314,908, a decrease in accounts payable of \$1,139,003, partially offset by an increase in bank loan of \$16,299.

Management continues to recognize the requirement to maintain liquidity in order to continue as a going concern, and as a result is aggressively working to increase sales and is continuing to develop new cooperative business relationships and exclusive sales distributorships in different, but complementary, product lines.

Management's discussions which began in the fourth quarter of FY 2008 to structure a multi-million dollar financing of its new Business Plan involving the acquisition of GEM Ltd., of Bristol, U.K., culminated with the successful completion of a brokered private placement with gross proceeds of \$15,000,000 in the first quarter of fiscal year 2009. The proceeds raised were used for completing the acquisition of GEM, to expand sales and marketing efforts in North America, Europe and China which began in earnest in this quarter with the hiring of four new salespersons, to assist in project financing and for R&D testing activities of THERMALONOX™ in China.

### **Related Party Transactions**

In the quarter ended November 30, 2008, Directors fees for services were \$15,750 compared with \$15,750 in 2007. Officers' fees for services were \$33,000 compared with \$51,000. Loans to exercise options and acquire shares by Directors were \$354,647 at November 30, 2008 (2007, \$49,647). Loans to Officers to exercise options and acquire shares were \$278,800 at November 30, 2008 (2007, \$7,500). The shares acquired by exercising options will be held as security by the Company until the loans are repaid. A loan was provided to a Director to exercise 250,000 options in the quarter ended November 30, 2008.



## SEGMENTED INFORMATION

In the quarter and six months ended November 30, 2008 the Company operated in the energy conservation and environmental compliance (air) industry in North America and Europe and was also engaged in the start-up phase of similar operations in China. Within this business segment, the Corporation markets, sells, engineers, fabricates, constructs, installs and supports three retrofit technology lines – waste energy recovery solutions, air emission control solutions and condensate return system solutions. Assets are located in Canada and Europe.

The Company operated in three reportable segments in the quarter and six months ended November 30, 2008 (one in 2007). In the waste energy recovery and air emission control business, customers finance these projects entirely from their own resources or through the Company's Thermal-AUD™ system whereby the Company finances the project and leases back the facility to the customer. This gives rise to two reportable segments. The third segment is in the condensate return system solutions business through its acquisition of Gardner Energy Management Limited (GEM™) on July 1, 2008. These three reportable segments are detailed below:

	Quarter Ended November 30, 2008		
	Customer financed contracts and other	Thermal- AUD™ contract	GEM™
	\$	\$	\$
Revenue from external customers	33,198	-	1,107,365
Inter-segment revenues	41,067	-	12,545
Interest and finance revenue	31,302	64,465	4
Interest expense and bank charges	1,849	9,071	23,948
Stock-based compensation charge	56,104	-	-
Amortization of property, plant and equipment	7,538	-	7,661
Segment loss (profit)	988,518	(14,327)	139,840
Expenditures for property, plant and equipment	8,874	-	11,812





Loss	\$	\$
Total loss for reported segments	834,331	1,450,417
Exchange translation adjustment of net investment in self-sustaining foreign operation	40,146	68,304
<b>Net loss and Other comprehensive loss</b>	<b>874,477</b>	<b>1,518,721</b>
<b>Assets</b>		
Total assets for reported segments		16,774,444
Elimination of inter-segment receivables		(2,153,681)
<b>Total assets</b>		<b>14,620,763</b>

Other significant items	Quarter ended November 30, 2008		
	Segment totals	Adjustments	Company totals
	\$	\$	\$
Interest revenue	31,306	-	31,306
Interest expense and bank charges	34,868	-	34,868
Finance revenue	64,465	-	64,465
Stock-based compensation charge	56,104	-	56,104
Amortization of property, plant and equipment	15,199	-	15,199
Expenditures for property, plant and equipment	20,686	-	20,686



Other significant items	Year to date November 30, 2008		
	Segment totals	Adjustments	Company totals
	\$	\$	\$
Interest revenue	65,327	-	65,327
Interest expense and bank charges	65,762	-	65,762
Finance revenue	149,517	-	149,517
Stock-based compensation charge	177,508	-	177,508
Amortization of property, plant and equipment	26,890	-	26,890
Expenditures for property, plant and equipment	37,130	-	37,130
Goodwill	4,804,213	-	4,804,213

Geographic Segments	Quarter ended	Year to date	As at
	Nov 30, 2008	Nov 30, 2008	Nov 30, 2008
	Revenues	Revenues	Property, plant and equipment
	\$	\$	\$
Canada	26,740	31,629	74,253
United States	33,643	537,896	-
Europe	1,080,180	1,629,356	47,384
Total	1,140,563	2,198,881	121,637

Revenues from outside customers are attributed to the geographic segments based on the location of the project.



## Supplementary Financial Information

The following table shows selected consolidated financial data for the most recent eight quarters. The quarterly information has been prepared on the same basis as the consolidated financial statements.

Quarterly financial information (unaudited)  
For the eight quarters ended November 30, 2008

	2007		2008				2009	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Sales	108,199	482,179	1,048,357	618,200	509,074	2,750,487	1,058,318	1,140,563
Net loss	520,155	721,949	417,895	863,431	569,794	521,388	616,086	834,331
Net loss per Share basic And diluted	0.007	0.008	0.005	0.009	0.006	0.006	0.004	0.005

### Trend Analysis:

The losses incurred in each quarter from Q3 FY 2007 through to Q2 FY 2009 are consistent in magnitude, with the exception of Q4 FY 2007, Q2 FY 2008, Q1 FY 2009 and Q2 FY 2009.

The lower loss amount of \$520,155 in Q3 FY 2007 was due mainly to a future income tax recovery provision of \$195,000 arising from the renouncing of \$540,000 expenditures on 3,484,334 flow-through common shares.

The losses on Q4 FY 2007 increased to \$721,949 from \$520,155 in Q3 FY 2007 mainly due to increases of \$133,000 in stock-based compensation and \$77,000 in sales commissions.

The losses in Q2 FY 2008 increased to \$863,431 partly due to lower recognized revenues from sales. The Company's work at Fraser Papers Canada (FPS's) Thurso mill could not be recognized until the construction asset was complete and generating revenue from monthly billings to FPS.

The losses in Q3 FY 2008 decreased to \$569,794 partly due to increased recognized revenues from sales. Q3 results also reflect the entry for the future income tax recovery of \$200,000 in 2008. The Company's work at FPS's Thurso mill was completed on time and although not impacting the third quarter, began generating revenue in the fourth quarter with the first monthly billing to FPS on March 31, 2008.

The losses in Q1 FY 2009 increased to \$616,086. Gross margins were much improved but were more than offset by increases in the major areas of administration and sales and marketing and increases in R&D expenditures for equipment related to testing the THERMALONOX® technology. Expenses were impacted on a comparative basis by the acquisition of GEM.



The losses in Q2 FY 2009 increased to \$834,331. Gross margins were improved from the previous quarter but were more than offset by increases in the major areas of administration and sales and marketing and increases in R&D expenditures related to testing the THERMALONOX® technology in China. Expenses were impacted to a greater degree from the first quarter on a comparative basis by the acquisition of GEM.

Without the exceptions noted above, the net losses remained in a fairly constant range throughout the eight quarters summarized from Q3 FY 2007 through Q2 FY 2009, demonstrating the need to significantly increase sales to cover and exceed the amount of fixed costs in order to overcome the consistent pattern of losses.

### **Evaluation of Disclosure Controls and Procedures**

Disclosure controls and procedures are designed to provide assurance that all relevant information is gathered and reported to senior management, including the Company's Chief Executive Officer (CEO) and Chief Financial Officer (CFO), on a timely basis so that appropriate decisions can be made regarding public disclosure. Management of the Company, with the participation of the CEO and the CFO, has evaluated the effectiveness of the Company's disclosure controls and procedures as at November 30, 2008 as required by Canadian securities laws. Based on that evaluation, the CEO and CFO have concluded that, as of November 30, 2008, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the Company's interim filings (as such terms are defined under National Instrument 52-109 Certification of Disclosure in Issuer's Annual and Interim Filings) and other reports filed or submitted under Canadian securities laws is recorded, processed, summarized and reported within the time periods specified by those laws and that material information is accumulated and communicated to management of the Company, including the CEO and CFO, as appropriate to allow for accurate disclosure to be made on a timely basis.

### **Changes in Internal Control over Financial Reporting**

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with Canadian GAAP. The CEO and CFO have concluded that there has been no change in the Company's internal control over financial reporting at November 30, 2008 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company has recognized the need to improve internal control by a better segregation of duties in the accounting and finance area. An Administrative assistant/accounting clerk has been added to relieve the current accountant of bookkeeping duties and enable the Company to devote more resources to the controllership function.



## Disclaimer

The information provided in this document is not intended to be a comprehensive review of all matters concerning the Company. It should be read in conjunction with all other disclosure documents provided. No securities commission or regulatory authority has reviewed the accuracy or adequacy of the information presented herein and, as noted in the financial statements for the quarter ended November 30, 2008, these statements were not subjects to an audit or a review by our independent public accountants.

## Business Risks

Management is confident about our long-term prospects, but we recognize that we are exposed to a number of risks in the normal course of business that could negatively impact the financial condition of the Company.

The Company is engaged in the development, engineering and supply of pollution control and heat recovery systems. Operational risks of the Company include the ability to continue to secure and implement multiple sales contracts each year for FLU-ACE® Dry-Rex™ and GEM technology solutions. In addition, the Company has not yet been able to finance and complete the development and commercialization of its patented THERMALONOX™ technology. However, with the successful completion of its brokered private placement in Q1 FY 2009, the Company began the design work in earnest to be in a position to test the THERMALONOX™ patented technology by Q3 FY 2009.

The Cost Effective Energy Conservation and Environmental Compliance Solutions sales through the close working relationship with partner companies Johnson Controls (JCI) and Honeywell China has not limited the size of the market but has actually increased the market potential.

Financial risks and uncertainties of the Company include:

- The Company's history of operating losses and uncertainty of future profitability;
- The ability to continue to grow sales by maintaining its close working relationship with JCI and Honeywell China;
- The ability to grow sales through the establishment of new cooperative partnerships and strategic alliances;
- The ability to grow sales through the licensing of the Company's technologies;
- The ability to secure and maintain the required outside working capital financing;
- The ability to achieve profitable operations through increased sales,
- Reliance on third party collaborations and license arrangements;
- Reliance on proprietary technology;
- Competition in the energy conservation and environmental compliance solutions;
- Product liability claims and insurance;
- Reliance on key personnel;
- The ongoing litigation with its former President & CEO;
- The ability to control costs and achieve a positive gross margin on projects; and
- The effect of a prolonged recession both in Canada and the USA to the financial markets in securing project financing and in particular to industrial and commercial customers in committing capital to projects.



Management's addressing of the risks:

The management of the Company realizes that the operating losses of the period ended November 30, 2008, display a consistent pattern of losses as in previous years. However with the previous fiscal year's losses partly attributed to new management transition costs and to remedial costs on past projects, the Company is now fully focused on sales and marketing and is expanding its drive towards that purpose with the addition of five sales persons and 2 new Account Managers, Solution Sales to promote the Company's solutions in Canada, the U.S. and Mexico.

The costs in the first two quarters associated with administration and sales, marketing and business development were necessary to advance the sales cycle forward which will become evident in future quarters.

Management believes that it can leverage off of its wholly-owned subsidiary's (ForEverGreen Energy Inc.) successful signing of an agreement of up to \$3.75M with Fraser Paper Inc. to recover waste heat using the THERMAL-AUD™ program and use the same process in other mills.

Management is presently in late discussions with several large companies that it believes will result in the signing of new cooperative partnership agreements that could help to grow its sales and possibly lead to licensing agreements after successful trials of the Company's technologies.

Management has demonstrated that it can secure outside working capital as evidenced by the successful closings of its private placement with gross proceeds of \$778,639, in Q3 FY 2007, with gross proceeds of \$1,968,500 in Q4 FY 2007 and with gross proceeds of \$1,017,750 in Q3 FY 2008. In addition, during this period, it has realized in excess of \$600,000 through the closing of smaller private placements and the exercise of options and warrants. Finally, in Q1 FY 2009, management closed an oversubscribed brokered private placement of common shares with gross proceeds of \$15,000,000.

Management believes that by maintaining its small core of personnel, reducing non-essential employee costs and miscellaneous overhead and higher margins on more secured contracts, it will achieve profitable operations. Small incremental staffing increases will be introduced from time to time as evidenced in FY 2008 depending on the demand arising from increased sales volumes, however management has also been aggressively implementing measures to reduce total SG&A costs.

Management has acquired GEM®, a leading European (Great Britain) line of industrial/commercial steam traps; and DRY-REX™, a technology that uses waste heat to turn bark, sludge and other biomass into high-efficiency bio-energy fuel for the pulp & paper and other industrial applications. In connection with these technologies, the Company has received multiple purchase orders from Dow Corning in Kentucky, Hemlock Semiconductor Corporation in Michigan, Anheuser-Busch, Inc. in Colorado, GlaskoSmithKline in North Carolina, Greenfield Ethanol in Chatham, Ontario, Alberta Envirofuels Inc., Rogers Sugar in B.C., CFB Kingston, CFB Trenton, Fraser Papers at Thurso, Catalyst Paper in B.C., Lee & Man Paper Manufacturing Co. and Jiangsu Huachang Chemical Co., Coca Cola, BASF, all located in China, and has conducted audits for its implementation at other industrial sites and awaits new trial orders.



The Company is protecting its proprietary technology through registered trademarks and confidentiality agreements. It has recently filed a new provisional patent for THERMALONox™, a technology which is currently undergoing laboratory testing.

The Company maintains adequate forms of general liability insurance including product liability and errors and omission coverage.

Management believes that competition against its core technology of FLU-ACE™ and DRY-REX® is limited at this time and believes that the market place is sufficiently large enough to permit stronger competition in the future. Management also believes that while there is greater competition to its newly acquired GEM® product line, that the Company is well positioned to penetrate the market with a far superior product. It is the opinion of management that the Company is in a better position now with a significantly enhanced arsenal of building blocks to draw on in presenting a more comprehensive solution to customers.

### **Highlights**

On June 3, 2008, the Corporation announced that it had entered into an agreement with a North American integrated paper company for the delivery of a green energy supply program worth in excess of \$20M, using recovered waste heat at one of its facilities in the north eastern United States.

On June 23, 2008, the Corporation announced that it had closed an oversubscribed brokered private placement of common shares with gross proceeds of \$15,000,000. The placement was subscribed by a number of the most recognized renewable energy and sustainability focused funds in Toronto, New York and London (U.K.). The funds raised were to complete the acquisition of Gardner Energy Management Ltd. in the U.K. (requiring approximately CAD\$5.4 M) and to provide the Corporation a funding base for future investment in its product line of assets under THERMAL-AUD™ green energy supply contracts. The financing which was handled by agents Max Capital Markets Ltd. and Jacob and Company Securities Inc. (both headquartered in Toronto) consisted of an issuance of 68,181,818 common shares of the Corporation at a price of \$0.22 per share.

On July 2, 2008, the Corporation announced that it had completed the acquisition of Gardner Energy Management Ltd. ("GEM") of Bristol, U.K. Under the terms of the transaction, the Corporation made a base payment of 2.7 M British Pounds Sterling (or CAD \$5.4M) upon closing on July 1, 2008. An additional payment of up to 1.3 M British Pounds Sterling (or CAD \$2.6M) may be made on an earn-out basis in a combination of cash and shares over a three-year period subject to defined future growth targets of the GEM® business unit.

On September 22, 2008, the Corporation announced the launch of a new "quick fit" line of Emerald traps for its GEM® Condensate Return System. The Emerald GEM® Trap is compatible with other manufacturers' fittings, which allows them to be easily bolted on to existing connectors. These "quick fit" traps as well as the entire series of GEM® Traps were showcased at the Oil Sands Trade Show in Edmonton, Alberta between September 23 and 24, 2008.



On November 6, 2008, the Corporation announced the appointment of a senior manager. Peter Bennett joined as Sales and Marketing Director of GEM Ltd and is responsible for the overall management of UK and European sales, marketing and business development activities. In addition his role is to expand the market presence and growth of the GEM® steam trap product line throughout Europe and leverage cross selling of the Corporation's FLU-ACE® heat recovery solutions and the DRY-REX® biomass drying solutions in Europe. The Corporation also appointed five sales personnel, four responsible for the sale of GEM traps throughout Canada and the USA and one salesperson responsible to pursue heat recovery solution sales in the North-eastern USA.

On November 20, 2008, the Corporation announced that it had shipped equipment to China for demonstration-scale testing of its THERMALONox™ process for reducing nitrogen oxides (NOx) for power plants. The equipment is to be installed at Guangzhou Yuanchun Cogeneration Co., Ltd., a 50 MW power plant in Guangdong province, China, under the joint venture research and development program with the South China University of Technology.

### **Outlook**

On December 1, 2008, the Corporation announced that the resolutions presented in the Management Information Circular of October 16, 2008 were approved by shareholders at Annual and Special Meeting held on November 25, 2008. The Corporation also gave an update to a press release made on June 3, 2008 by stating that the proposed project had been scaled back due to a number of changes at the client's site resulting in a reduction of approximately 50% to the proposed project still under negotiations.

Signed in Ottawa, Ontario on this 29th day of January, 2009.

A handwritten signature in black ink that reads "Tim Angus".

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Tim K. Angus  
President and CEO

A handwritten signature in black ink that reads "Oliver Toffoli".

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Oliver Toffoli, P.Eng  
Chief Operating Officer & CFO