



MANAGEMENT'S DISCUSSION & ANALYSIS

For the Quarter Ended November 30, 2019

Introduction

This Management Discussion and Analysis (MD&A) explains the material changes in Thermal Energy International Inc.'s ("Thermal Energy" or the "Company") financial position and financial performance for the second quarter of Fiscal Year 2020, ended November 30, 2019. The unaudited condensed consolidated interim financial statements and accompanying notes constitute an integral part of the discussion and should be read in conjunction with this MD&A. Unless otherwise indicated, all comparisons to the second quarter of FY 2020 are against the second quarter of FY 2019. Additional information relating to the Company is available on SEDAR at www.sedar.com.

Currency

All financial information in this report is stated in Canadian Dollars, which is both the presentation and functional currency of the Company. Approximately 25% our operations, assets and liabilities are denominated in British Pound Sterling and 25% in US Dollar. As such, foreign currency fluctuations affect the reported values of individual lines on our statement of financial position and income statement. When the Canadian dollar strengthens, the reported values decrease and the opposite occurs when the Canadian dollar weakens.

Review and Approval by the Board of Directors

The Board of Directors, on recommendation of the Audit Committee, approved the content of this MD&A on January 22, 2020. Disclosure contained in this document is current to January 22, 2020, unless otherwise stated.

Forward-Looking Statements

This MD&A may include statements that are forward-looking. These statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. We discuss the principal risks of our business in Section 8 of this MD&A. We cannot provide any assurance that forecasted financial or operational performance will actually be achieved. If it is achieved, we cannot provide assurance that it will result in an increase in our share price. See Section 9 entitled "Forward-Looking Information".

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1. Our Business

1.1 Company Overview

Thermal Energy, established in 1991, is a global provider of proprietary and proven energy and water efficiency and emission reduction products and solutions to the industrial, commercial and institutional markets. The Company is headquartered in Ottawa, Canada, with offices in the U.K., Italy, Germany, U.S., and China.

Thermal Energy engages clients through a unique mix of process, energy, environmental and financial expertise to save our customers money and improve their bottom lines by reducing their fuel use and carbon emissions. The Company's award-winning products have an excellent track record of longevity, proven reliability and performance and have been shown to provide: significant energy savings; improved water efficiency; reduced greenhouse gas emissions; lowered maintenance costs; improved product quality; and increased production efficiency. Thermal Energy's products are effective in a wide range of industries and applications.

More information on Thermal Energy can be found at www.thermalenergy.com. **GEM™**, **FLU-ACE®**, **THERMALONox™** and **DRY-REX™** are trademarks of Thermal Energy.

1.2 Core Businesses

The Company operates primarily in North America and Europe but also sells its products and services through representative agents throughout the rest of the world. The Company markets, sells, engineers, fabricates, constructs, installs and supports two technology lines – heat recovery solutions, including direct contact heat recovery solutions (e.g. **FLU-ACE®**) and indirect contact heat recovery solutions (**HEATSPONGE** and **SIDEKICK**), and condensate return system solutions (**GEM™** steam traps). The Company is also developing a number of other technology lines, including low temperature biomass drying systems (**DRY-REX™**).

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In 2008, the Company acquired Gardner Energy Management Limited, which owns, manufactures and sells the GEM™ steam traps throughout the world. As part of this transaction, the Company also acquired the 67% share of GEMchem Ltd, a UK-based water treatment company providing services within the UK only. On June 29, 2018, the Company acquired Boilerroom Equipment Inc., a company based in the U.S., which owns, manufactures and sells HEATSPONGE and SIDEKICK indirect contact heat recovery units.

The Company has two primary operational bases of operation, one in Ottawa, Canada covering North America (“Thermal Energy Ottawa”), and the other in Bristol, United Kingdom, covering Europe and the rest of the world (“Thermal Energy Bristol”). Although the Thermal Energy Ottawa is considered to be the center of excellence for heat recovery engineering and technical support, and Thermal Energy Bristol the center of excellence for GEM™ steam traps and condensate return systems engineering and technical support, continuous cross-training means that both Ottawa and Bristol have expertise across both major product lines.

Although the Company markets its products throughout the world, the majority of sales are from within North America and Europe where the Company has direct sales and engineering staff. While North American and European markets continue to be the Company’s strategic focus, the Company also continues to look for new agents and distributors in other regions deemed to have potential.

1.3 Strategy

The Company’s mission is to be a best-in-class provider of return on investment-driven thermal energy efficiency technology and solutions to the industrial, institutional, and commercial sectors, helping our clients around the world improve their bottom line, move towards sustainable operations and reduce their environmental and carbon footprint. The Company’s products and services are “best-in-class” with world-wide application in a broad range of sectors.

The Company has representation in 28 countries around the world with a current focus on the key markets of North America and Europe. Thermal Energy’s penetration in these markets remains low and therefore the Company plans to continue growing its sales and distribution capabilities in these markets, while at the same time, build its business in other energy-intensive markets around the world.

We have sold our proprietary and proven products to hundreds of companies and institutions, including approximately 50 large companies in the pharmaceutical, food and beverage, pulp and paper, chemical and petrochemical sectors.

With an established global sales and distribution network, the Company is looking to develop and/or acquire additional complementary products and services that can be distributed through its existing network.

2. Performance Measures

The Company believes the following performance measures provide useful information to both management and investors to better understand the financial performance and financial position of the Company.

2.1 EBITDAS

Management believes that EBITDAS (earnings before interest, taxation, depreciation, amortization, impairment of goodwill and other intangible assets, share-based compensation expense and net write down of lease) is a useful performance measure as it approximates cash generated from operations, before tax, capital expenditures and changes in working capital, and excludes non-operating items. EBITDAS also assists comparison among companies as it eliminates the differences in earnings due to how a company is financed. EBITDAS does not have a standardized meaning prescribed by International Financial Reporting Standards and therefore may not be comparable to similar measures presented by other companies. The most directly comparable measure calculated in accordance with International Financial Reporting

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Standards within the financial statements is income (loss) before income taxes, as disclosed in the statements of comprehensive income.

2.2 Order Backlog

Order backlog is a useful performance measure that Management uses as an indicator of the short-term future revenue of our Company resulting from already recognized orders. The Company includes in "order backlog" any purchase orders that have been received by the Company but have not yet been reflected as revenue in the Company's published financial statements. It is important to note that once an order or partial order is recorded as revenue, the order backlog is reduced by the amount of the newly reported revenue. Order backlog does not have a standardized meaning prescribed by International Financial Reporting Standards and therefore may not be comparable to similar measures presented by other companies.

3. Performance

3.1 Summary of Second Quarter Results

	Q2 2020	Q2 2019
	\$	\$
Revenue	7,848,096	5,193,092
Cost of sales ¹	(4,929,739)	(3,358,322)
Gross profit	2,918,357	1,834,770
Administration, selling, marketing and business development expenses ¹	(2,439,342)	(1,952,888)
Research and development expenses	130	(57,563)
Operating income (loss)	479,145	(175,681)
Finance costs	(106,134)	(80,993)
Finance revenue	2,111	5,453
Income (loss) before income taxes	375,122	(251,221)
Income taxes recovery	10,059	139,099
Net income (loss) for the period	385,181	(112,122)
Exchange differences on translation of overseas operations	169,388	(8,533)
Total comprehensive income (loss) for the period	554,569	(120,655)
EBITDAS for the quarter	709,182	(67,995)
Order backlog as at Nov 30 quarter end	8.2 million	4.9 million
Order backlog as at January reporting date	9.1 million	10.4 million

1. The Company reclassified commission expense from selling, marketing and business development expense to cost of sales effective June 1, 2019. As a result, commission expense in the amount of \$267,740 for the comparative period was reclassified from selling, marketing and business development expense to cost of sales.

Revenues and Gross Profits

Revenues were \$7,848,096 in the quarter ended November 30, 2019, representing an increase of \$2,655,004, or 51.1%, compared to \$5,193,092 in the quarter ended November 30, 2018. The increase of revenue in the second quarter of FY 2020 was mainly due to the increase in sales of heat recovery systems.

The gross profit of \$2,918,357 in the quarter ended November 30, 2019 represented an increase of \$1,083,587, or 59.1%, from the \$1,834,770 in the quarter ended November 30, 2018 due to the increase in heat recovery sales. Gross profit expressed as a percentage of sales was 37.2% in the second quarter of FY 2020 compared with 35.3% in the same quarter of FY 2019. The increase was mainly the result of the slightly increased gross margin on heat recovery projects.

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Expenses

Administration, selling, marketing and business development expenses (“Operating Expenses”) in the quarter ended November 30, 2019 totaled \$2,439,342 compared to \$1,952,888 in the quarter ended November 30, 2018, an increase of \$486,454. The increase of the operating expenses was partially related to the increased loss on foreign exchange of \$197,588: in the second quarter of the current year, the Company recognized foreign exchange loss of \$155,959 because the British Sterling Pounds strengthened against the Euro and one of the major heat recovery contracts delivered during the quarter was denominated and paid in Euro, which caused the significant foreign exchange loss for the UK subsidiary. Subsequent to the quarter-end, one of the Company’s customers was granted protection under the Companies’ Creditors Arrangement Act. As a result, the Company recorded a bad debt expense on the overdue lease receivable in the amount of \$102,142 and a loss in the amount \$45,848 relating to the remaining lease receivable to the end of the lease term, which also contributed to the increase in Operating Expenses.

Research and development (“R&D”) expenses related to expenditures on various research and development programs. The Company receives credits from the R&D claims related to product development and the credits are accounted as a reduction of research and development expenses. The total R&D expense in the second quarter of FY 2020 was around \$35,000 and the R&D credits claimed to receive was around \$35,130. Hence, the net R&D expenses in the second quarter of FY 2020 was around \$130.

Finance costs and finance revenue: finance costs include interest expense on the long-term debt, interest accretion on contingent payable and holdback payable related to acquisition, interest accretion on lease obligations, and amortization on financing cost. The second quarter of FY 2020 incurred finance cost of \$106,134. The cost was higher than the second quarter of FY 2019 of \$25,141 because the interest rate on the long-term debt was increased in the second quarter of the current year compared to the second quarter of FY 2019.

Income before income taxes for the quarter ended November 30, 2019 was \$375,122, compared to a loss of \$251,221 in the same quarter of the previous year. Income before income taxes increased by \$626,343 mainly due to the increase in gross profit of \$1,083,587 as a result of the increased revenue, offset by the increase in Operating Expenses of \$486,454.

Income tax recovery in the second quarter of FY 2020 was \$10,059, as compared to \$139,099 in the second quarter of FY 2019, a decrease of \$129,040. In the second quarter of FY 2019, the Company’s subsidiary based in UK had an operational loss and recognized an income tax recovery of \$104,667. In the second quarter of the current year, the subsidiary had an operating income, therefore, there was no tax recovery recorded.

Net income for the second quarter of FY 2020 was \$385,181, compared to a net loss of \$112,122 in the same quarter of the previous year, representing an increase of \$497,303. The increase in net income was mainly due to the increase of \$626,343 in income before income taxes offset by the decrease in income tax recovery of \$129,040.

Comprehensive income was \$554,569 for the second quarter of FY 2020, compared to a comprehensive loss of \$120,655 for the second quarter of FY 2019. In the second quarter of FY 2020, exchange gain arising on translation of overseas operations in the amount of \$169,388 was recorded due to the strengthening of the British sterling pounds and the US dollars against the Canadian dollars.

EBITDAS was \$709,182 for the second quarter of FY 2020, compared to a negative \$67,995 for the same quarter of the previous year, representing an increase of \$777,177. The increase was mainly due to the increase in income before income taxes.

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3.2 Summary of Year to Date Results

	Six months Ended Nov 30, 2019	Six months Ended Nov 30, 2018
	\$	\$
Revenue	12,813,885	11,993,953
Cost of sales ¹	(7,705,010)	(8,213,148)
Gross profit	5,108,875	3,780,805
Administration, selling, marketing and business development expenses	(4,275,311)	(3,984,781)
Research and development expenses	(53,962)	(87,521)
Operating profit (loss)	779,602	(291,497)
Finance costs	(189,411)	(117,433)
Finance revenue	5,144	11,711
Profit (loss) before income taxes	595,335	(397,219)
Income taxes recovery	31,107	235,639
Net income (loss) for the period	626,442	(161,580)
Exchange differences on translation of overseas operations	8,332	(34,824)
Total comprehensive income (loss) for the period	634,774	(196,404)
EBITDAS	1,180,968	(118,731)
Order backlog as at November 30	8.2 million	4.9 million
Order backlog as at January reporting date	9.1 million	10.4 million

1. The Company reclassified commission expense from selling, marketing and business development expense to cost of sales effective June 1, 2019. As a result, commission expense in the amount of \$531,590 for the comparative period was reclassified from selling, marketing and business development expense to cost of sales.

Revenues and Gross Profits

Revenues were \$12,813,885 in the six months ended November 30, 2019, representing an increase of \$819,932, or 6.8%, over the \$11,993,953 recognized in the six months ended November 30, 2018. The increase in revenues was mainly due to the increased sales in the European and the Rest of the World market for both heat recovery solutions and the condensate return systems.

The gross profit of \$5,108,875 in the first half of FY 2020 represented an increase of \$1,328,070, or 35.1%, from the \$3,780,805 achieved in the first half of FY 2019. The increase was mainly the result of increased revenues in the European and the Rest of the World market together with the increased margins on the heat recovery projects. Gross profit expressed as a percentage of sales was 39.9% in the first half of FY 2020 compared with 31.5% in the first half of FY 2019. The increase in gross profit percentage was mainly due to the increased margins on heat recovery projects.

Expenses

Administration, selling, marketing and business development expenses (“Operating Expenses”) in the six months ended November 30, 2019 totaled \$4,275,311 compared to \$3,984,781 in the six months ended November 30, 2018, representing an increase of \$290,530, or 7.3%. The main increases were mainly due to the bad debt expense of \$132,142 recorded in Q2 F2020, the write-down of finance lease receivable of \$45,848, foreign exchange loss increase of \$99,741, compared to the same period last year, increase in the stock-based compensation expense of \$95,082, offset by the decrease in the acquisition related cost of \$168,104. Despite the increases, the Operating Expenses as a percent of revenue was 33.4% in the first six months of FY 2020 compared to 33.2% in the same period of the previous year.

Research and development expenses in the first half of FY 2020 were \$53,962, compared to \$87,521 in the second quarter of FY 2019. The decrease was due to the fact the Company claimed its R&D credits in the amount of \$35,000 earlier in terms of timing in the current year than in prior year.

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Finance costs and finance revenue: in the six months ended November 30, 2019, finance costs increased by \$71,978 from \$117,433 to \$189,411. The increase was mainly due to the increased interest rate on the long-term debt which increased the interest expense by \$55,650, compared to the expense for the six months from prior year. The remaining increase was due to the new interest expense on the lease obligations following the adoption of new accounting guideline under IFRS 16 Leases.

Income before income taxes for the six months ended November 30, 2019 was \$595,335 compared to a loss of \$397,219 in the same period of the previous year, representing an increase of \$992,554. The increase was mainly due to the increase of \$1,328,070 in gross profit offset by the increase in Operating Expenses and finance costs.

Income tax recovery in the first half of FY 2020 was \$31,107, compared to \$235,639 in the first half of FY 2019. Both the U.K. and the U.S. entities are subject to tax charges. Fluctuations in the tax charges are the result of changing profitability in those entities. In the first half of the previous year, the Company's UK subsidiary incurred a loss, therefore, income tax recovery of \$201,207 was recorded by the UK subsidiary. For the first half of FY 2020, no income tax recovery was recorded for the UK subsidiary.

Net income for the six months ended November 30, 2019 was \$626,442 compared to a loss of \$161,580 in the same period of the previous year, representing an increase of \$788,022. The increase was mainly due to the increase in the income before taxes of \$992,554 offset by the decrease in income tax recovery of \$204,532.

Comprehensive income was \$634,774 for the first half of FY 2020, compared to a loss of \$196,404 for the first six months of FY 2019.

EBITDAS was \$1,180,968 for the first six months of FY 2020 compared to negative \$118,731 for the same quarter of the previous year, representing an increase of \$1,299,699. The increase was mainly due to the increase of \$992,554 in income before income taxes.

3.3 Liquidity & Capital Resources

Current assets increased by \$1,589,638 to \$9,574,004 at November 30, 2019, compared to \$7,984,367 at May 31, 2019. This increase was mostly due to in the increase in cash balances of \$856,947 and the increase in trade receivable of \$525,393. Current liabilities increased by \$1,172,506 to \$7,129,049, mainly due to the increase in trade payable and accrued liabilities of \$1,699,778.

Working capital increased by \$417,132 to \$2,444,955 at November 30, 2019, compared to \$2,027,823 at May 31, 2019. The increase was mainly due to the decrease in deferred revenue of \$577,763. Deferred revenue is recorded when the Company receives cash deposit before it delivers products or services to a customer. Deferred revenue decreases and revenue is recognized when the Company delivers the work to the customer.

The Company's working capital position over the last eight quarters can be summarized as follows:

	Feb 28, 2018 \$	May 31, 2018 \$	Aug 31, 2018 \$	Nov 30, 2018 \$	Feb 28, 2019 \$	May 31, 2019 \$	Aug 31, 2019 \$	Nov 30, 2019 \$
Current Assets	4,933,877	6,613,125	8,310,609	7,244,731	7,337,334	7,984,367	9,544,737	9,574,004
Current Liabilities	3,706,345	4,586,122	5,984,275	5,178,449	8,816,994	5,956,544	7,423,040	7,129,049
Working Capital	1,227,532	2,027,003	2,326,334	2,066,282	(1,479,660)	2,027,823	2,121,697	2,444,955

The Company's net cash position was \$5,034,207 as at November 30, 2019, compared to \$4,177,260 at May 31, 2019, representing an increase of \$856,947. The increase was mainly due to net cash provided from operating activities of \$1,396,141. The net cash provided from the operating activities included the net income of \$626,442, the addbacks of non-cash items of \$652,014 and changes in working capital of

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\$254,349 offset by the interest paid on lease obligations and long-term debt of \$140,965. The Company invested \$247,562 in property, plant and equipment during the six-month period, of which \$169,116 related to a leasehold improvement for a new rental space. The Company also made repayments to the long-term debt of \$164,833 and the lease obligations of \$42,058.

At November 30, 2019, \$344,670 (11.1%) of the Company's trade receivables balance was over 90 days past due. \$141,955 of the past due balance was impaired at November 30, 2019. In addition, \$32,390 of trade receivables (including sales tax of \$4,219) that were not over 90 days past due on November 30, 2019 was also impaired. Total impaired balance was \$174,345 as at November 30, 2019. For the six months ended November 30, 2019, total bad debt provision of \$132,142 (net of sales tax of \$19,196) was recognized under administration expense on the condensed consolidated interim statements of comprehensive income. \$102,142 (net of sales tax of \$15,296) of the total provision related to one customer (see the finance lease receivable notes below).

At May 31, 2019, \$123,223 (6.2%) of the Company's trade receivables balance was over 90 days past due. \$22,864 of the past due balance was impaired at May 31, 2019. For the six months ended November 30, 2018, a provision of \$24,152 was made, but \$24,202 of the provision was subsequently released due to the collection on the doubtful account.

The Company's finance lease receivable includes the following:

	November 30, 2019	May 31, 2019
Total estimated minimum lease payments receivable	\$ 47,500	\$ 100,053
Less: unearned income	(1,652)	(6,796)
Less: recognised loss on lease	(45,848)	-
	-	93,257
Less: current portion	-	(93,257)
	-	-

On December 16, 2019, Fortress Specialty Cellulose sought and obtained a First Day Initial Order under the Companies' Creditors Arrangement Act from the Quebec Superior Court. The Company's finance lease receivable was reviewed for indicators of impairment. For the six months ended November 30, 2019, a write-down of \$45,848 was recognized on the remaining finance lease receivable under administrative expenses. A bad debt provision of \$102,142 net of \$15,296 sales tax was made on the Company's trade receivables from the customer, out of which \$28,171 was under 90 days.

The following table presents the contractual undiscounted cash flows for lease obligations as of November 30, 2019:

Less than one year	\$ 160,900
One to five years	329,470
Five to ten years	310,875
Total undiscounted lease obligations	\$ 801,245

The Company's ability to realize its assets and discharge its liabilities depends on its ability to generate sufficient cash from operations or its ability to arrange debt or equity financing. No assurance can be given that any such additional funding will be available or that, if available, it can be obtained on terms favorable to the Company.

Management is of the opinion that sufficient working capital will be obtained from future cash flows by achieving profitable operations through continuing to manage expenditures, concentrating on building upon revenue levels experienced from FY 2016 to FY 2019, and growing revenues at growth rates experienced in the years ended May 31, 2010 through May 31, 2019.

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3.4 Segmentation Information

In the quarters ended November 30, 2019 and November 30, 2018, the Company operated in the energy efficiency industry in North America, Europe, China and Rest of the World. The Company markets, sells, engineers, fabricates, constructs, installs and supports two technology lines - heat recovery solutions and condensate return system solutions. The Company is also developing a third technology line - low temperature biomass drying systems. Assets are located in Canada, U.S. and Europe.

Management reporting comprises analysis of revenue and gross profit within two distinct geographical areas. All other items of revenue and expenses are considered on a geographical and/or global basis in making strategic decisions regarding the Company's future. The Company has two operational bases ("reporting units"), one in Ottawa, Canada covering North America and China, and the other in Bristol, United Kingdom, covering Europe and the rest of the world. These areas are determined by proximity of the region to the reporting unit, plus the location of the contracts in existence with agents and distributors in the respective areas and the historical relationships with those agents and distributors. Corporate costs that cannot easily be attributed to either of the two reporting units are included in reconciling items. The chief operating decision maker focuses on revenues and costs by geographical segments, but manages assets and liabilities on a global basis.

Segment information for the three months ended November 30, 2019 and the comparative period are detailed in the table below:

	Thermal Energy Ottawa		Thermal Energy Bristol		Reconciling Items		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
	\$	\$	\$	\$	\$	\$	\$	\$
Total revenue	5,542,554	4,300,032	2,305,542	893,060	-	-	7,848,096	5,193,092
Cost of sales ⁽¹⁾	(3,677,044)	(2,813,921)	(1,252,695)	(544,401)	-	-	(4,929,739)	(3,358,322)
Gross profit	1,865,510	1,486,111	1,052,847	348,659	-	-	2,918,357	1,834,770
Other expenses ⁽¹⁾	(957,707)	(913,654)	(860,125)	(827,305)	(621,380)	(269,492)	(2,439,212)	(2,010,451)
Net finance (costs) income	2,111	5,453	-	-	(106,134)	(80,993)	(104,023)	(75,540)
Income (loss) before taxation	909,914	577,910	192,722	(478,646)	(727,514)	(350,485)	375,122	(251,221)
Tax (expense) recovery	-	34,432	(10,563)	85,737	20,622	18,930	10,059	139,099
Net income (loss)	909,914	612,342	182,159	(392,909)	(706,892)	(331,555)	385,181	(112,122)
Attributable to:								
Owners of the parent	910,516	616,043	166,934	(390,246)	(706,892)	(331,555)	370,558	(105,758)
Non-controlling interest	(602)	(3,701)	15,225	(2,663)	-	-	14,623	(6,364)

1. The Company reclassified commission expenses from other expenses to cost of sales for the three months ended November 30, 2019. As a result, commission expenses in the amount of \$267,740 for the three months ended November 30, 2018 were also reclassified to cost of sales to conform to the current period presentation.

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Segment information for the six months ended November 30, 2019 and the comparative period are detailed in the table below.

	Thermal Energy Ottawa		Thermal Energy Bristol		Reconciling Items		Total	
	2019 \$	2018 \$	2019 \$	2018 \$	2019 \$	2018 \$	2019 \$	2018 \$
Total revenue	9,305,246	9,954,432	3,508,639	2,039,521	-	-	12,813,885	11,993,953
Cost of sales ⁽¹⁾	(5,921,078)	(6,993,234)	(1,783,932)	(1,219,914)	-	-	(7,705,010)	(8,213,148)
Gross profit	3,384,168	2,961,198	1,724,707	819,607	-	-	5,108,875	3,780,805
Other expenses ⁽¹⁾	(1,771,808)	(1,691,652)	(1,644,576)	(1,603,842)	(912,889)	(776,808)	(4,329,273)	(4,072,302)
Net finance (costs) income	5,144	11,711	-	-	(189,411)	(117,433)	(184,267)	(105,722)
Income (loss) before taxation	1,617,504	1,281,257	80,131	(784,235)	(1,102,300)	(894,241)	595,335	(397,219)
Tax (expense) recovery	-	34,432	(10,563)	146,178	41,670	55,029	31,107	235,639
Net income (loss)	1,617,504	1,315,689	69,568	(638,057)	(1,060,630)	(839,212)	626,442	(161,580)
Attributable to:								
Owners of the parent	1,623,069	1,324,029	54,055	(645,979)	(1,060,630)	(839,212)	616,494	(161,162)
Non-controlling interest	(5,565)	(8,340)	15,513	7,922	-	-	9,948	(418)

1. The Company reclassified commission expenses from other expenses to cost of sales for the six months ended November 30, 2019. As a result, commission expenses in the amount of \$531,590 for the six months ended November 30, 2018 were also reclassified to cost of sales to conform to the current period presentation.

Reconciling items comprise the following:

	Three months ended November 30		Six months ended November 30	
	2019 \$	2018 \$	2019 \$	2018 \$
Corporate admin costs	188,737	120,961	338,651	374,395
Stock-based compensation	51,666	4,125	103,332	8,250
Professional fees	94,606	26,722	153,493	102,168
Depreciation of property, plant and equipment	27,849	22,167	49,603	39,136
Depreciation of right-of-use assets	33,364	-	59,057	-
Amortization of intangible assets	69,199	76,384	138,382	114,125
Acquisition costs	-	60,762	-	168,104
Foreign exchange differences	155,959	(41,629)	70,371	(29,370)
Total	621,380	269,492	912,889	776,808

Corporate administration costs include directors' fees, all costs relating to both the CEO and CFO, directors' and officers' insurance, corporate legal costs, public relations costs, professional fees relating to group tax planning and corporate filing costs as well as the Annual General Meeting.

Finance costs within the reconciling items include interest and deferred financing charge on the long-term debt, interest accretion on lease obligations, and interest accretion on contingent consideration and holdback payable following the acquisition of Boilerroom Equipment Inc.

Management Discussion and Analysis for Quarter Ended November 30, 2019

Material Segmentation Variances

Thermal Energy Ottawa:

For the quarter ended November 30, 2019, revenue was \$5,542,554, as compared to \$4,300,032 for the same quarter of prior year, representing an increase of \$1,242,522 or 28.9%. The increase was mainly due to the increase in heat recovery revenue.

Revenue for the six months ended November 30, 2019 of \$9,305,246 represented a decrease of \$649,186, or 6.5%, over the \$9,954,432 achieved in the first half of the previous year. The decrease was due to the lower heat recovery revenue achieved in Q1 FY 2020 (\$3,762,692) compared to Q1 FY 2019 (\$5,654,400).

Gross profit increased by \$379,399 in the second quarter of FY 2020 over the same quarter of FY 2019. The increase in gross profit was mainly due to the increased revenue in heat recovery systems. As a percentage of revenue, gross profit was 33.7% in the second quarter of FY 2020, compared to 34.6% achieved in the second quarter of FY 2019.

Gross profit for the six months ended November 30, 2019 increased by \$422,970 over the same period of last year despite the fact that the revenue decreased by \$649,186. The increase in gross profit was mainly due to the increased profit margins in heat recovery systems. As a percentage of revenue, gross profit was 36.4% for the six months ended November 30, 2019, compared to 29.8% achieved in the same period last year.

Other expenses in the region increased by \$44,053 (4.8%) for the quarter ended November 30, 2019 over the same period of last year. Other expenses for the six months ended November 30, 2019 increased by \$80,156 over the same period of last year. The increase was mainly due to the bad-debt expense of \$102,142 and the loss of \$45,848 recognized on the finance lease offset by the decrease in the spending on business development costs.

For the quarter ended November 30, 2019, income before tax of \$909,914 represented an increase of \$332,004 from the same period of previous year.

Thermal Energy Bristol:

Revenue for the quarter ended November 30, 2019 was \$2,305,542 compared to \$893,060 for the same quarter of previous year, representing an increase of \$1,412,482 or 158.2%. Revenue for the six months ended November 30, 2019 of \$3,508,639 represented an increase of \$1,469,118, or 72.0%, over the \$2,039,521 achieved in the first half of the previous year. The increase for the quarter and for the six-month period was due to increased revenue in the Europe and rest of world market from both condensates return systems and heat recovery systems.

Gross profit increased in the second quarter of FY 2020 by \$704,188, compared to the same quarter last year. The increase in gross profit was mainly due to the increased sales in both heat recovery systems and condensate return systems. As a percentage of revenue, gross profit was 45.7% in the second quarter of FY 2020, compared to 39.0% achieved in the second quarter of FY 2019. The increase in gross profit as a percentage of revenue was mainly due to the change in the product split. Gross profit for the six months ended November 30, 2019 increased by \$905,100 over the same period of last year due to the increased sales in both product lines.

Other expenses increased by \$32,820 for the second quarter of FY 2020, compared to the same quarter last year. Other expenses for the six months ended November 30, 2019 increased by \$40,734 over the same period of last year. The increase was mainly due to the increased investment in marketing and sales activities.

Management Discussion and Analysis for Quarter Ended November 30, 2019

The resulting pre-tax income was \$192,722 for the current quarter, as compared to a loss of \$478,646 for the same quarter of prior year. The improved pre-tax income was mainly due to the increased revenue while the other expenses remained at the similar level as Q2 FY 2019.

Other expenses within Reconciling items, which incorporates all costs not specifically attributable to either regional operational center, increased from prior period by \$351,888 for the quarter ended November 30, 2019. The increase was partially due to foreign exchange loss of \$155,959 recorded in the second quarter of current year, compared to the foreign exchange gain of \$41,629 recorded in the same quarter of last year. The other increases included the increase in the professional fees, the stock-based compensation expense due to the issuance of options in November 2018 and the new depreciation expense on the right-of-use assets following the adoption of the new accounting guideline under IFRS 16 Leases.

3.5 Quarterly financial information (unaudited)

For the eight quarters ended November 30, 2019

Quarter ended	30-Nov-19 \$	31-Aug-19 \$	31-May-19 \$	28-Feb-19 \$
Revenue	7,848,096	4,965,789	5,974,546	3,114,757
Gross Profit ⁽¹⁾	2,918,357	2,190,518	3,117,297	1,143,104
Gross Profit Percentage	37.2%	44.1%	52.2%	36.7%
EBITDAS ⁽²⁾	709,182	471,786	1,029,103	(734,366)
Total net income (loss)	385,181	241,261	599,958	(889,481)
Income (loss) per share, basic and diluted	0.002	0.002	0.004	(0.006)

Quarter ended	30-Nov-18 \$	31-Aug-18 \$	31-May-18 \$	28-Feb-18 \$
Revenue	5,193,092	6,800,861	7,352,794	3,228,386
Gross Profit ⁽¹⁾	1,834,770	1,946,035	2,786,145	1,344,871
Gross Profit Percentage	35.3%	28.6%	37.9%	41.7%
EBITDAS ⁽²⁾	(67,995)	(50,736)	850,479	(156,016)
Total net income (loss)	(112,122)	(49,458)	888,389	(158,644)
Income (loss) per share, basic and diluted	(0.001)	0.00	0.006	(0.001)

(1) The Company reclassified commission expense from selling, marketing and business development expense to cost of sales effective June 1, 2019. As a result, commission expense for the quarters ended before May 31, 2019 was reclassified from selling, marketing and business development expense to cost of sales to conform to the current period presentation.

(2) EBITDAS represents earnings before interest, taxation, depreciation, amortization, impairment of goodwill and other intangible assets, share-based compensation expense and net write down of lease.

A reconciliation of Net income (loss) to EBITDAS is shown below for the quarters ended November 30:

	Three months ended		Six months ended	
	Nov 30, 2019 \$	Nov 30, 2018 \$	Nov 30, 2019 \$	Nov 30, 2018 \$
Total net income (loss) attributable to owners of the parent	370,558	(105,758)	616,494	(161,162)
Total net income (loss) attributable to non-controlling interest	14,623	(6,364)	9,948	(418)
Interest charge	106,134	80,993	189,411	117,433
Interest received	-	(443)	-	(456)
Taxation	(10,059)	(139,099)	(31,107)	(235,639)
Depreciation and amortization	130,412	98,551	247,042	153,261
Share based compensation	51,666	4,125	103,332	8,250
Net write down of lease	45,848	-	45,848	-
EBITDAS	709,182	(67,995)	1,180,968	(118,731)

4. Related Party Transactions

Options outstanding for Directors (excluding the CEO) as at November 30, 2019 were 1,250,000, of which 416,667 were exercisable. There were no warrants outstanding for Directors.

Options outstanding for Senior Management (including the CEO) as at November 30, 2019 were 4,383,360, of which 2,008,360 were exercisable. There were no warrants outstanding for Senior Management.

Directors and Senior Management Compensation

During the quarter ended November 30, 2019 compensation arrangements for directors was as follows:

\$13,500 per annum per Director plus an additional \$8,100 per annum payable to the Chairman of the Board, \$5,400 per annum payable to the chairperson of the Audit Committee, \$5,400 per annum payable to the chairperson of the Ethics Committee, and \$1,000 payable for each in-person meeting.

During the quarter ended November 30, 2019, Directors fees paid were \$16,875. Fees to the Chairperson of the Audit Committee were \$1,350; fees to the Chairperson of the Ethics, Governance and Compliance Committee were \$1,350; fees paid to the Chairman were \$2,025. Two in-person meetings were held during the period, a total cost of \$9,000.

Compensation paid to directors and officers during the quarter ended November 30, 2019 (inclusive of the amounts described above but excluding share-based compensation) was as follows:

	Salaries and fees		Incentives		Other short-term benefits		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
	\$	\$	\$	\$	\$	\$	\$	\$
Directors								
M. Williams	4,375	5,375	-	-	-	-	4,375	5,375
J. Kelly	7,400	7,400	-	-	-	-	7,400	7,400
W. Ollerhead	6,725	5,725	-	-	-	-	6,725	5,725
J. Schoenmakers ⁽¹⁾	-	4,568	-	-	-	-	-	4,568
D. Spagnolo	6,725	4,420	-	-	-	-	6,725	4,420
W. White	5,375	5,375	-	-	-	-	5,375	5,375
Total	30,600	32,863	-	-	-	-	30,600	32,863
Senior Management								
W. Crossland	60,000	60,000	-	-	-	-	60,000	60,000
J. Zhang	31,250	31,250	-	-	880	1,669	32,130	32,919
R. Triebe	45,250	45,250	-	-	880	845	46,130	46,095
S. Mawby ⁽²⁾	38,191	37,720	-	-	6,170	6,408	44,361	44,128
Total	174,691	174,220	-	-	7,930	8,922	182,621	183,142
Total Related Party Transactions	205,291	207,083	-	-	7,930	8,922	213,221	216,005

Other short-term benefits include cash payments for social security costs, employee benefits, and payments made into defined contribution pension plans of the Company's U.K. based subsidiaries.

(1) Mr. Schoenmakers resigned on November 27, 2018.

(2) Mr. Mawby is compensated in UK Pound sterling. Average exchange rate to Canadian dollar was 1.6705 and 1.6994 in the second quarter of FY 2020 and FY 2019 respectively.

5. Business Outlook

Governments around the world are taking unprecedented action, including increasing regulations, to reduce carbon emissions. Energy efficiency can make the transition toward a clean energy economy faster and cheaper than other initiatives, and therefore is an important element in energy policies around the world. As such, the industrial sector has begun to feel the pressing need to adopt measures that can improve the energy efficiency of internal processes and operations, thus contributing to an increased demand for energy efficiency products, solutions and services globally.

Other than our order backlog, we do not provide specific financial performance guidance. However, we believe that we are well positioned to benefit from this increased demand, particularly in our key markets of North America, the United Kingdom, and the European Union. As mentioned in Section 2.2 earlier, Management uses order backlog as an indicator of the short-term future revenue of our Company resulting from already recognized orders.

The Company's order backlog as at November 30, 2019 was approximately \$8.2 million. As at January 28, 2020, the Company had an order backlog of approximately \$9.1 million.

	2017 \$ million	2018 \$ million	2019 \$ million
Order backlog as at November 30	5.3	4.9	8.2
Order backlog as at January reporting date	17.5	10.4	9.1

- On October 16, 2019, the company announced that it had been commissioned by a leading European meat processing company, to install an innovative heat recovery system. This FLU-ACE® heat recovery project, valued over \$738,000, is designed to improve site efficiency and sustainability. It's expected to provide a utility saving of over \$614,000 per year.
- On August 22, 2019, the company announced that it had been commissioned by a multi-national food-products corporation to install a turn-key energy saving heat recovery system. The FLU-ACE® heat recovery project, valued at approximately \$1.4 million, is designed to improve efficiency and reduce emissions at the manufacturer's infant milk processing plant. Preliminary analysis shows it could improve fuel use by up to 12%, equating to an annual energy saving of up to \$570,000.
- On August 7, 2019, the company announced that it had been commissioned by a leading European brewer to install a high-efficiency heat recovery system. The FLU-ACE® heat recovery project, valued at over \$650,000, is designed to optimize efficiency at the UK production facility, helping the site to reach its sustainability goals. Preliminary analysis shows the initiative will provide an expected utility saving of \$400,000 per year.
- On May 21, 2019, the company announced that it had been commissioned by a leading snack food manufacturer to install a heat recovery system designed to support its sustainability goals. The custom-designed condensing project, valued at over \$1.5 million, is the first of its kind to be developed with this multinational snack company. Upon commissioning, the installation will provide an expected natural gas saving of almost \$400,000 per year.
- On March 27, 2019, the Company announced that it had been commissioned by a leading multinational animal nutrition and agricultural products company to improve energy efficiency at one of its European facilities. The project, valued at approximately \$2.3 million, will see the Company install two of its proprietary FLU-ACE® heat recovery systems to delivery greater fuel efficiency.
- On March 11, 2019, the Company announced that it had been commissioned by a major US dairy group to design and implement an extensive heat recovery project. This project, valued at \$1.8

Management Discussion and Analysis for Quarter Ended November 30, 2019

million, will utilize the Company's recently acquired HEATSPONGE technology to heat boiler feed and process water. It is the first project between the Company and the dairy group.

- On January 29, 2019, the Company announced that it had been commissioned by a leading food ingredient company to install an innovative heat recovery system at one of its processing plants. This FLU-ACE® heat recovery project, valued at over \$2.4 million, is the first time Thermal Energy will apply its proprietary heat recovery technology in this Food & Beverage sub-sector.
- On December 13, 2018, the Company announced that it had been commissioned by a multinational food and beverage conglomerate to add a second FLU-ACE® to its existing heat recovery system. This heat recovery project, valued at approximately \$2.4 million, is an extension to the Company's proprietary FLU-ACE® technology already deployed at the beverage processing plant.
- On October 25, 2018, the Company announced that it had been commissioned by a leading Fortune 500 food and beverage company to implement a water recovery system as part of an ongoing sustainability drive. This landmark project has an order value of approximately \$1.3 million and highlights the Company's strategic goal of expanding its products and capabilities beyond energy efficiency to include water recovery and the broader sustainability market.

6. Summary of Outstanding Shares and Dilutive Instruments

The Company currently has the following shares and dilutive instruments outstanding:

Shares:

161,885,616 class A common shares.

Normal Course Issuer Bid:

On November 19, 2019, the Company announced its intent to re-launch the Normal Course Issuer Bid ("NCIB") for a further period of twelve months. The NCIB was approved by the TSX Venture Exchange on November 18, 2019. During the 12-month period commencing November 22, 2019 and ending November 21, 2020, the Company may purchase on the TSX up to 8,094,280 common shares, representing approximately 5% of the then issued and outstanding common shares. The actual number of common shares purchased, if any, and the timing of such purchases will be determined by the Company by considering market conditions, share prices, its cash position, and other factors.

Options:

Range of exercise prices	Options outstanding		Options exercisable		
	Number outstanding November 30, 2019	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable at November 30, 2019	Weighted average exercise price
0.05-0.07	2,770,833	1.50	0.05	2,770,833	0.05
0.08-0.10	15,323,360	3.45	0.08	6,121,693	0.08
0.11-0.12	250,000	1.99	0.12	250,000	0.12
	18,344,193	3.13	0.08	9,142,526	0.07

7. Critical Accounting Estimates and Changes in Accounting Standards

Critical Accounting Estimates

The preparation of financial statements in accordance with IFRS necessitates the use of management estimates, assumptions and judgment that affect reported amounts of assets, liabilities, revenues, expenses, and disclosure of contingent assets and liabilities at the date of the financial statements. Although management reviews its estimates on an ongoing basis, actual results may differ from these estimates as confirming events occur. The following components of the financial statements depend most heavily on such management estimates, assumptions and judgment, and any changes in which may have a material impact on the Company's financial condition or results of operations. For more information about certain assumptions and risks that may affect these estimates, assumptions and judgments, please see the "Forward Looking Information" section of this MD&A.

Business combinations

The identifiable assets acquired and liabilities assumed as part of a business combination are measured at the date of acquisition at their fair values. In estimating fair value, the Company uses market observable data to the extent it is available. In cases when Level 1 inputs are not available, the measurement of fair value involves the selection of an appropriate valuation model and consideration as to the inputs necessary for the valuation model chosen.

Valuation of goodwill and intangible assets and asset impairment

Goodwill and intangible assets are tested annually for impairment, or earlier if circumstances indicate an impairment.

An impairment loss is recognized for the amount by which an asset's or cash-generating unit's carrying amount exceeds its recoverable amount. To determine the recoverable amount, management estimates expected future cash flows from each asset or cash-generating unit and determines a suitable interest rate in order to calculate the present value of those cash flows. In the process of measuring expected future cash flows, management makes assumptions about future operating results and, in the case of other intangible assets, determines an applicable royalty rate. These assumptions relate to future events and circumstances. The actual results may vary and may cause significant adjustments to the Company's assets within the next financial period.

In most cases, determining the applicable discount rate involves estimating the appropriate adjustment to market risk and the appropriate adjustment to asset-specific risk factors.

Future production outputs relating to the finance lease

When a new finance lease or amendment is signed, in determining minimum lease payments receivable, management makes estimates regarding monthly energy outputs of the leased asset based on assumptions regarding the efficiency of the asset, the operations of the plant in which it is located, penalty payments resulting from temporary plant shut-downs and residual value of the equipment. These assumptions relate to future events and circumstances. Actual results may vary from estimate.

Assumptions used in the Black-Scholes fair value calculations

The estimation of share-based payment expense requires the selection of an appropriate valuation model and consideration as to the inputs necessary for the valuation model chosen. In calculating the share-based payment expense, key estimates such as the rate of forfeiture of options granted, the expected life of the option, the volatility of the Company's stock price, and the risk-free interest rate are used.

Management Discussion and Analysis for Quarter Ended November 30, 2019

Expected credit loss

The valuation of allowances for uncollectable trade receivables requires assumptions including estimated credit losses based on the Company's knowledge of the financial conditions of its customers, historical experience, and general economic conditions.

Revenue recognition relating to contracts for heat recovery solutions

The stage of completion of any heat recovery solutions contract is assessed by management by taking into consideration all information available at the reporting date. In this process, management exercises significant estimate about milestones, actual work performed, and the estimated costs to complete work.

Deferred tax assets

Deferred tax assets are recognized for unused tax losses, tax credits, and deductible temporary differences, to the extent that it is probable that future taxable income will be available against which they can be utilized. These estimates are reviewed at every reporting date. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of the reversal of existing differences, future taxable income, and future tax planning strategies.

Changes in Accounting Policies

Reclassification of Commission Expense

Effective June 1, 2019, the Company changed its accounting policy with respect to commissions and reclassified commission expense from selling, marketing and business development expense to cost of sales. The Company believes that the revised policy and presentation provides more reliable and relevant information to users of the consolidated financial statements. The change in accounting policy has been applied retrospectively. The Company has restated the comparative figures in the consolidated statements of operation resulting in reclassification of commission expense in the amount of \$267,740 and \$531,590 for the three and six months ended November 30, 2018 from selling, marketing and business development expense to cost of sales.

Changes in Accounting Standards

The Company has adopted the following new or amended accounting standard.

IFRS 16, "Leases"

Effective June 1, 2019, the Company adopted IFRS 16, which specifies how to recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all major leases. The impact of the transition is shown in (b).

- (a) Accounting policy under IFRS 16:

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which

Management Discussion and Analysis for Quarter Ended November 30, 2019

it is located, less any lease incentives received. The assets are depreciated to the earlier of the end of the useful life of the right-to-use asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. Lease terms range from 2 to 10 years for vehicles, equipment and offices. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The lease liability is subsequently measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

(b) Impact of transition to IFRS 16:

Effective June 1, 2019, the Company adopted IFRS 16 using the modified retrospective approach and accordingly the information presented for 2018 comparative period has not been restated. It remains as previously reported under IAS 17 and related interpretations.

On initial application, the Company has elected to record right-of-use assets based on the corresponding lease liability. Right-of-use assets and lease obligations of \$231,780 were recorded as of June 1, 2019, with no net impact on retained earnings. When measuring lease liabilities, the Company discounted lease payments using its incremental borrowing rate as at June 1, 2019. The weighted-average rate applied is 6.6%.

The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for leases of low-value assets or for which the lease term ends within 12 months of the date of initial application.

The Company has elected to apply the practical expedient to grandfather the assessment of which transactions are leases on the date of initial application, as previously assessed under IAS 17 and IFRIC 4. The Company applied the definition of a lease under IFRS 16 to contracts entered into or changed on or after June 1, 2019.

Management Discussion and Analysis for Quarter Ended November 30, 2019

The following table reconciles the Company's operating lease obligations as at May 31, 2019, as previously disclosed in the Company's consolidated financial statements, to the lease obligations recognized on initial application of IFRS 16 at June 1, 2019.

Aggregate lease commitments as disclosed at May 31, 2019	\$1,351,406
*Less: lease committed but not commenced as at June 1, 2019	(1,074,642)
Less: recognition exemption for short-term leases (leases that expire on or prior to May 31, 2020)	(85,955)
Less: recognition exemption for low-value assets	(14,493)
Add: extension options reasonably certain to be exercised	75,994
Less: foreign exchange and other adjustments	16
Adjusted lease commitments	252,326
Less: impact of present value	(20,546)
Opening IFRS 16 lease liability as at June 1, 2019	\$ 231,780

*The company entered a 10-year lease for an office space before May 31, 2019. The lease was included in the lease commitment note in the consolidated financial statements at May 31, 2019. The lease commencement date was September 1, 2019. On June 1, 2019, the Company did not recognize the lease obligation and the right-of-use asset for this lease because the lease term had not started.

Management Discussion and Analysis for Quarter Ended November 30, 2019

The following table summarizes the impact of adopting IFRS 16 on the Company's condensed consolidated interim statements of financial position as at November 30, 2019:

	November 30, 2019 as reported	Adjustments	November 30, 2019 without adoption of IFRS 16
	\$		\$
Assets			
Current assets:			
Cash and cash equivalents	5,034,207	-	5,034,207
Trade and other receivables	3,542,601	-	3,542,601
Current tax receivable	51,072	-	51,072
Inventory	946,124	-	946,124
Finance lease receivable	-	-	-
	9,574,004	-	9,574,004
Non-current assets:			
Property, plant and equipment	455,719	-	455,719
Right-of-use assets	489,174	(489,174)	-
Intangible assets	2,013,030	-	2,013,030
Goodwill	2,504,974	-	2,504,974
Deferred tax assets	104,549	-	104,549
	5,567,446	(489,174)	5,078,272
Total assets	15,141,450	(489,174)	14,652,276
Liabilities			
Current liabilities:			
Trade payables and accrued liabilities	4,249,348	-	4,249,348
Current tax liabilities	27,234	-	27,234
Pensions and other employer obligations	118,373	-	118,373
Current portion of long-term debt	392,450	-	392,450
Deferred revenue	2,026,827	-	2,026,827
Provisions	283,384	-	283,384
Lease obligations	31,433	(31,433)	-
	7,129,049	(31,433)	7,097,616
Non-current liabilities:			
Contingent payable	117,272	-	117,272
Long-term debt	2,396,857	-	2,396,857
Lease obligations	474,851	(474,851)	-
Deferred tax liabilities	400,795	-	400,795
	3,389,775	(474,851)	2,914,924
Total liabilities	10,518,824	(506,284)	10,012,540
Equity			
Capital stock	32,464,780	-	32,464,780
Contributed surplus	4,106,015	-	4,106,015
Accumulated other comprehensive income	281,315	(93)	281,222
Deficit	(32,143,728)	17,203	(32,126,525)
Equity attributable to owners of the parent	4,708,382	17,110	4,725,492
Non-controlling interest	(85,756)	-	(85,756)
Total equity	4,622,626	17,110	4,639,736
Total liabilities and equity	15,141,450	(489,174)	14,652,276

Management Discussion and Analysis for Quarter Ended November 30, 2019

The following table summarizes the impact of adopting IFRS 16 on the Company's condensed consolidated interim statements of comprehensive income for the six months ended November 30, 2019:

	Six months ended November 30, 2019 as reported	Adjustments	Six months ended November 30, 2019 without adoption of IFRS 16
	\$	\$	\$
Revenue	12,813,885	-	12,813,885
Cost of sales	7,705,010	-	7,705,010
Gross profit	5,108,875	-	5,108,875
Expenses:			
Administration	2,552,783	(17,705)	2,535,078
Selling, marketing and business development	1,722,528	14,347	1,736,875
Research and development	53,962	-	53,962
	4,329,273	(3,358)	4,325,915
Operating income	779,602	3,358	782,960
Finance costs	(189,411)	13,845	(175,566)
Finance revenue	5,144	-	5,144
Income before income taxes	595,335	17,203	612,538
Income taxes recovery	31,107	-	31,107
Net income for the period	626,442	17,203	643,645
Items that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of overseas operations	8,332	(93)	8,239
Total comprehensive income for the period	634,774	17,110	651,884
Net income (loss) for the period attributable to:			
Owners of the parent	616,494	17,203	633,697
Non-controlling interest	9,948	-	9,948
Net income for the period	626,442	17,203	643,645
Total comprehensive income (loss) for the period attributable to:			
Owners of the parent	629,920	17,110	647,030
Non-controlling interest	4,854	-	4,854
Total comprehensive income for the period	634,774	17,110	651,884
Net income per share - basic and diluted	0.004	0.00	0.004

Management Discussion and Analysis for Quarter Ended November 30, 2019

The following table summarizes the impact of adopting IFRS 16 on the Company's condensed consolidated interim statements of cash flows for the six months ended November 30, 2019:

	Six months ended November 30, 2019 as reported	Adjustments	Six months ended November 30, 2019 without adoption of IFRS 16
	\$	\$	\$
Net cash flows from operating activities	1,396,141	(42,058)	1,354,083
Net cash flows used in financing activities	(216,923)	42,058	(174,865)

8. Risk Factors and Risk Management

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

Operational risks of the company include the ability to continue to secure and implement sales contracts for its GEM™ and FLU-ACE® technology solutions.

Financial risks and uncertainties of the Company include:

- The Company's history of operating losses and uncertainty of future profitability;
- 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 corporation'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;
- The effect of a continuing prolonged recession in Canada, U.S. and Europe to the financial markets in securing project financing and in particular to industrial and commercial customers in committing capital to projects;
- The impact of the pending departure from the European Union by the U.K.

Management's addressing of the risks:

FY 2012 saw the Company's first ever net profit, which was the result of increased revenues and strict cost control. FY 2013, however, produced an operating loss of \$844,328, resulting from diminished revenues and increasing costs. Despite further cost increases as management continue to build the sales force, FY 2014 produced the company's best ever post-tax income of \$634,023 as well as an increase in cash balance of \$742,022. However, this was again followed by a net loss of \$2,154,817, accompanied by a cash decrease of \$1,331,074 in FY 2015. FY 2016 and FY 2017 saw a return to profitability and an increase in cash

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balances of \$427,805 and \$1,806,992 respectively. This was followed in FY 2018 by another profitable year which saw cash balances increase by \$336,334. In FY 2019, sales increased by 21.1% due to the increased revenue in heat recovery systems and the acquisition of Boilerroom Equipment Inc.

The Company actively protects its proprietary technology through registered trademarks and confidentiality agreements.

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

Management still believes that competition against its core technologies is limited at this time and believes that the market place is sufficiently large enough to mitigate the risk of stronger competition in the future.

On June 23, 2016 a referendum was held in the U.K., resulting in the decision to leave the European Union. One immediate effect was a significant fall in the value of U.K. Pound Sterling against most other major currencies, although it has now stabilized. Negotiations regarding how trade will continue after U.K. leaves are ongoing, the outcome of which is difficult to predict. Management continues to monitor the situation, but at this point, cannot comment on how the eventual break will impact the Company. In the meantime, business continues as normal.

Management continues to focus on strengthening relationships with key customers, as well as securing new relationships with multi-site organizations, which is anticipated to provide repeat business into the foreseeable future. Management continually monitors costs and cash flow to ensure that the Company has sufficient funds for operations while providing for future growth.

9. Forward-Looking Information

This MD&A contains certain “forward-looking statements.” All statements, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future (including, without limitation, statements regarding financial and business prospects and financial outlook) are forward looking statements. These forward-looking statements reflect the current expectations or beliefs of Management, based on information currently available to the Company. Forward-looking statements are subject to a number of risks, uncertainties and assumptions that may cause the actual results of the Company to differ materially from those discussed in the forward-looking statements and, even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company. Factors that could cause actual results or events to differ materially from current expectations include, among other things, changes in general economic and market conditions, changes to regulations affecting the Company’s activities, and uncertainties relating to the availability and costs of financing needed in the future. Any forward-looking statement speaks only as at the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although Management believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and, accordingly, undue reliance should not be put on such statements due to the inherent uncertainty therein.

10. Management's Responsibility for Financial Reporting

In compliance with the Canadian Securities Administrators' National Instrument 52-109 ("NI 52-109"), the Company has filed with applicable Canadian securities regulatory authorities, certificates signed by its Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") that, among other things, report on the design and effectiveness of disclosure controls and procedures, and the design of internal controls over financial reporting.

Under the supervision of the CEO and CFO, the Company maintains systems of internal accounting and administrative controls to provide reasonable assurance that the financial information is relevant, reliable, and accurate, and that transactions are authorized, assets are safeguarded, and proper records are maintained. Internal controls over financial reporting, no matter how well designed, have inherent limitations, and may not prevent or detect all misstatements. There were no changes to the Company's internal control over financial reporting during the quarter ended November 30, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

The Board of Directors is responsible for ensuring that management fulfills its responsibility principally through its Audit Committee.