



## Management's Discussion and Analysis

For the three months ended June 30, 2010

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The following Management Discussion and Analysis ("MD&A"), dated August 25<sup>th</sup>, 2010, provides information that management believes is relevant to an assessment and understanding of the company's consolidated results of operations and financial condition. This discussion should be read in conjunction with the unaudited interim consolidated financial statements for the six months ended June 30, 2010 and the audited financial statements and accompanying notes for the year ended December 31, 2009.

### Forward Looking Statements

This MD&A contains forward-looking information, including statements regarding the future results of operations and marketing activities. Forward looking statements generally can be identified by the use of forward looking terminology such as "may", "will", "expect", "intend", "anticipate", "plan", "foresee", "believe" or similar terminology. Although these forward-looking statements are based on what management believes to be current and reasonable assumptions, they involve known and unknown risks, uncertainties and other factors that may cause the actual results and performance to differ materially from those stated, anticipated, or implied in these forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking information as no assurances can be given to future results, performance, or achievements.

### Business Overview

Smartcool Systems Inc. is a cleantech company that specializes in energy and cost reduction technologies for air conditioning and refrigeration systems. Smartcool's first product, the Energy Saving Module™ (ESM™), has met with a great deal of success targeting industrial and commercial businesses around the world. The expansion of the product line with introduction of the new ECO<sup>3</sup>™ in early 2009 has launched Smartcool into a new era of development and growth.

Smartcool Systems Inc. was established in 2004, and was initially the North American distributor for the ESM™ on behalf of Abbotly Technologies Pty Ltd of Australia. In 2006, Smartcool International Inc., a 100% wholly owned subsidiary of Smartcool Systems Inc., purchased the assets of Abbotly, including intellectual property of the ESM™, and became the sole distributor and manufacturer. With research and development moving to the Vancouver head office, Smartcool Systems was well positioned for further corporate and product development.

Smartcool International Inc. is the master distributor of Smartcool's product line and is located in Barbados. Following the acquisition, Smartcool International developed an international network of distributors using strategically located offices based in London, England, and Houston, Texas to build support and sales channels. Smartcool Systems USA Inc. is the head distributor for the U.S. and Canada (excluding B.C.) for the Energy Savings Module. Smartcool Systems EMEA was formed in 2008 and is the master distributor for Europe, the Middle East, Africa and the Indian Sub-Continent. Across the branches of the company, Smartcool employs 16 people, including the management team and a full office of 8 people in Vancouver. The following graphic illustrates the location of Smartcool offices and third party distributors:

# SMARTCOOL™

## International Distribution Network



★ **Smartcool Offices:**  
Vancouver, Canada  
Houston, USA  
Alton, UK  
St. Michael's, Barbados

● **Independent Distributors**

[www.smartcool.net](http://www.smartcool.net)

### Market Opportunity

Achieving greater energy efficiency is a crucial step towards building more sustainable communities. The generation of electricity for use in buildings is the single largest producer of greenhouse gases in the world. There are two ways to reduce the emissions caused by electricity. The first would be to use more renewable energy sources like wind and solar power. The second is to reduce the amount of electricity currently being used around the world. Taking advantage of this 'fifth fuel' is achieving greater momentum every year and provides the most cost effective option for reducing emissions.

According to the International Energy Outlook 2006, world energy consumption is expected to increase by 71% from 2003 to 2030, most rapidly in the industrial sector. In the U.S. alone, space cooling and refrigeration accounts for 15% of total electricity consumption. At a rate of US\$0.07/kWh in the commercial sector, air-conditioning and refrigeration accounts for US\$26 billion in spending annually. Energy consistently ranks as the second or third largest operating expense for businesses with air-conditioning and refrigeration typically representing the largest electrical expense in the market verticals that Smartcool is targeting.

In countries with higher ambient temperatures, the usage in air conditioning will be significantly higher, coming much closer to 30% of total energy consumption. There has been a great deal of development in the lighting field to reduce energy, however, in the area of air conditioning and refrigeration, most of the development has resulted in expensive and complex systems requiring highly skilled installers and programmers. The cost of these systems has prohibited the installation by most small to medium consumers and even larger businesses have been challenged to meet the expense.

With ever increasing energy demands and the rising cost of power, both Government and Industry are searching for ways to simultaneously reduce operating costs and decrease their environmental impact. Governments are implementing rebate programs for companies that institute energy saving measures. Companies are realizing the economic and social benefits of implementing aggressive environmentally conscious programs that reduce their energy costs. The administration in the U.S has highlighted the energy crisis as a significant challenge they are fully prepared to address. The investment of over US\$150 billion over the next 10 years to address the dependence on foreign oil, address the global climate crisis and create millions of new jobs is a clear indication of that commitment.

Smartcool is helping clients achieve greater energy efficiency, increase profits and promote environmental sustainability through the installation of the Energy Saving Module™ and ECO<sup>3</sup>™.

## **Technology Overview**

The Energy Saving Module™ and ECO<sup>3</sup>™ are green technologies that reduce the electricity usage (kWh) and demand (KW) of air conditioning and refrigeration compressors through enhanced system performance. This provides substantial economic and environmental benefits for Smartcool's growing customer base. Smartcool's products are compatible with all types of control systems including the latest building automation systems and computer controlled refrigeration plants. Energy savings achieved by the ESM™ and ECO<sup>3</sup>™ are quantifiable and the products can qualify for certain government and utility rebates. The technology has been validated by rigorous third party testing, government organizations and private business installations.

### **The Energy Saving Module™ (ESM™)**

The Energy Saving Module™ is designed specifically to reduce the electricity consumption (kWh) and maximum demand (KW/KVA) of refrigeration and air conditioning compressors by improving their performance and maintaining temperature control. The ESM™ is designed to interface with all types and makes of air conditioning and refrigeration controllers from the simple thermostat single condensing systems to the most sophisticated computer based multiple compressor parallel systems.

The ESM™ is not a controller. It is a supplement to the existing system - designed to work with the existing air conditioning and refrigeration equipment along with current control methodology in order to reduce the energy consumption. When a call for cooling comes from the existing controls, the ESM™ takes over to determine when and for how long each compressor or unloader will run. Because the primary control is not replaced, the ESM™ can be put into bypass at any time and the system returns to operating exactly as it was prior to the installation. This is an important distinction for system repairs and/or troubleshooting.

The ESM™ enables the compressor to maximize the rate of heat removal by optimizing the natural physical properties of the compressor operating cycle. This process, known as "Compressor Optimization" can reduce compressor running time by up to 30% with no affect on the temperature conditions.

## **The ECO<sup>3</sup>™**

In early 2009, Smartcool Systems Inc. through its wholly owned subsidiary Smartcool International Inc. launched its newest product: the ECO<sup>3</sup>™. This unique retrofit device can be installed on any air conditioning or refrigeration unit with one or two compressors, and will save an average of 12% of the energy used by that system. The most significant feature of the new ECO<sup>3</sup>™ is its ability to save energy on the cooling and heating cycles of compressor driven heat pumps, significantly increasing the opportunity for energy savings. With its IP64 enclosure rating, and its simple installation process, the ECO<sup>3</sup>™ can be installed quickly (under 2 hours by an experienced technician) in virtually any location without additional and often costly protection from the elements. Once installed, the large display screen of the ECO<sup>3</sup>™ allows for easy monitoring of the amount of energy it is saving for the customer.

### **Third Party Assessment**

Smartcool's technology has undergone significant testing, resulting in a great deal of evidence of its energy saving capabilities. In addition to independent third party tests, over 26,000 units of the ESM™ and ECO<sup>3</sup>™ have been installed worldwide.

The University of Miami, on behalf of Florida Power and Light (FPL), conducted extensive testing of the ESM™ installed over a twelve month period in 2006. The testing showed that the ESM™ reduced kWh usage of the entire air conditioning system by 8.9% – which provides a savings of 13.38% of the kWh usage by the compressors, an annual reduction of 43,660 kWh and a reduction in greenhouse gas emissions of 58,911 lbs. The ESM™ also reduced the peak demand of the system by 10.8%.

Oak Ridge National Laboratory (ORNL), a division of the U.S. Department of Energy, conducted a two phase test of the ESM™ in 2004-2005. The first phase of the test involved the analysis of data collected from an installation on a refrigeration rack in a grocery store. Phase 1 results were sufficiently promising to merit a second phase of testing in a controlled laboratory environment. The second phase evaluated the ability of the ESM™ to reduce the electrical consumption of a four compressor roof top unit in a controlled laboratory environment. Test results showed an 11.87% reduction in kWh usage by the compressors in the system and a 2.2% demand (KW) reduction.

Previously, a test on a refrigeration system was conducted by the Los Angeles Department of Water and Power (LADWP). The ESM™ was installed on two compressors of the refrigeration system of Notrica's Market in Bellflower, California. The average daily kWh usage savings recorded during this test was between 20% and 24%. These reductions were achieved while maintaining the temperature performance of the system.

### **Applications for Smartcool's Technology**

The ESM™ and ECO<sup>3</sup>™ have a large number of potential applications in a variety of different industries. Between the two products, Smartcool is able to offer a cost-effective energy efficiency solution for virtually any cooling systems, with the exception of blast chillers. In every Smartcool installation, the ESM™ and ECO<sup>3</sup>™ provide great economic, environmental and energy reducing benefits for the client's facility.

#### *Air Conditioning Units*

The ESM™ is compatible with any air conditioning system, while the ECO<sup>3</sup>™ is compatible with packaged units with one or two stages of control. Air conditioning in facilities such as commercial real estate, supermarkets, hotels, restaurants, schools, hospitals, data centers and telecommunications facilities can all benefit from the energy efficiency products supplied by Smartcool.

### *Refrigeration Units*

The ECO<sup>3™</sup> is compatible with any single compressor refrigeration system. The ESM™ is compatible with all refrigeration systems, including large multi-compressor racks. Process cooling, cold storage warehouses, hospitals, supermarkets, mini-marts or convenience stores, restaurants and many other businesses can reduce money on their refrigeration bills by installing the ESM™ or ECO<sup>3™</sup>.

### *Chillers*

Most modern chillers are fitted with Micro-Processor Chiller Management Systems that usually allow a third party interface to modify the chiller capacity control. The Intelligent Interface Module allows the ESM™ to modify chiller capacity control using remote set point control, temperature reset, dual set point control or pulse width modulation.

The ability of the ESM™ to provide savings on a chiller is achieved by the ability of the IIM to interface with the primary controller causing the unit to shed load for a period of time to reduce the amount of energy the system is using. The ESM™ is able to provide this set point shift/load shifting through the full range of ambient conditions and not just at low ambient conditions.

### *Heat Pumps*

Heat pumps are a rapidly growing market in North America, and have been well-established for quite some time in Europe and Australia. With the increasing push towards greater energy efficiency by governments around the world, many new constructions in the residential and commercial sectors are choosing air source or geothermal heat pumps over traditional air conditioning and/or heating systems. It is estimated that 1 in every 3 new homes in the US is built with a heat pump. These systems are gaining traction in many regions of North America thanks to their ability to provide both heating *and* cooling to buildings.

Smartcool's ECO<sup>3™</sup> is ideally positioned to tackle the heat pump market, due to its unique ability to save energy on the heating and cooling cycles of compressor driven heat pumps. The recent completion of successful testing on ECO<sup>3™</sup> units installed on heat pumps in Australia and in Canada shows strong results with considerable financial benefit to the customer.

### **Competitive Advantage**

There are no direct competitors at this time with the ESM Family of products offered by Smartcool Systems Inc., and those few products that are geared towards energy efficiency in the air conditioning and refrigeration market do not provide the same package of benefits as does the ESM™ or ECO<sup>3™</sup>. Most other products aiming to save energy on air conditioning and refrigeration systems do not target the compressors, despite the compressors being responsible for most of the energy consumed by the system. Smartcool's products target the compressors specifically, and are miles ahead of the competition with thanks to a solid technical foundation and certain unique features.

The ECO<sup>3™</sup> has been developed using the experience gained through distribution of the ESM™, a product that has already met a high level of success with 26,000 units installed around the world. Case studies from ESM™ installations in all of Smartcool's targeted vertical markets show a large, satisfied customer base. As reported previously, Smartcool's ESM™ has also undergone significant independent third party testing, including field and laboratory tests by Oak Ridge National Laboratory (ORNL) on behalf of Wal-Mart, the University of Miami on behalf of Florida Power and Light (FPL) and Los Angeles Department of Water and Power (LADWP). All of the results from these tests have been positive and have verified the effectiveness of the technology. Experience gained from the development and marketing of the ESM™ has allowed the ECO<sup>3™</sup> to be created and launched into the market with a solid and credible foundation. This gives potential customers additional confidence in the company and the technology, leading them to choose Smartcool over other alternatives.

Certain features of the ECO<sup>3</sup>™ also give it an advantage over potential competitors. It is the only product on the market that can save energy on the cooling and heating cycles of compressor driven heat pumps. These types of heat pumps are very common, particularly in areas where cooling may not be necessary year round such as in British Columbia. The ECO<sup>3</sup>™ has exclusive access to this large market, as it provides the most effective energy efficiency device for customers with these types of units. The IP64 rating and simple installation cut down on additional costs for the customer, as extra protection and long labour hours are not necessary.

## Financial Overview

The financial highlights for the second quarter of 2010 are as follows:

Revenue was \$1,137,863, increased by \$627,019 or 123%, compared to \$510,844 for the second quarter of 2009. Total assets were \$6,062,562 compared to \$6,476,394 for the same quarter of 2009. Net loss for the quarter was \$249,782 (\$0.01 per share), compared to \$929,730 (\$0.02 per share) for the same quarter of 2009.

The company had \$514,719 in cash and cash equivalents at the end of the quarter, compared to \$498,050 in cash and cash equivalent and short-term investments of \$352,143 at the end of the second quarter of 2009.

Current liabilities at the end of the quarter were \$1,022,737 which include the current portions of purchase obligations to TECC Services, debentures, capital leases and deferred tenant inducement totaling \$411,193. Long-term liabilities were \$925,943, consisting of acquisition obligations \$401,069, debentures \$466,449 and deferred tenant inducement \$58,424.

## Selected Annual Information

The following is selected information on Smartcool's financial performance for the past three years:

	December 31, 2007	December 31, 2008	December 31, 2009
<b>Revenue</b>	\$447,275	\$1,175,168	\$2,402,081
<b>Selling, General &amp; Administrative</b>	\$2,741,892	\$4,417,466	\$4,033,161
<b>Net loss</b>	\$(4,323,281)	\$(4,370,884)	\$(3,390,930)
<b>Net loss – Per Share (Basic and Diluted)</b>	\$(0.13)	\$(0.11)	\$(0.08)
<b>Total Assets</b>	\$9,313,309	\$8,281,026	\$5,754,220
<b>Total Long Term Liabilities</b>	\$111,004	\$624,467	\$646,436
<b>Cash Dividends</b>	\$0	\$0	\$0

## Summary of Quarterly Results

	Sep 2008 (\$)	Dec 2008 (\$)	Mar 2009 (\$)	Jun 2009 (\$)	Sep 2009 (\$)	Dec 2009 (\$)	Mar 2010 (\$)	Jun 2010 (\$)
Total Revenues	204,793	427,339	225,556	510,844	681,811	983,870	634,927	1,137,863
Loss	(1,337,484)	(\$1,247,679)	(1,404,535)	(929,730)	(471,100)	(585,565)	(668,200)	(249,782)
Loss Per Share – basic & diluted	(0.03)	(0.11)*	(0.03)	(0.02)	(0.01)	(0.08)*	(0.02)	(0.01)

\*represents the loss per share (basic and diluted) for the fiscal years ended December 2008 and 2009

### **Revenue**

The demand for Smartcool products has steadily increased and the second quarter saw a great break through in revenue. For the first time, quarterly sales exceeded 1 million dollars, contributed equally by direct sales to end users of \$568,473 (50%) and distribution sales of \$569,390 (50%).

### **Gross profit**

Gross profit for the quarter increased by \$499,767 to \$834,084 (73% of revenue) from \$334,317 (65% of revenue) for the second quarter of 2009. While the first installation of a series of very large projects with a multi-site customer was done in the previous quarter at the additional cost of first-time experience, subsequent installations have been completed very effectively resulting in higher gross margin for the quarter.

### **General and administrative expenses**

General and administrative expenses for the quarter decreased to \$802,461 from \$990,454 for the same quarter of 2009. Cost reduction was achieved in all discretionary cost areas. More significant were reductions in salaries and wages (\$387,848 compared to \$460,318 for the second quarter of 2009), consulting fees (\$105,417 compared to \$175,692 for the second quarter of 2009) and technical consulting fees (\$3,517 compared to \$28,578 for the second quarter of 2009).

### **Net loss**

Net loss for the quarter was \$249,782, decreased by \$679,948 or 73% from \$929,730 in the second quarter of 2009, a result of growing revenue. Though gross margin was greater than total general and administrative expenses, non cash expenses (asset amortization of \$141,864, stock-based compensation of \$71,146 and research and development amortization of \$13,200) have brought the positive operating results down to a loss position. The loss per share (basic and diluted) for the quarter was \$0.01, compared to \$0.02 for the same quarter of 2009.

Loss per share is calculated based on the weighted average number of common shares outstanding throughout the year.

### **Amortization**

Amortization expenses for the second quarter were \$141,864, consisting of amortization on property and equipment of \$23,371 (Second quarter of 2009 - \$38,677) and amortization of intangible assets of \$114,493 (second quarter of 2009 - \$114,086).

### **Stock-based compensation**

Stock-based compensation costs for the quarter were \$71,146, compared to \$9,364 for the second quarter of 2009. While no options were granted during the first six months of the previous year, 650,000 options were granted this year to replace a number of expired options, resulting in the increase.

### **Capital expenditures**

There were no capital expenditures for the quarter compared to \$9,952 for the same quarter of 2009. Sufficient resources had been invested in testing equipment in past years and the company's focus on the distribution business also reduced the need for new testing equipment.

### ***Intangible assets***

Smartcool acquired the intellectual property of the ESM™ and its world-wide distribution rights in the year 2006. The acquisition was closed on June 30, 2006 at a price of AU\$2,895,000. The purchase price has been fully paid. The acquired assets included four distribution contracts and several supplier agreements along with the intellectual property of the ESM™ and the ESM™ brand.

Smartcool acquired the exclusive rights to distribute the ESM™ in the United Kingdom, Spain, Portugal, and the Middle East from T.E.C.C. Services Ltd. ("TECC") in July 2008. Consideration of £1,035,000GBP (CA\$1,738,750) was payable in cash and £265,000GBP (CA\$532,067) was payable in the form of common shares of the company. Upon closing, payment of £435,000GBP (CA\$873,393) was made and 743,709 shares were issued.

The remaining balance of £600,000GBP is due in scheduled instalments over four years with the last payment due on July 11, 2012. These instalments are non-interest bearing. At the acquisition date, the fair value of consideration was determined to be \$2,270,800 based on discounting the future payments at a rate of 16%. Transaction costs of \$28,300 were also incurred.

The purchase agreement was amended on December 21, 2009 where payments were rescheduled with the first payment due on January 16, 2010 and the last one on July 16, 2012. The parties also agreed that interest would accrue on £75,000 GBP at RBC prime rate plus 4% from January 16, 2009 and additionally on £75,000 GBP from July 16, 2009 until paid in full. Payment of £46,875 GBP was made on February 2, 2010. As at June 30, 2010, the balance of £563,353 GBP, including accrued interest of 10,228 GBP, remained outstanding.

### ***Impairment of Long-Lived Assets***

Smartcool amortizes long-lived assets over the estimated useful life of the asset. Evaluation of all long-lived assets occurs periodically for impairment in accordance with Section 3062 and Section 3063 of the CICA Handbook. These sections require that long-lived assets be evaluated for impairment whenever events or changes in circumstances indicate that their carrying value may not be recoverable. Events or changes in circumstances include a significant adverse change in business climate that could affect their value. If such an event or change indicates that the carrying value of an asset may not be recoverable, or that our estimated amortization period was not appropriate, we would record an impairment charge against our long lived assets. The amount of impairment would be measured as the difference between the carrying value and the fair value of the impaired asset as calculated using a net realizable value methodology. An impairment charge would be recorded as an operating expense in the period of the impairment and as a reduction in the carrying value of that asset.

At December 31, 2009, as the recovery of the global economy was still uncertain, we determined that it was necessary to conduct an impairment test on certain of our definite lived intangible assets. Our definite lived intangible assets are ESM™ intellectual property, ESM™ distribution contracts and ESM™ supplier contracts that we acquired from Abbotly USA, Abbotly Technologies Pty and TECC Services. These definite lived intangibles have net book values as at December 31, 2009 of approximately \$80,000, \$3,400,000 and \$73,000, respectively.

As our revenue is primarily derived from the sales of ESM™ products, revenue associated with the above intangible assets is readily identifiable. Revenue from existing distribution channels is projected based on forecasts provided by the distributors themselves. Revenue expected from potential distribution channels is based on business development progress. Cost of goods sold projections are based on our expected margin and operating costs projections based on 2009 cost structures. These undiscounted cash flows supported the recoverability of our definite lived intangible assets.

Due to the above considerations, which are based on our best available information, we have not recorded any impairment on our long-lived assets in fiscal 2009.

## Schedule of selling, general and administrative expenses

	Three months ended June 30, 2010	Six months ended June 30, 2010
Management and consulting fees	105,417	201,650
Salaries and benefits	387,848	757,321
Professional fees	17,286	44,592
Investor relations and media	34,710	65,511
Travel	110,708	173,085
Technical consulting	3,517	5,726
Rent, office and other expenses	142,975	264,881
<b>Total selling, general &amp; admin expenses</b>	<b>802,461</b>	<b>1,512,766</b>
Stock-based compensation	71,146	215,339
Research & Development	14,666	29,029
Amortization	141,864	290,031
<b>Total operating expenses</b>	<b>1,030,137</b>	<b>2,047,165</b>

### Liquidity and Capital Resources

Since incorporation, the company has financed its operations through the issuance of equity. A number of private placements along with the issuance of shares upon exercise of warrants and stock options had provided the company with working capital in previous years.

During the quarter, the company issued 55 units of debentures for net proceeds of \$247,500. Each unit consists of a non convertible debenture in the principal amount of \$5,000 and 8,600 warrants (see note 10). The company also issued 2,500,000 units of common share and warrant at \$0.20 per unit for net proceeds of \$462,500. Each unit consists of one common share and one-half warrant (see note 11(b)(iii)).

Sales of short-term investments in the quarter also generated \$55,007 in cash. As at June 30, 2010, the company had \$514,719 in cash and cash equivalents (including restricted cash of \$42,351 - see note 3).

Working capital at the end of the quarter was \$1,468,107 compared to working capital of \$1,505,557 at the end of the second quarter of 2009.

The company generated cash resources of \$191,477 during the quarter and consumed \$739,116 cash resources in the first quarter of 2009. Cash was generated from the issuance of debentures and common shares. The average monthly burn for the quarter was \$189,000 compared to \$290,000 for the second quarter of the previous year.

Though the company has been able to raise capital to finance its operations from time to time, its ultimate success and the recoverability of its intangible assets will depend on the company's ability to successfully execute its business plan which includes the existence of a market for its products, achieving profitable operations, meeting its business acquisition obligations, and the continued support of the company's shareholders and employees.

Management projects with growing sales revenue and reduced expenses the company will be able to break even in 2010. Positive cash flow might be generated later in the year with the establishment of new distribution channels.

## Commitments

### a) Premise lease

In June, 2005, the company entered into an agreement to lease office facilities for 10 years.

In February 2008, the company entered into a lease agreement to lease office facilities in Texas for 37 months commencing February 1, 2008 and expiring February 28, 2011, for monthly rent payments of \$1,800 per month, up to February 28, 2009 and monthly payments of \$1,908 thereafter.

The future minimum commitments for the company's office premises are:

	\$
2010	36,199
2011	54,222
2012	51,300
2013	52,875
2013 and thereafter	<u>76,500</u>
	<u>271,096</u>

For the three and six months ended June 30, 2010, the company's rent expense including certain operating expenses and property taxes was \$39,360 and \$81, 915 (2009 - \$174,667) and its sublease revenue was \$4,117 and \$10,467 (2009 - \$24,928).

### b) Equipment lease

In March 2007, the company signed two contractual agreements for the financing of computer equipment and software. Under these agreements, the company is required to make 36 monthly payments of \$1,013 and \$706 starting July 2007. These leases expired in June 2010.

In July 2008, Smartcool USA entered into an office equipment lease agreement. Under this agreement, the company is required to make 24 monthly payments of \$369 starting August 2008.

### c) Abbotly USA

Under the terms of the North American distribution rights acquisition, the company is required to pay a 20% royalty on products identified in the Assignment and Assumption agreement dated March 27, 2006 and purchased from Abbotly Pty for North American sales. The initial term of the agreement was to expire on March 3, 2008. Smartcool, under its rights in the Assignment and Assumption agreement, has renewed the licensing agreement for another five year term. The company has purchased all of the remaining inventory from Abbotly USA as required under this agreement and is now required to purchase a minimum of \$200,000 of products identified in the Assignment and Assumption agreement from Abbotly Pty per year for purposes of the royalty calculation. For the six months ended June 30, 2010, the company recorded royalty expense of US\$3,496. As at June 30, 2010, royalties of US\$3,496 were payable to Abbotly USA (Year 2009 – US\$11,200).

## Transactions with Related Parties

During the three and six months ended June 30, 2010, consulting fees of \$28,986 and \$59,719 were charged by directors of the company (2009 - \$254,317). Consulting fees of \$33,000 and \$65,500 were charged by two companies with common directors during the above periods (2009 - \$76,000). The company rents its office in the United Kingdom from a company with a common director. During the three and six months ended June 30, 2010, rent expense was \$8,472 and \$17,777 (2009 –\$39,721). These transactions have been charged to general and administrative in the statement of operations. The company also utilizes installation services from a company with a common director. During the three and six months ended June 30, 2010, installation and material expenses were \$55,509 and \$198,912 (2009 - \$0). These transactions have been charged to cost of sales in the statement of operations. At June 30, 2010, £59,120 GBP (CDN\$93,717) was owed to these related parties. (December 31, 09 - £8,129GBP)

The company subleases its Vancouver office and other facilities to a company with a common director. During the three and six months ended June 30, 2010, sublease income was \$4,117 and \$10,467 (2009 - \$24,928). At June 30, 2010, no amounts were owed from this related party (December 31, 09 - \$2,100).

The Company uses the services of a law firm of which a director is a partner. During the three and six months ending June 30<sup>th</sup>, 2010 fees in the amounts of \$8,173 and \$28,578 were charged to the company for legal services provided.

During the three and six months ended June 30, 2010, total sales of \$207,259 and \$179,043 were made to company with a common director (2009 – \$226,174). As at June 30, 2010, US\$178,721 (CDN\$189,551) was owed from this related party (December 31, 2009 \$74,734).

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties. Management is of the opinion that these transactions were undertaken under the same terms and conditions as transactions with arms-length parties.

## Outstanding Share Data

The authorized share capital of the company is an unlimited number of common shares without par value. As at June 30, 2010 the company had 46,821,396 common shares outstanding. The following table provided the weighted average number of common shares outstanding for the three and six months ended June 30, 2009.

	June 30, 2010	June 30, 2009
Three month weighted average	45,145,572	41,389,597
Six month weighted average	44,735,761	41,286,121

The increase in average number of common shares outstanding was a result of the issuance of 2,500,000 common shares pursuant to June 1,, 2010 private placement.

As at August 25, 2010, the outstanding shares are 46,821,396 and diluted are 55,614,596.

## Warrants and Stock options

As at June 30, 2010, there were 2,424,200 share purchase warrants and 6,369,000 stock options outstanding which collectively could result in the issuance of 8,793,200 common shares if these warrants and stock options are exercised. The outstanding options have a weighted average exercise price of \$0.33.

As at June 30, 2010 there were 5,064,500 exercisable options with a weighted average exercise price of \$0.34.

No options were granted during the quarter.

## **Financial Instruments and Risk Management**

The company is exposed to certain financial risks, including credit risk, liquidity risk, and market risk.

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations and arises principally from the company's cash and cash equivalents, short-term investments and amounts receivable. The company limits its exposure to credit loss by placing its cash and cash equivalents and short-term investments with high credit quality financial institutions.

Liquidity risk results from the company's inability to meet its financial obligations when they become due. As part of the risk management process, the board approves the company's annual operating and capital budgets as well as any material transactions outside the ordinary course of business. To ensure that the Company has sufficient liquidity to carry out its core business plan and meet its current obligations in 2010, the company has issued units of debenture and warrant during the quarter and is seeking additional equity financing.

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the company's income or valuation of its financial instruments. The company is exposed to fluctuations in foreign currency as most of its international distribution transactions are settled in U.S. dollars, Australian dollars and British pounds. The company's net income and cash flow will therefore be affected by fluctuations in foreign exchange rates. None of these risks have been mitigated by the use of foreign currency forward contracts. The company is exposed to fluctuations in interest rates as late payments under TECC acquisition obligations are subject to interest based on prime rate plus 4%. As at June 30, 2010 the total of such payments was £103,125GBP.

Details of the company's financial instruments as at June 30, 2010 and risk exposures are disclosed in note 15 to the consolidated financial statements.

## **Critical Accounting Policies and Estimates**

### *Intangible assets*

Intangible assets are recorded at cost and include the ESM<sup>TM</sup> brand, ESM<sup>TM</sup> intellectual property, distribution agreements and supplier agreements. The ESM<sup>TM</sup> brand has been determined to have an indefinite life and is not amortized. The remaining intangible assets are amortized on a straight-line basis over their useful lives as follows:

ESM <sup>TM</sup> Intellectual property	10 years
North American distribution rights	10 years
European distribution rights	9 years
Distribution agreements	10 - 15 years
Supplier agreements	10 years

### *Impairment of long-lived assets*

Long-lived assets including property and equipment and intangible assets with a finite life are tested for impairment whenever events or changes in circumstances indicate that carrying value of an asset or asset group may not be recoverable. An impairment loss would be recognized when the carrying amount of an asset exceeds the estimated undiscounted future cash flow expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss to be recorded is calculated by the excess of the asset's carrying value over the fair value. Fair value is generally determined using a discounted cash flow analysis.

Intangible assets with an indefinite life are reviewed for impairment annually or more frequently, if events or changes in circumstances indicate that the asset might be impaired. The asset is written down when the carrying amount exceeds its estimated fair value.

### *Revenue recognition*

Revenue from the direct sale and installation of the ESM<sup>™</sup> and ECO<sup>3™</sup> in North America is recognized when the ESM<sup>™</sup> has been installed, title has transferred, collectability is reasonably assured and the fee is fixed and determinable. Revenue from the worldwide distribution of the ESM<sup>™</sup> and ECO<sup>3™</sup> is recognized when the equipment has been shipped and title has transferred, collectability is reasonably assured and the fee is fixed and determinable. Provisions are established for estimated warranty costs at the time revenue is recognized. The company records deferred revenue when cash deposits are received in advance of the above revenue recognition criteria being met.

### *Research and development costs*

Research costs are expensed as incurred. Development costs are expensed as incurred unless they meet specific criteria under Canadian GAAP for deferral and amortization, which relate primarily to technical, market and financial feasibility.

### *Stock-based compensation and other stock-based payments*

The fair value of all stock options granted to employees and non-employees is determined using the Black-Scholes option pricing model, and the resulting value is charged to operations over the vesting period. For options granted to non-employees, the fair value is measured when performance is complete, a performance commitment is made or the options are fully vested and non-forfeitable, whichever is earliest, and the expense is recognized over the period in which the goods or services from the non-employees are received. A corresponding increase in contributed surplus is recorded when stock options are expensed. When stock options are exercised, capital stock is credited by the sum of the consideration paid and the related portion previously recorded in contributed surplus.

### **Internal Controls over Financial Reporting and Disclosure Controls and Procedures**

The Chief Executive Officer and Chief Financial Officer make no representation relating to the establishment and maintenance of the company's disclosure controls and procedures and internal controls over financial reporting.

## **Future Accounting Standards**

### *Business Combinations*

In January 2009, the CICA issued Section 1582 “Business Combinations” which establishes principles and requirements of the acquisition method for business combinations and related disclosures. The purchase price is to be based on trading data at the closing date of the acquisition, not the announcement date of the acquisition, and most acquisition costs are to be expensed as incurred. This standard applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2011 with earlier application permitted. The company plans to adopt this standard prospectively effective January 1, 2011. The adoption of this standard may have an impact on the accounting of future business combinations.

### *Consolidated Financial Statements*

In January 2009, the CICA issued Section 1601 which establishes standards for the preparation of consolidated financial statements and Section 1602 which provides guidance on accounting for a non-controlling interest in a subsidiary in consolidated financial statements subsequent to a business combination. The company plans to adopt this standard prospectively effective January 1, 2011. The adoption of this standard may have an impact on the accounting of future business combinations.

### *International Financial Reporting Standards*

In February 2008, the Canadian Accounting Standards Board confirmed that International Financial Reporting Standards (“IFRS”) will replace Canadian GAAP for publicly accountable profit-oriented enterprises for interim and annual financial statements effective January 1, 2011.

The company will therefore be required to report using IFRS commencing with its unaudited interim financial statements for the three months ended March 31, 2011, which must include the interim results for the three months ended March 31, 2010 prepared on the same basis. IFRS uses a conceptual framework similar to Canadian GAAP, but there are some significant differences with regards to recognition, measurement and disclosures. Management has performed an analysis to identify differences between the company’s current accounting policies and IFRS. The impact of IFRS convergence on its financial statements has not been quantified yet as accounting policies are still being finalized. Management continues to analyze accounting changes and should be able to address the impact quantitatively later in the year.

#### IFRS 1 - First-time adoption of International Financial Reporting Standards

The basic requirement for IFRS adoption is full retroactive application of all IFRS effective at the reporting date. IFRS 1, however, provides entities that adopt IFRS for the first time with a number of optional exemptions and mandatory exceptions. Management plans to apply the following optional exemptions:

Business combinations – IFRS 1 allows an entity to use IFRS standards for business combinations on a prospective basis rather than restating all business combinations.

Cumulative translation differences – IFRS 1 relieves entities from complying with the requirement of IAS 21 to separately classify the cumulative translation differences as a component of equity. This exemption allows cumulative translation differences to be deemed as zero at the transition date.

Share-based payments – IFRS 1 provides an exemption on IFRS 2 ‘Share-based payments’ to equity instruments that vested before the transition date.

### Major accounting policy differences

Set below are the key areas where changes in accounting policies are expected that may impact the company's consolidated financial statements. The list and comments below should not be regarded as a complete list of changes that will result from transition to IFRS. It is intended to highlight those areas we believe to be most significant; however, analysis of changes is still in process and not all decisions have been made where choices of accounting policies are available. We note that the standard-setting bodies have significant ongoing projects that could affect the ultimate differences between Canadian GAAP and IFRS and their impact on the company's consolidated financial statements in future years.

#### Foreign currency translation IAS 21

Under IFRS the financial statements of subsidiaries are translated into consolidated financial statements currency as follows: All assets and liabilities are translated at the closing rate at the balance sheet date. Income statement is translated at exchange rates at the dates of the transactions. All resulting exchange differences are recognized as a separate component of equity.

Presently, the company follows the temporal method where only monetary assets and liabilities of its integrated foreign operations are translated at balance sheet exchange rate and exchange differences are recognized in the income statement.

#### Intangible assets impairment IAS 36

Canadian GAAP generally uses a two-step approach to impairment testing: (1) comparing asset carrying values with undiscounted future cash flows to determine whether impairment exists; and (2) measuring any impairment by comparing asset carrying values with fair values. Under IAS 36, a one-step approach for both testing for and measuring impairment is used, with asset carrying values being compared directly with (i) the higher of fair value less costs to sell; and (ii) value in use (which uses discounted future cash flows). This may potentially result in more write-downs where carrying values of intangible assets were previously supported under Canadian GAAP on an undiscounted cash flow basis but could not be supported on a discounted cash flow basis. However, the extent of any new write-downs may be partially offset by the requirement under IAS 36 to reverse any previous impairment losses where circumstances have changed such that the impairments have been reduced. Canadian GAAP prohibits reversal of impairment losses.

## **Risk Factors**

The business of the company is subject to a number of risks and uncertainties associated with its business for the marketing and distribution of the ESM<sup>TM</sup>.

### *Lack of Marketing Network*

At the current time the company has continued to develop new marketing networks throughout the world. A primary objective of the company's business plan includes the identification and securing new networks however there can be no assurances of the amount of revenue that will be generated from these efforts. To mitigate the risk to a certain extent, the company when granting exclusive marketing rights for a territory will require a new distributor to agree to purchase a minimum amount of inventory in each year of the agreement to retain exclusivity. This provides the company with revenue from these territories.

### *Reliance on Key Personnel*

The company is dependent on certain key members of its management team, and in particular Mr. George Burnes, President, to complete the market development of the ESM<sup>TM</sup> and ECO<sup>3TM</sup>. If any of these individuals are unavailable for any reason, the ability of the company to implement its business plan in the short term would be materially and adversely affected. To mitigate the risk to a certain extent, key personnel in the companies' subsidiaries have been added to complete new marketing initiatives in developing markets.

#### *Concentration on a single product and supplier*

Presently, as the company is placing its sole focus on the distribution of the ESM<sup>TM</sup>, and ECO<sup>3TM</sup>, any unfavorable change in the quality of the product or the introduction of similar products by competitors in the market would affect the company's competitive advantage to a great extent. To mitigate the risk to a certain extent, the company expanded the application of its technology and made available the ECO3 which allows for sales initiatives in new vertical markets and new distribution channels previously not available.

The company also relies on Tiller Manufacturing for the manufacturing of its major products, ESM<sup>TM</sup> and ECO<sup>3TM</sup>.

#### *Currency risk*

Presently the company's major business dealings are transacted in foreign currencies. Direct sales are in the United States currency as well as the majority of sales to distributors are also in US currency. Any devaluation in these currencies would affect the company's future revenues. Also, a significant portion of the company's expenses are in Canadian and Australian currencies. As long as the majority of revenue remains in US currency, appreciation in the value of Canadian and Australia currencies relative to the US dollar would worsen that affect on net operating results. To mitigate this risk to certain extent, recently the company has had most of its new purchases and sales contracts denominated in US dollars.

#### *Competition Risk*

Although the ESM<sup>TM</sup> and ECO<sup>3TM</sup> are unique products and the company is not aware of any direct competitors, there is a possibility that new technologies will be developed that allow direct competition as energy saving activities gain more and more public support. These potential competitors may have greater resources and networking and the company may not be able to successfully compete with them. This direct competition may adversely affect the company's operating results and even its ability to sustain the business.

#### **Additional Information**

Additional information relating to the company, including the company's latest Annual Financial Statements and news releases can be located on the SEDAR website at [www.sedar.com](http://www.sedar.com) or on the company's website at [www.smartcool.net](http://www.smartcool.net)