

# Management's Discussion and Analysis

**For the three months ended June 30, 2011**

The following Management Discussion and Analysis ("MD&A"), dated August 26<sup>th</sup>, 2011, 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 audited consolidated financial statements for the year ended December 31, 2010.

## 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



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Vancouver, Canada, 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. The Vancouver office supports distributors through the Americas and the Asia-Pacific On February 28, 2011, Smartcool EMEA acquired all the outstanding shares of the third party distributor Smartcool UK Ltd., which held the exclusive rights for sale of ESM products to customers in UK and Ireland region.

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The main reason for the acquisition was to change the relationship with those customers. Prior to the acquisition Smartcool EMEA sold equipment to Smartcool Systems UK Ltd. at wholesale prices, who then in turn charged customers retail prices. After the acquisition Smartcool EMEA, doing business as Smartcool Systems UK Ltd., will directly manage these well established customer accounts improving gross revenue and profitability. Another significant factor in the acquisition is accessing enhanced technical abilities and knowledge transfer from UK team's large database of installations. This allows the merged entity to leverage this knowledge to grow the business through expanding direct selling opportunities and third party distributor support. The main area for growth in the upcoming years is in this geographic region and the acquisition allows for a stronger platform to build from.

Across the four branches of the Company, Smartcool employs 28 people, including the management team and a full office of 8 people in Vancouver.

The following graphic illustrates the current structure of the Smartcool organization including third party distributors:

## International Distribution Network



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

● **Independent Distributors**

### 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 new 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 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 quarter ended June 30, 2011 are as follows:

Revenue was \$276,398, decreased by \$861,465 or 76%, compared to \$1,137,863 for the second quarter of 2010. Total assets were \$9,547,364 compared to \$5,890,067 for the second quarter of 2010. Net loss for the quarter was \$1,253,291 (\$0.02 per share), compared to \$246,073 (\$0.01 per share) for the second quarter of 2010.

The Company had \$873,797 in cash and cash equivalents at the end of the quarter, compared to \$514,719 in cash and cash equivalent at the end of the second quarter of 2010.

Current liabilities at the end of the quarter were \$3,615,361 which include the current portions of purchase obligations, finance leases, debentures and deferred tenant inducement totaling \$2,634,983. Long-term liabilities were \$190,098, consisting of acquisition obligations of \$108,838, finance leases of \$31,142 and deferred tenant inducement of \$50,118.

### Selected Annual Information

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

	December 31, 2008	December 31, 2009	December 31, 2010
Revenue	\$1,175,168	\$2,402,081	<b>\$4,209,645</b>
Selling, General & Administrative	\$4,417,466	\$4,033,161	<b>\$3,272,909</b>
Net loss	\$(4,370,884)	\$(3,390,930)	<b>\$(1,619,771)</b>
Net loss – Per Share (Basic and Diluted)	\$(0.11)	\$(0.08)	<b>\$(0.04)</b>
Total Assets	\$8,281,026	\$5,754,220	<b>\$5,343,272</b>
Total Long Term Liabilities	\$624,467	\$646,436	<b>\$531,167</b>
Cash Dividends	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Result of Operations

### Revenue

Major delays of multi-site installations experienced by both Smartcool and its distributors have resulted in a sharp decrease in the quarter's revenue. Distribution sales for the quarter decreased to \$248,719 from \$569,390 for the same quarter of 2010. Direct sales decreased to \$27,679 from \$568,473 for the same quarter of 2010. Management expects these installation projects to start early in the fall and bring the company's revenue stream back to its usual growth.

### Gross profit

Gross profit for the quarter was \$156,231 compared to \$834,084 for the same quarter of the previous year. Profit margin of 57% was well below the expected range, as certain costs have been incurred to prepare for the delayed installation projects. Gross margin for the same quarter of the previous year was 73%, within the expected range.

### General and administrative expenses

General and administrative ("G & A") expenses increased to \$1,017,941 from \$802,461 for the same quarter of 2010. This increase is primarily the result of the acquisition of Smartcool UK. As this subsidiary's main operating focus is direct sales, it has incurred significant costs of G&A in the period, including marketing and technical training, in anticipation of large installation projects.

Significant increases were related to salaries expense, \$549,825 compared to \$387,848 for the same quarter of 2010, professional fees, \$65,775 compared to \$17,286 for the same quarter of 2010, and marketing expenses, \$17,555 compared to \$1,683 for the same quarter of 2010.

### Schedule of selling, general and administrative expenses

	Three months ended June 30, 2011	Three months ended June 30, 2010
Management and consulting fees	\$93,259	\$105,417
Salaries and benefits	549,825	387,848
Professional fees	65,775	17,286
Investor relations and media	37,508	34,710
Travel	109,254	110,708
Rent, office and other expenses	162,320	146,492
Total selling, general & admin expenses	1,017,941	802,461
Stock-based compensation	106,395	71,146
Research & Development	3,428	14,666
Amortization	192,608	141,864
<b>Total operating expenses</b>	<b>\$1,320,372</b>	<b>\$1,030,137</b>

**Net loss**

Net loss for the quarter was \$1,253,291, increased by \$1,007,217 from \$246,073 for the same quarter of the prior year, due primarily to reduction in revenue. The loss per share (basic and diluted) for the second quarter was \$0.02, compared to \$0.01 for the same quarter of 2010.

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

**Comprehensive loss**

Comprehensive loss of \$1,264,283 consists of net operating loss (\$1,253,291) and foreign currency translation adjustment (\$10,992). As the functional currencies of Smartcool EMEA, Smartcool UK and Smartcool USA are different from the reporting currency (Canadian dollar), their monetary assets and liabilities as well as non-monetary assets and liabilities in the consolidated financial statements must be translated into the reporting currency based on June 30, 2011 exchange rate under IFRS. This method of foreign currency translation resulted in the above adjustment which is classified as a component of equity.

**Amortization**

Amortization expenses were \$192,608 for the quarter compared to \$141,864 for the same quarter of the prior year. Amortization on property and equipment was \$24,121 (June 2010 - \$27,371) and amortization of intangible assets was \$168,487 (June 2010 - \$114,493). Amortization of intangible assets was higher for the quarter as new assets have been acquired as part of February 28, 2011 business combination.

**Stock-based compensation**

Stock-based compensation costs for the quarter were \$106,395, compared to \$71,146 for the same quarter of 2010. A large number of options were granted to the company's employees and officers in December 2010 to replace their expired options. In April 2011, subsequent to the acquisition of Smartcool UK, its employees also received a significant numbers of options. These grants have resulted in increased expense for the period.

**Capital expenditures**

Capital expenditures for the quarter were \$9,099 (Second quarter of 2010 - \$0). These expenditures were primarily for the acquisition of testing equipment and office equipment for Smartcool UK.

**Intangible assets**

The Company acquired \$2,278,350 of intangible assets in relation to the acquisition of Abbotly.

Management has performed a review of the carrying value of its distribution agreements. As a result of its assessment, in 2008 the Company recognized an impairment of \$116,914 related to distribution agreements. As a result of this impairment recognition, the total

cost of distribution rights was reduced by \$148,799 to \$1,835,701. As at June 30, 2011, distribution rights consist of:

ESM™ Distribution agreements (b)	\$1,835,701
Other distribution rights	\$26,140
<b>Total</b>	<b>\$1,861,841</b>

No impairments were recorded in 2011 and 2010 and the impairment loss recognized in 2008 was not reversed upon transition to IFRS.

On July 11, 2008, the Company 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"). 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 installments over four years with the last payment due on July 16, 2012. These installments 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 these amounts are fully paid. The amendment had no material impact on the company's financial position and no gain or loss was recognized in 2009. As at June 30, 2011, the balance of £469,965GBP, including accrued interest of £19,965GBP, remained outstanding.

On February 28, 2011, the Company acquired \$3,768,164 of intangible assets in relation to the acquisition of Smartcool UK as described in note 3. These intangible assets include the distribution rights of the ESM™ in the United Kingdom.

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

Smartcool amortizes long-lived assets over the estimated useful life of the asset. Evaluation of all long-lived assets occurred periodically for impairment in accordance with Section 3062 and Section 3063 of the CICA Handbook.

Under IFRS, long-lived assets including property and equipment and intangible assets with a finite life are assessed for indications of impairment at the end of each reporting period. If such indications exist, then the recoverable amount of the asset or cash-generating unit ("CGU") is estimated.

An impairment loss is recognized when the carrying amount of the asset or CGU exceeds its recoverable amount. A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of cash inflows from other assets or groups of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset or CGU.

Impairment losses are recognized in respects to CGU's are first allocated to reduce the carrying amount of any goodwill allocated to cash generating units, and then to reduce the carrying amount of the other assets in the unit on a pro-rata basis. Impairment losses are recognized in profit and loss for the period it is identified.

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 recoverable amount.

At December 31, 2010, to prepare for IFRS transition, we have conducted an impairment test on our definite lived intangibles assets. The 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. 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 minimum purchase requirements in conjunction with 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 2010 cost structures. The 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 year 2010.

## Summary of Quarterly Results

	Sep 2009 (\$)	Dec 2009 (\$)	Mar 2010 (\$)	June 2010 (\$)
Total Revenues	681,811	983,870	634,927	1,137,863
Loss	(471,100)	(585,565)	(751,757)*	(246,073)*
Loss Per Share – basic & diluted	<b>(0.01)</b>	<b>(0.01)</b>	<b>(0.02)</b>	<b>(0.01)</b>

	Sep 2010 (\$)	Dec 2010 (\$)	Mar 2011 (\$)	June 2011 (\$)
Total Revenues	1,098,949	1,337,906	943,958	276,398
Loss	(240,671)	(381,270)	(578,824)	(1,253,291)
Loss Per Share – basic & diluted	<b>(0.01)</b>	<b>(0.01)</b>	<b>(0.01)</b>	<b>(0.02)</b>

\* IFRS adjusted

### Liquidity and Capital Resources

Since incorporation, the Company has financed its operations through the issuance of equity. During the first quarter of 2011, the Company issued 13,333,330 units (consisting of one common share and one-half warrant) for gross proceeds of \$4,000,000. A large portion of the capital raised has been used to pay for the acquisition of Smartcool UK. As at June 30, 2011, the Company had \$873,797 in cash and cash equivalents.

Working capital deficit at the end of the second quarter was \$659,555 compared to working capital of \$1,468,107 at the end of the second quarter of 2010. Part of the obligations under Smartcool UK acquisition contract, scheduled for payments within a year and classified as current liabilities, can be deferred at the Company's discretion, however. These installments total £750,000GBP (Cdn\$1,161,795).

The Company consumed cash resources of \$681,818 during the quarter, compared to \$562,387 for the same quarter of the previous year. The average monthly burn for the quarter was \$227,000 compared to \$187,000 for the same quarter of the previous year. While operating expenses have been closely monitored and significant cash consumption improvement has been achieved since the start of the global economic crisis, the acquisition of Smartcool UK's non-cash working capital partly resulted in the increase in cash used in operations. To ensure steady cash inflow from operating activities, management has placed stronger emphasis on accounts receivable collection effort.

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.

To date the Company has been able to raise capital to finance its operations whenever necessary. The Company's ultimate success and the recoverability of its 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.

On February 22, 2011, the Company completed a private placement raising gross proceeds of \$4,000,000 from the issuance of 13,333,330 units comprising one common share and one half of one common share purchase warrant demonstrating the Company's success with raising financing for future operations and business developments.

### **Debentures**

In May 2010, the Company completed its offer of 122 units of debenture and share purchase warrants for aggregate proceeds of \$610,000. The debenture is not redeemable by the holder.

Each unit comprises of a debenture in the principal amount of \$5,000 plus 8,600 warrants, issued at a price of \$5,000 per unit. The debentures have no stated interest rate. They are for a term of three years and entitle the holder to receive distribution of \$150 each quarter per \$5,000 of principal amount with an additional distribution of \$150 if the debenture is repaid by December 31, 2011 and two additional distributions (for a total of \$300) if the debenture is repaid after December 31, 2011, but before maturity. The debentures also receive 5% of gross cash revenue to be paid towards the outstanding principal of the debenture each quarter. The debentures are secured by a general security agreement over the assets of the Company.

The payment of quarterly principal payments owing during the first twelve-month period commencing from the closing date, however, may be delayed and paid on a date that is 13 months from the closing date. When such payments are delayed, the Company is required to deposit into a separate trust account, on a quarterly basis, an amount equal to any first year quarterly principal payment that would otherwise have been payable. As at Jun 30, 2011, total principal payments of \$66,833 have been deferred.

One whole warrant entitles the holder to purchase one common share at the price of \$0.50 per share for a period of three years from the date of issuance. If the Company's share trade at an average price of \$0.80 per share for a period of 60 days, the Company, at its election, may force exercise or cancellation of the warrants. If the Company repays

any portion of the principal amount of the debentures prior to January 1, 2011, the number of common shares purchasable pursuant to the warrants shall be decreased proportionately to the amount of principal so repaid.

Finder's fees equal to 10% of the aggregate proceeds from the offerings of the units were payable to the brokers.

On February 9, 2010, the Company closed the first tranche of its debenture offering for gross proceeds of \$250,000. On March 19, 2010, the Company closed the second tranche for gross proceeds of \$85,000. On April 29, 2010, the Company closed the third tranche for gross proceeds of \$200,000 and on May 4, 2010, closed the last tranche of its debenture offering for gross proceeds of \$75,000.

The net proceeds received from the issue of debentures have been split between the financial liability component and an equity component, representing the fair value of the share purchase warrants, as follows:

	\$
Net proceeds of issue	552,751
Equity component	8,101
Liability component at date of issue	544,650

The equity component of \$8,101 has been credited to equity, Share Purchase Warrants (note 13(d)). The liability component is measured at amortized cost. Interest expenses for the three and six months ended June 30, 2011 were \$32,640 and \$70,903 (June 30, 2010 - \$30,483 and \$39,077), calculated by applying weighted average effective interest rate of 26% to the liability component. Interest payment total of \$36,600 and principal payment total of \$115,269 were paid during the six months ended June 30, 2011. As at June 30, 2011, the carrying amount of these debentures was \$534,302.

	<b>Feb. 9, 2013</b>	<b>March 19, 2013</b>	<b>April 29, 2013</b>	<b>May 4, 2013</b>	<b>Total</b>
Maturity date					
Debenture principal	\$250,000	\$85,000	\$200,000	\$75,000	\$610,000
Balance on issuance date	223,165	75,550	178,830	67,105	544,650
Accrued interest	54,555	16,193	32,588	11,970	115,306
Interest payment	(21,750)	(6,290)	(12,198)	(4,450)	(44,688)
Balance Dec. 31, 2010	255,970	85,453	199,220	74,625	615,268
Accrued interest	26,941	9,848	24,751	9,363	70,903
Principal payment	(84,479)	(23,661)	(5,185)	(1,944)	(115,269)
Interest payment	(15,000)	(5,100)	(12,000)	(4,500)	(36,600)
Balance June 30, 2011	\$183,432	\$66,540	\$206,786	\$77,544	\$534,302
Less: current portion	(183,432)	(66,540)	(206,786)	(77,544)	(534,302)
Balance	-	-	-	-	-

**Commitments**

**a. Premise lease**

The Company has entered into three lease agreements to lease office facilities in Vancouver and Alton, Hampshire. These leases will expire in five years. The future minimum lease payments commitments for the Company's office premises are:

	\$
2011	68,256
2012	105,526
2013	107,101
2014	108,226
2015	76,726
2016	9,035
	<u>474,870</u>

For the three and six months ended June 30, 2011, the Company's rent expense including certain operating expenses and property taxes was \$35,921 and \$84,077 (2010 - \$39,360 and \$81,915) and its sublease revenue was \$3,000 and \$6,000 (2010 - \$4,117 and \$10,467).

**b. 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 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. The Company did not record any expense for the three and six months ended June 30, 2011. As at June 30, 2011, no royalties were payable to Abbotly USA (June 30, 2010 – US\$3,496).

## Transactions with Related Parties

### Trading transactions

The Company's related parties consist of companies owned by executive officers and directors as follow:

	Nature of Transaction
384518 BC Ltd.	Consulting
Windstone Financial Corp.	Consulting
Key Management	Consulting/General and administrative
Richards Buell Sutton LLP	Legal Services
TECC. Services Ltd.	Premises rent
Magnum Energy Inc.	Rental income

The Company incurred the following expenses in connection with the companies owned by key management and directors. 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.

	Note	Three months ended		Six months ended	
		June 30, 2011	June 30, 2010	June 30, 2011	June 30, 2010
		\$	\$	\$	\$
Consulting	(i)	58,089	61,986	121,183	125,219
Legal fees	(ii)	3,726	8,173	17,254	28,578
Rent expense	(iii)	-	8,472	12,777	17,777
Lease Income	(iv)	(3,000)	(4,117)	(6,000)	(10,467)

During the three months ended June 30, 2011, consulting fees of \$25,089 were charged by directors of the Company (June 2010 - \$28,986). Consulting fees of \$33,000 were charged by two companies with common directors during the above periods (June 2010 - \$33,000). As at June 30, 2011, \$23,240 was owed to these related parties (June 30, 2010 - \$20,984).

During the six months ended June 30, 2011, consulting fees of \$55,183 were charged by directors of the Company (June 2010 - \$59,719). Consulting fees of \$66,000 were charged by two companies with common directors during the above periods (June 2010 - \$65,500). As at June 30, 2011, \$23,240 was owed to these related parties (June 30, 2010 - \$20,984).

The Company uses the services of a law firm of which a director is a partner. During the three and six months ended June 30, 2011, fees in the amounts of \$3,726 and \$17,254 charged to the Company for legal services provided. As at June 30, 2011, \$3,812 was owed by this related party (June 30, 2010 - \$62,215).

The Company rents its office in the United Kingdom from a company with a common director. During the six months ended June 30, 2011, rent expense was \$12,777 (June 2010 –\$17,777). There was no rent expense in the three months ended June 30, 2011 (June 2010 - \$8,472). These transactions have been charged to general and administrative in the statement of operations, comprehensive loss and deficit. At June 30, 2011, no amounts were owed to this related party (June 30, 2010 - £2,416 GBP (CDN\$3,830)).

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, 2011, sublease income was \$3,000 and \$6,000 (June 2010 - \$4,117 and \$10,467). At June 30, 2011, no amounts were owed from these related parties (June 30, 2010 - \$0).

### Compensation of key management personnel

The Company incurred the following expenses in connection with compensation of key management personnel.

	June 30, 2011	December 31, 2010
Short-term benefits	52,960	74,104
Share-based payments	106,915	205,728
Total	159,875	279,832

### Outstanding Share Data

The authorized share capital of the Company is an unlimited number of common shares without par value. As at June 30, 2011 the Company had 60,808,726 common shares outstanding. The weighted average number of common shares outstanding for the three months ended June 30, 2011 was 60,545,341 (December 31, 2010 – 45,787,149)

The increase in average number of common shares outstanding was a result of the issuance of 13,333,330 common shares pursuant to February 22, 2011 private placement. As at August 26, 2011, the outstanding shares are 60,808,726 and diluted are 76,541,258.

### Warrants and Stock options

As at June 30, 2011, there were 9,342,532 share purchase warrants and 6,410,000 stock options outstanding which collectively could result in the issuance of 15,732,532 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, 2011 there were 4,875,625 exercisable options with a weighted average exercise price of \$0.34. During the quarter ended June 30, 2011, the company granted 577,500 options to employees and officers and 480,000 options to a consultant. As at August 26, 2011, there were 9,342,532 outstanding warrants and 6,390,000 outstanding options. The outstanding options have a weighted average exercise price of \$0.33.

## 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 meet its acquisition obligations and other current obligations in 2011, the Company has raised 4 million dollars through 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, 2011 the total of such payments was £150,000GBP. In addition, late payments under Smartcool UK acquisition obligations are subject to interest based on prime rate. As at June 30, 2011 the total of such payments was £250,000GBP.

Details of the Company's financial instruments as at June 30, 2011 and risk exposures are disclosed in note 18 to the consolidated financial statements.

## Critical Accounting Policies and Estimates

### Business combinations

The identifiable assets, liabilities and contingent liabilities of a subsidiary, joint venture entity or an associate, which can be measured reliably, are recorded at their provisional fair values at the date of acquisition. Goodwill is the fair value of the consideration transferred (including contingent and previously held non-controlling interests) less the fair value of the Company's share of identifiable net assets on acquisition. Transaction costs incurred in connection with the business combination are expensed. Provisional fair values are finalized within twelve months of the acquisition date.

Where the fair value of the identifiable net assets acquired exceeds the cost of the acquisition, the surplus, which represents the discount on the acquisition, is recognized directly in the statement of operations and total comprehensive loss in the period of acquisition.

### Revenue Recognition

Revenue from the sale and installation of the ESM™ and ECO3™ is recognized when the ESM™ & ECO3™ have been installed, significant risks and rewards of ownership of the equipment have been transferred to the customer, the Company does not retain continuing managerial involvement or effective control over the equipment, the sales price can be determined and probably collectible, and the cost of the transaction can be measured reliably.

Revenue from the international distribution of the ESM™ & ECO3™ is recognized when the equipment has been shipped, title has been transferred, the sales price has been determined and the cost of the equipment can be measured reliably. Revenue is also recognized when equipment has been ordered and laid away as instructed by the customer, the sales price has been determined and a significant portion of it has been paid. Provisions are established for estimated warranty costs at the time revenue is recognized. The Company records deferred revenue when cash is received in advance of the above revenue recognition criteria being met.

### Share-based Payments

The fair value of all stock options granted to employees is determined using the Black-Scholes option pricing model, and the resulting value is charged to operations over the vesting period.

The fair value of options granted to non-employees is determined using fair value of the goods or services received. The resulting value is charged to operations when 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 equity reserve is recorded when stock options are expensed. When stock options are exercised, share capital is credited by the sum of the consideration paid and the related portion previously recorded in equity reserve. At the time of grant, the expense is determined based on estimated forfeiture rate. The expense will be adjusted to recognize the effect of actual forfeitures as they occur.

The fair value of warrants issued to agents for their finder's fee is determined using the Black-Scholes option pricing model and the resulting value is charged to share issuance costs.

### Intangible assets

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

ESM™ Intellectual property	10 years
North American distribution rights	10 years
United Kingdom distribution rights	9 years
Distribution agreements	10 - 15 years
Supplier agreements	10 years

Total amortization for the three months ended June 30, 2011 of \$168,487 is included under Net loss for the period on the statement of operations.

### Impairment

- Property and Equipment and intangible assets with a finite useful life  
Long-lived assets including property and equipment and intangible assets with a finite life are assessed for indications of impairment at the end of each reporting period. If such indications exist, then the recoverable amount of the asset or cash-generating unit ("CGU") is estimated.

An impairment loss is recognized when the carrying amount of the asset or CGU exceeds its recoverable amount. A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of cash inflows from other assets or groups of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset or CGU.

Impairment losses are recognized in respects to CGU's are first allocated to reduce the carrying amount of any goodwill allocated to cash generating units, and then to reduce the carrying amount of the other assets in the unit on a pro-rata basis. Impairment losses are recognized in profit and loss for the period it is identified.

- Intangible assets with an indefinite useful life  
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 recoverable amount.

**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.

**Accounting standards issued but not yet effective**

Standards issued but not yet effective up to the date of issuance of the Company's condensed consolidated financial statements are listed below.

**Financial Instruments – Disclosures:** The International Accounting Standard Board (the "IASB") has issued an amendment to IFRS 7, "Financial Instruments: Disclosures" (the "IFRS 7 amendment") requiring incremental disclosures regarding transfers of financial assets. The IFRS 7 amendment is effective for annual periods beginning on or after July 1, 2011. The Company will apply the amendment at the beginning of the 2012 financial year and does not expect the implementation to have a significant impact on disclosures

**Deferred Taxes – Recovery of Underlying Assets:** The IASB has issued an amendment to IAS 12, "Income Taxes" (the "IAS 12 amendment") that introduces an exception to the general measurement requirements of IAS 12 in respect of investment properties measured at fair value. This amendment is effective for annual periods beginning or after January 1, 2012. The Company will apply the amendment at the beginning of the 2012 financial year and does not expect the implementation to have a material impact on the Company's financial statements.

**Financial Instruments:** The IASB has issued a new standard, IFRS 9, "Financial Instruments" ("IFRS 9") which will ultimately replace IAS 39, "Financial Instruments: Recognition and Measurement ("IAS 39") . The replacement of IAS 39 is a multi-phase project with the objective of improving and simplifying the reporting of financial instruments and the issuance of IFRS 9 is part of the first phase of this project. This standard becomes effective on January 1, 2013. The Company has not assessed the impact of this new standard.

**Consolidated Financial Statements:** The IASB has issued a new standard, IFRS 10, which establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more other entities. IFRS 10 supersedes IAS 27 "Consolidated and Separate Financial Statements" and SIC-12 "Consolidation—Special Purpose Entities" and is effective for annual periods beginning on or after January 1, 2013. Earlier application is permitted. The company is currently evaluating the impact of this standard on its consolidated financial statements.

**Fair value measurements:** The IASB has issued IFRS 13, which defines fair value and sets out in a single IFRS framework for measuring fair value and requires disclosures about fair value measurements. The IFRS 13 applies to IFRSs that require or permit fair value measurements or disclosures about fair value measurements (and measurements, such as fair value less costs to sell, based on fair value or disclosures about those

measurements), except in specified circumstances. IFRS 13 is to be applied for annual periods beginning on or after January 1, 2013. Earlier application is permitted. The company is currently evaluating the impact of this standard on its consolidated financial statements.

The IASB has issued an amendment to IAS 1 “Presentation of financial statements” (“IAS 1 amendment”), which requires the presentation of items of other comprehensive income (“OCI”), classified by nature, to be grouped into items that will not be reclassified subsequently to profit or loss; and items that will be reclassified subsequently to profit or loss when specific conditions are met. The IAS 1 amendment is effective for annual periods beginning on or after July 1, 2012. IAS 1 amendment is not applicable to the Company.

### **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™.

#### **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™ and ECO<sup>3</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™, and ECO<sup>3</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™ and ECO<sup>3</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™ and ECO<sup>3</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).