

# LCTI LOW CARBON TECHNOLOGIES

## INTERNATIONAL INC.

(formerly Encap Investments Inc.)

### MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE MONTHS ENDED NOVEMBER 30, 2012

#### **Introduction**

This management discussion and analysis ("MD&A"), dated March 22, 2013 provides a review of the financial condition and the results of operations of LCTI Low Carbon Technologies International Inc. (the "Company" or "LCTI"). The review is provided to enable the reader to assess the significant changes in the financial condition of the Company as at and for the three months ended November 30, 2012. This MD&A with the unaudited condensed consolidated financial statements and notes thereto of the Company for the three months ended November 30, 2012 financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts presented are stated in United States dollars, unless otherwise indicated.

The following discussion and analysis of the operations, results and financial position of (the "Company") should be read in conjunction with the condensed consolidated interim financial statements and the notes thereto for the three months ended November 30, 2012. Additional information relevant to the Company's activities can be found on SEDAR at [www.sedar.com](http://www.sedar.com). The date of this report is March 22, 2012 and incorporates discussion by management on events that have occurred subsequent to the end of the reporting period.

#### **Forward Looking Statements**

Certain statements contained in this MD&A constitute forward-looking information within the meaning of securities laws. Forward-looking information may relate to our future outlook and anticipated events or results and may include statements regarding the future financial position, business strategy, budgets, litigation, projected costs, capital expenditures, financial results, taxes and plans and objectives of or involving the Company. Particularly, statements regarding our future operating results and economic performance are forward-looking statements. In some cases, forward-looking information can be identified by terms such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "intend", "estimate", "predict", "potential", "continue" or other similar expressions concerning matters that are not historical facts. Examples of such statements include the Company's intention to complete to complete future financings, acquisitions or investments. Forward looking-information is subject to certain factors, including risks and uncertainties, which could cause actual results to differ materially from what we currently expect. Forward-looking information contained in this MD&A is based on our current estimates, expectations and projections, which we believe are reasonable as of the current date. You should not place undue importance on forward-looking information and should not rely upon this information as of any other date. These forward-looking statements are made as of the date hereof and the Company assumes no obligation to update or review them to reflect new events or circumstances except as required by applicable securities laws.

#### **Background**

LCTI Low Carbon Technologies International Inc. (the "Company") was incorporated pursuant to the provisions of the Business Corporations Act (British Columbia) on August 11, 2008. The head

office of the Company is located at 4010 Bluebonnet St. Suite 209 Houston, TX 77025, and its registered and records is located at 5587 Westhaven Road, West Vancouver, BC V7W 3E9. The unaudited condensed consolidated financial statements for the three months ended November 30, 2012 were approved by the Board of Directors on March 22, 2013.

The Company was classified as a Capital Pool Company (“CPC”) as defined in the TSX Venture. On September 30, 2008, the Company received final receipts for a prospectus and became a reporting company in British Columbia and Alberta. The Company completed its initial public offering (the “offering”) on December 23, 2008.

On January 31, 2012 the Company changed its name to LCTI Low Carbon Technologies International Inc. The Company was delisted from the NEX Board of the TSX Venture Exchange on February 15, 2012. The Company completed a merger transaction (the “Merger”) with Sustainable Energy Properties (“SEP”) on February 10, 2012 and trading commenced on Wednesday February 15, 2012 on the Canadian National Stock Exchange (“CNSX”) under the trading symbol LCT. SEP is a clean technology and environmental solutions and services provider.

**The Company’s primary objective is to continue to develop the business of SEP, which business is now assumed by LCTI as a result of the reverse takeover (“RTO”).**

At November 30, 2012, the Company has a working capital deficiency of \$2,105,792 and has accumulated losses of \$10,095,857 since inception and expects to incur further losses in the development of its business. The Company may continue to have capital requirements in excess of its currently available resources. In the event the Company’s capital resources are insufficient to fund operations the Company may be required to seek additional financing. There can be no assurance that the Company will have sufficient financing to meet its future capital requirement or that additional financing will be available on terms acceptable to the Company in the future.

The Company’s ability to continue operations is uncertain and is dependent upon the ability of the Company to obtain the necessary financing to meet the Company’s liabilities and commitments as they become payable, the successful acquisition of an interest in assets or a business and the ability to generate positive cash flows from future profitable production or operations.

The Company is hopeful of completing equity financing in 2013.

## **Corporate Highlights**

### *Industrial Commercial Mechanical LLC*

On January 16, 2013, subsequent to the three months ended November 30, 2012, a former owner and manager of Industrial Commercial Mechanical LLC (“ICM”) transferred 25.5% of the membership units of ICM to the Company. The Company now owns 50% of ICM. ICM had revenues of \$1,000,452 and net income of \$95,143 for the three months ended November 30, 2012. ICM began operating in February of 2012 and had revenues of \$751,322 and a net loss of \$118,886 for the year ended August 31, 2012. ICM continues to operate under the Company’s energy efficiency division as its principal services are the development, design, engineering and installation of projects that reduce the energy and operations and maintenance, or O&M, costs of customers' facilities. These projects will typically include a variety of measures customized for the facility and designed to improve the efficiency of major building systems, such as heating, ventilation, air conditioning and lighting systems. ICM will typically commit to customers that energy efficiency projects will satisfy agreed upon performance standards upon installation or achieve specified increases in energy efficiency. In most cases, the forecasted lifetime energy and operating cost savings of the energy

efficiency measures installed will defray all or almost all of the cost of such measures. ICM can assist customers in obtaining third-party financing for the cost of constructing the facility improvements, resulting in little or no upfront capital expenditure by the customer. After a project is complete, ICM may operate, maintain and repair the customer's energy systems under a multi-year O&M contract, which provides them with recurring revenue and visibility into the customer's evolving needs.

## **Operations**

The operations of LCTI are divided into the following three divisions:

1. ***Energy Efficiency***-This division is responsible for provide energy efficiency and related construction services.
2. ***Environmental*** –This division is responsible for the development of mitigation banks and environmental credits.
3. ***Technology Management***-This division is responsible for the acquisition and development of clean technologies.

### ***Energy Efficiency***

The company energy efficiency division provides a broad range of comprehensive energy solutions including designs and implementation of energy savings projects. The division performs an in-depth analysis of the property, designs an energy efficient solution, installs the required elements, and maintains the system to ensure energy savings during the payback period. The savings in energy costs is often used to pay back the capital investment of the project over a five- to twenty-year period, or reinvested into the building to allow for capital upgrades that may otherwise be unfeasible. To date, this division has generated all revenues of the Company.

Included in this division are the operations of Industrial Commercial Mechanical LLC, an affiliate LCTI company that provides a broad range of comprehensive energy solutions including designs and implementation of energy savings projects, energy conservation, energy infrastructure outsourcing, power generation and energy supply, and risk management. The Company performs an in-depth analysis of the property, designs an energy efficient solution, installs the required elements, and maintains the system to ensure energy savings during the payback period. The savings in energy costs is often used to pay back the capital investment of the project over a five- to twenty-year period, or reinvested into the building to allow for capital upgrades that may otherwise be unfeasible. As of November 30, 2012, the Company owns 24.5% of Industrial Commercial Mechanical LLC.

ICM's core competencies include the following:

- Equipment Efficiency
- Equipment replacement, system component retrofit, energy recovery equipment installation
- Load Management
- Energy source switching, dual fuel capability, operating schedule modifications, converted energy storage
- Operational Efficiency
- Operating procedures modification, controls addition, control sequence refinement, maintenance practices alteration
- Process Productivity
- Production flow refinement, capacity bottlenecking reduction, production line speed increases, new process technology

Also included in this division are the operation of wholly owned subsidiary Teposolar Technologies Corp. (“Teposolar”) and its subsidiary Commercial and Institutional Mechanical LLC (“C&I”). Acquired in April of 2011, Teposolar’s wholly owned subsidiary C&I, provides energy efficiency and related mechanical and electrical construction services that focus on large scale institutional clients. C&I has successfully completed projects ranging from schools to hospitals and the Company intends to utilize the experience of C&I to expand into building integrated and commercial solar projects that offer savings in operating costs for commercial and industrial developments.

### ***Environmental***

Mitigation banking is the restoration, creation, enhancement, or preservation of a wetland, stream, or habitat conservation area which offsets expected adverse impacts to similar nearby ecosystems. The goal is to replace the exact function and value of the specific wetland habitats that would be adversely affected by a proposed development project. Upon replacement of function and value of the habitat, credits are issued and become available for purchase for the developer of a project that is adversely affecting wetland habitats.

East Bay Farms, LLC (“East Bay”), an affiliate LCTI company is in the process of receiving U.S. Army Corps of Engineers approval for a 1,900 acre wetland mitigation bank known as the Gulf Coastal Plains Wetland Mitigation Bank. When approved, this mitigation bank will provide mitigation credits that will compensate for adverse impacts to U.S. Coastal and wetland areas, resulting from developments and projects along the coastline from the Texas/Louisiana border to Surfside, Texas. East Bay expects final approval for the mitigation bank and to receive initial credit deposits in 2013. East Bay has already begun negotiating the deposits with several oil and gas firms. East Bay also has exclusive water rights to East Bay Bayou in Chambers County, Texas. LCTI currently owns 27.5% of East Bay.

LCTI also has plans for the development of a second mitigation bank site along the Texas Gulf coast. The site was secured in May of 2010 and consists of 3,500 acres of land located throughout the Bolivar Peninsula.

The Bolivar Peninsula is situated along The Gulf Intracoastal Waterway. The Gulf Intracoastal Waterway is a navigable inland waterway bordering the Gulf of Mexico and running approximately 1,050 miles from Carrabelle, Florida to Brownsville, Texas. The waterway provides a protected shipping channel designed primarily for barge transportation. An entrance to the Gulf Intracoastal Waterway is located at the southeastern point of the Bolivar Peninsula and runs the entire length of the peninsula. Thirty miles northwest of this entrance lies the Port of Houston. The Port of Houston is ranked first in the U.S. in foreign tonnage for 14 consecutive years and first in imports for 19 consecutive years.

For more information on the development of this second mitigation bank site see “Projects” section of this report.

### ***Technology***

#### ***Prestige Joint Venture***

Within this division lies LCTI’s 50% interest in Prestige Thermal Americas LLC. Prestige Thermal Americas LLC has secured the exclusive rights in the Americas to manufacture Advanced Conversion Technology Equipment to be employed in the Waste to Energy, Biomass to Energy and

Biomass to Liquid Market Sectors. C6 Technologies Inc. (“C6”) has granted GEI Green Energy Industries pty Ltd (“GEI”) rights to their patented waste to energy technology. GEI and C6 have provided a license to Prestige to manufacture the Prestige Thermal Energy Branded equipment. More importantly, the license provides for technology and manufacturing know how transfer, during the execution of projects in progress.

The technology employs an advanced form of gasification known as pyrolysis – an existing and proven technology. Pyrolysis is the thermo-chemical decomposition of material at elevated temperatures in an oxygen-deprived environment. The technology can process a wide variety of waste and biomass streams to produce a clean, high calorific value gas, which is suitable for utilization in gas engines to generate green electricity or further conversion to liquid fuels

#### *Waste to Energy Deployment Licenses*

The Company obtained deployment licenses from C6. for waste to energy and waste to fuel projects. The licenses grant the Company the right to utilize the technology in a specific geographic location. The licenses are registered on the date that the quotes are issued for each project. The license fees are based on the C6 standard fees. The license fees are not payable until permitting and financing occurs on each project. The ongoing monthly royalty fees are paid only upon project completion and project start up. The royalties are paid one month in arrears. The company currently has three projects that are registered with C6. The Company has already secured the three project sites via long term leases for which it intends to deploy the technology. The sites are as follows:

##### *1. Tri-State Commerce Park*

On November 30th, 2010 Project Green Lonestar 1 Corp., a wholly owned subsidiary of LCTI, entered into a lease agreement with Tishomingo County in Mississippi for a portion of the Tri-State Commerce Park. The lease is for a 65 acre portion of the 3,500 acre property as well 3,500 sq/ft of office space. LCTI has full access to utilize most of the site’s extensive infrastructure further described below. At LCTI’s option it may lease additional portions of the properties under similar terms and conditions. The fully furnished and operational office space has favorable lease payments of \$4,200 annually. Additional lease payments for the 65 acres being leased are calculated as 5% of gross revenue for onsite projects, with annual payments capped at \$350,000 once 20 full time employees are hired and \$250,000 once 30 full time employees are hired. The site is a former Tennessee Valley Authority Nuclear Power & NASA Rocket Facility and is located at the juncture of the Tennessee River & the Tennessee Tombigbee Waterway with connections to the Mississippi-Ohio-Missouri River Systems and the Gulf of Mexico. The entire site includes\*:

- 3500 Acres including buffer zone
- Site was developed at a cost of \$4 Billion dollars
- +/-169,000 square feet of furnished office facility
- Up to +/- 600,000sq ft. of industrial lease space
- Barge Dock
- 24/7 Security

- Dual feed electricity
- Onsite fire department
- Onsite rail and rail yard
- Bridge cranes up to 400 tons
- Electrical substation

*\*Information Report compiled: 12-2006. Prepared by the Tennessee-Tombigbee Waterway Development Council in cooperation with the Tennessee –Tombigbee Waterway Development Council. Information supplied by local officials.*

## 2. Texas

LCTI also has a long term lease in place for a ~13 acre site situated along Interstate 10 east of Beaumont Texas. The site is adjacent to a Goodyear manufacturing plant. The lease has a purchase option that can be triggered at any time during the term of the 25 year lease. LCTI intends to utilize this site for a future Waste to Energy facility.

## 3. Mexico

LCTI currently leases a 900 acre property located in Campeche along the Gulf of Mexico coast. The lease has a purchase option that can be triggered at any time during the term of the lease which is 25 years. The property is located approximately 10 miles away from the state capital city via a federal highway, and is conveniently close to the municipal landfill. Until the properties is utilized, developed, or improved by LCTI, the landlord is responsible for maintenance, taxes, and insurance. The site is located adjacent to a specialty woods lumber mill owned also owned by the landlord. Landlord and mill owner, Transforesta, intends to provide wood waste to LCTI for use in a future Waste to Energy facility.

The deployment licenses are valued at \$16,850,000. In determining the fair value of the deployment licenses, assumptions were made regarding future cash flows, comparable sales of similar projects, as well as general business and economic conditions that prevail and are expected to prevail. The relief from royalty approach is used to value the licenses. By nature, asset valuations are subjective and do not necessarily result in precise determinations. The valuation of the deployments licenses is subject to material measurement uncertainty. It is reasonably possible, based on existing knowledge, that change in future conditions in the near term could require a material change in the recorded amount. Significant inputs factors into the valuation were projected sales, a royalty rate of 19%, and discount rate of 30%. Changes in these inputs and market demand will have a material impact on the estimated value.

### *Cleantech Portfolio*

LCTI's current portfolio of low carbon technologies are to be utilized to provide growth opportunities for sub-licensees and current and future affiliates, subsidiaries and partners. To date, LCTI has acquired licensing rights to a number of technologies in various stages of development. LCTI is currently in negotiations to enter into sub licensing agreements with third parties in the USA and Mexico for certain technologies in the LCTI portfolio of technologies.

LCTI, including its subsidiaries, holds the following technology licenses:

1. "Technology, Manufacturing Assembly and Distribution License Agreement". (the "**LCL License.**")

The LCL License is a perpetual license to the technology, to manufacture, improve, market and sell the products and services produced from the exploitation of the technology in North America and the independent countries of Central America, South America and the Caribbean. The license is exclusive but for the fact that the company can sub-license all aspects of the license, including the right to third parties to grant sub-licenses themselves.

The technology covered by the LCL License includes the following:

LED streetlights - These LED street lights incorporate innovative thermal management techniques. The patented rapid heat transfer and cooling system can transfer heat at up to 140 times the rate of copper, a widely used conductor.

The performance of LED lights is dramatically impaired by heat, but the heat management nanotechnology, combined with bespoke optics technology, delivers a highly energy efficient LED streetlight. System includes bespoke optics technology that achieves an even spread of light over the road and footpath (optics and light distribution is an important requirement of LEDs as LED light is directional in nature, meaning that it does not glow in the same way an incandescent bulb does).

LED street lights, alongside LED warehouse and factory lighting units, are already in production and trials with a number of customers. The LED lights have been tested successfully in the harshest conditions in Qatar since September 2008. They are also installed in a number of locations in Korea as well as in Nigeria as a solar street light.

The heat transfer technology may be commercially exploited in any situation requiring heat transfer, ranging from the cooling of PC Microchips up to heavy duty applications such as cooling step-down transformers for the national electricity power grid. Liquid coolant is sandwiched in a mesh between two um-thin plates. The heat transfer process works by phase change (evaporation & liquefaction) at 'warm' and 'cool' junctions, and by circulatory capillary action along the mesh between these points.

Consideration for the license was 500,000 common shares of the Company valued at \$5,751,000. Following the 3 year term, the Company would have had the right to extend the "Exclusivity Period" for an additional 5 years with a payment of USD \$1,200,000 payable in cash or common shares of the Company. On February 25 2011, the agreement was amended to extend the "Exclusivity Period" indefinitely without further payment.

In addition to the above noted stock issuances, the Company will pay LCL 5% of revenue earned as a result of exploiting the technologies.

In determining the fair value of the LCL license, assumptions were made regarding future cash flows, comparable sales of similar projects, as well as general business and economic conditions that prevail and are expected to prevail. The relief from royalty approach is used to value the license. By nature, asset valuations are subjective and do not necessarily result in precise determinations. The valuation of LCL license is subject to material measurement uncertainty. It is reasonably possible, based on existing knowledge, that change in future conditions in the near term could require a material change in the recorded amount. Significant inputs factors into the valuation were projected sales, a royalty rate of 9%, and discount rate of 20%. Changes in these inputs and market demand will have a material impact on the estimated value.

2. “Technology, Capability, Manufacturing, Assembly and Distribution License Agreement” (the “ZCL License.”)

The ZCL License is a perpetual license to the technology, to manufacture, improve, market and sell the products and services produced from the exploitation of the technology in North America and the independent countries of Central America, South America and the Caribbean. The ZCL License is exclusive but for the fact that LCTI can sub-license all aspects of the license, including the right to third parties to grant sub-licenses themselves.

As payment, the Company issued 3,000,000 common shares valued at \$8,100,000 for the 15 technologies in the portfolio. Following the 3 year term, the Company would have had the right to extend the “Exclusivity Period” for an additional 5 years for no additional cost. At the end of the 3 year exclusive period, if the Company does not extend, or at the end of the additional 5 year extension period, the license shall continue on indefinitely as a non-exclusive license for no additional cost, or until the expiry of the last patent, if earlier.

Zero Carbon agrees that the first \$5,000,000 generated from the sale of shares of the Company received by Zero Carbon will be re-invested into the technology portfolio to develop demonstration facilities.

On the same day, the agreement was amended to extend the “Exclusivity Period” indefinitely. Consideration for the amendment was paid by transferring 800,000 common shares of the Company valued at \$2,160,000 from a director and officer to Zero Carbon. A corresponding amount has been recorded as contributed surplus as the director and officer does not require repayment.

Management estimated the value ascribed to the common shares issued to acquire the technology license at \$2.70 per share based on the implied price of similar stock issuances for acquisitions that took place around the same period.

The technology covered by the ZCL License includes the following:

#### Active thermoregulation technology

This system uses a patented heat pump to produce and store high temperature thermal transfer liquids that are either hot or super cooled that can be stored for weeks or months in very efficient thermally insulated storage tanks. These tanks enable enough thermal transfer liquids to be stored for a building to actively thermo regulate itself with minimal offsite energy input throughout the year.

#### Desalination and salt production

The patented water and salt separation system requires low energy to separate the water from the salt. The system uses an efficient heat exchanger to vacuum distil the seawater giving industrially pure water with saturated brine that can be further dried to produce salt. The technology produces hydrophobic plasma surface treatment: stainless steel is put through a plasma surface modification process so that no waterborne chemicals can react or adhere to machinery surfaces and no micro-organisms can adhere to machinery surfaces. An autonomous desalination pilot plant was built from such materials and independently, successfully field tested with power coming from the concentrated solar power modules described below.

Uniquely no chemicals need to be added to the input pipes to kill marine micro-organism growth or to prevent scaling, so the salt and water produced is pure.

No toxic brine is ejected into the sea, no greenhouse gases are produced when utilized with solar modules and the salt can be resold to cover the costs of the water processing.

The system can be produced in 2m<sup>3</sup> or 5m<sup>3</sup>/day modules to enable individual houses to have fresh water, or linked to provide communities or conurbations with water and salt.

#### Concentrated solar energy capture and power conversion

Concentrated solar power (CSP) technology that uses a very efficient patented hermetically sealed parabolic trough to concentrate sunlight onto either a patented vacuum tube receiver thermal converter or onto a patented photovoltaic strip. Concentrated Solar Energy receivers in which “dark” nano-surfaces produced on stainless steel tubing, using a plasma surface modification technique, are optimized to receive solar radiation. The solar receivers are inserted into evacuated silicon tubes, fixed in parabolic trough solar concentrators, mounted on heliostats. The unit is then mounted on a patented heliostat that enables an additional 25% of usable direct sunlight to be converted. This system is robust, can be operated autonomously and produces thermal or electrical power very cost effectively. The technology is scalable and modular so can be used to power a single house, factory, large community or city. The system was used to power a desalination plant in very successful autonomous field trials in Oman in 2003. An advantage of the system in the field of CSP is that the parabolic trough can be optimized for magnification depending on the latitude of use, enabling similar system efficiencies to be achieved as in the tropics.

#### Atmospheric Electrical Energy Harvesting

This technology harvests electrostatic energy from the atmosphere through a ground pylon. Patented pilot demonstration unit utilizes known electromagnetic phenomena. Each unit comprises an electrostatic energy conduction mast with an ultra-high DC voltage to low AC voltage converter. The system is designed to operate for a single house/ building or in huge field arrays. The system’s small footprint will allow it to be employed along road sides, be placed on skyscrapers and within orchards, forestry blocks or along hedgerows on farms.

#### “Skysails” for shipping

This technology lies in a high strength material technology that has the potential to becoming the sail and rigging material of choice for conventional high performance sails and Skysails, the leading renewable ship propulsion technology being developed and commercialized in Germany. The use of Skysails can reduce the fuel consumption of shipping. Due to its strength, density and creep it can significantly reduce fishing net drag, efficiency and life.

#### Bio-composite building components and system production technology

The material content will vary depending on local raw material sources, but is mainly made up of waste paper/wood, grit/glass, aluminum and plastics.

Structural sandwich panels are formed into factory finished walls, floors or roofs using a proprietary press that incorporates electro textile materials to create very cost effective, large vacuum presses and autoclaves.

Material is made of compressed waste biomass, including straw, paper, wood particles and plastics and produced into factory finished walls and floors in a very cost and energy efficient process so are carbon negative, unlike most other commercially available building materials. The key is that they are formed in two processes from raw material into a panel and then a panel into a factory finished wall, floor or roof, then they can be toaster racked to site to be joined using a simple jointing system.

### Controlled environmental horticulture technology

A patented process for greatly enhancing the growth rate and the nutritional value of crops whilst, minimizing environmental impact. The technology creates patented optimized nutritional and environmental conditions for the plants to flourish 24 hours a day. The system needs distilled water and a closed environment to operate and therefore it is ideal for combining with the saltwater desalination technology shown below. The production cost per kg of nutrition is price competitive with conventional agriculture. With global demand for affordable food rising on a daily basis and the amount of available land available for agriculture decreasing proportionally this system can provide a viable alternative to supplying the nutritional needs of a growing population.

### Energy storage technology

Energy Storage Technology covers both thermal energy and electrical energy. The thermal energy storage technology is summarized above in the active thermoregulation technology section.

Electrical energy storage is divided into three separate technologies; chemical energy storage (batteries), electrical energy storage (capacitors) and kinetic (spinning objects).

Nano-surfaces are created in a plasma chamber with near perfect surface coatings enabling near perfect dielectric properties to be achieved and enable very large surface area/ area ratios to be produced to create ultra-capacitors.

Ultra capacitors are energy efficient; have almost infinite life compared with chemical energy storage (batteries), etc. They can be used for long term storage and supply of electrical energy comparable to batteries, and buffering for short periods.

Plasma capacitors are electrical storage units containing aluminum with a considerable active surface area and dielectric properties enabling very high electrical storage densities to be achieved. Ultra efficient plasma capacitors enable electrical energy to be stored and used with minimal loss, almost limitless cycles, and working life making them a more environmentally sustainable electrical energy storage medium than batteries.

### Electrowinning of precious and rare earth metals

Electrowinning is a technique used to produce materials such as lead, copper, gold, silver, zinc, aluminum, chromium, cobalt, manganese, and the rare-earth and alkali metals. The electro-winning technology was developed by the team that developed the original carbon based electro-winning process for Anglogold. The new version is more efficient at extracting precious metals from solution than their existing commercial technology. The system was field trialed at the Kumtor Mine owned by Centerra with excellent results. Technology can be used to create much purer solutions (less pollution) than existing electro-winning operations.

### Centrifugal materials processing system

This technology is an efficient system for mixing liquids with liquids and solids with liquids. Existing mixing systems mix liquids with liquids and solids with liquids with liquid in the liquid phase. This technology efficiently converts the liquids into a gaseous / aerosol phase that then can be combined efficiently and accurately with other liquids and solids with a large increase in efficiency in mixing of emulsions.

### Hydrofoil assisted marine vessels

Patented hydrofoil technology is used to reduce the wetted area unwanted ship movement, thereby reducing the fuel consumption and emissions from marine craft. A number of new international agreements require shipping companies to significantly reduce their ships' emissions. Virtually all existing cargo vessels and new builds can be retro- or outfitted with the system. Its universal design opens up an attractive market for the system.

### Kinetic energy (water and wind) conversion

The (patent to be applied for) kinetic energy converter enables highly efficient conversion of mechanical energy for examples from wind or water into thermal (patent applications pending) or electrical energy and is especially useful in micro/macro power generation. The converter can be powered by either wind or hydro energy. The patent applied for unique efficient horizontal motion turbine enables power to be produced very cost effectively from wind and water with minimum environmental impact. The technology is potentially scalable and modular so can be used to power a single house or a community.

### Nano-Carbon Fiber

This unique electro textile is made using a carbon cored yarn with a dielectric polymer sheath that when woven produces a range of electro responsive textiles, including heat generation. The material not only has excellent high temperature heating properties, but high strength when embedded in the composite, and can give live feedback on the stress and strain loading throughout the composite material.

Applications include the production of and use in multi-functional composites for the aerospace, defense, marine and built environment.

### Low cost zero carbon power and CO2 sequestration

Patented Continuous Cycle Enriched Hydrocarbon Gas Power Generation, Carbon Sequestering and Enhanced Oil Recovery Technology. Uses industry accepted principles and methods, industry accepted component parts, proven technologies, and there are many potential sites for use with infrastructure already in place. This technology enables electrical and thermal power to be generated onsite and the inert exhaust gases / scrubbed out and CO2 sequestered underground to enhance oil recovery from the reservoir. This not only produces zero carbon power, but also produces very cost effective power and can extend the life of an oil reservoir by decades at a reduced cost. In depleted fields / reservoirs it is possible depending on the geology to pump prime the depleted oil reservoir with flue gas and recover enriched hydrocarbon gas to burn and re-inject (for every m3 of enriched hydrocarbon gas burned approximately 30-50m3 of flue gas is created). The patents cover the modifications needed to be made to the engines (turbine and ICE) as well as the continuous cycle process for enriched hydrocarbon.

### Efficient transport technology

This efficient transport system combines Nano Carbon Fiber and Energy Storage technologies previously mentioned to be able to produce a cost effective and light vehicle. The automobile is a community commuter transport based on an ultra-light composite body produced using a patented fast production process using pre-preg vacuum pressed composites, for high accuracy and mould cycle time. The recyclable composite, similar in physical properties to a carbon fiber sandwich composite, is lighter than an alloy or glass fiber body.

Apart from the body and plasma capacitor the vehicle is based on “off the shelf” parts enabling it to be produced efficiently in low volumes. This approach cannot be taken by the large OEM car manufacturers as they are locked into legacy powertrains and body production lines that cost hundreds of millions to produce.

3. “Technology, Manufacturing Assembly and Distribution License Agreement” (the “**ZEM License.**”)

The ZEM License is a perpetual license to the technology, to manufacture, improve, market and sell the products and services produced from the exploitation of the technology in North America and the independent countries of Central America, South America and the Caribbean. The ZEM License is exclusive but for the fact that the company can sub-license all aspects of the license, including the right to third parties to grant sub-licenses themselves.

The technology covered by the ZEM License includes the following:

Electric/Hybrid vehicles - This technology allows for the production lightweight fully wheel chair accessible electric and hybrid buses. Future development plans include niche utility vehicles such as garbage trucks and city utility vehicles.

Consideration for the license was 500,000 common shares of the Company with a value of \$1,452,000. Following the 3 year term, the Company shall have the right to extend the “Exclusivity Period” for an additional 5 years with a payment of USD \$1,200,000 payable in cash or common shares of the Company. On February 18, 2011, the agreement was amended to extend the “Exclusivity Period” indefinitely without further payment.

In determining the fair value of the ZEM license, assumptions were made regarding future cash flows, comparable sales of similar projects, as well as general business and economic conditions that prevail and are expected to prevail. The relief from royalty approach is used to value the license. By nature, asset valuations are subjective and do not necessarily result in precise determinations. The valuation of ZEM license is subject to material measurement uncertainty. It is reasonably possible, based on existing knowledge, that change in future conditions in the near term could require a material change in the recorded amount. Significant inputs factors into the valuation were projected sales, a royalty rate of 5%, and discount rate of 30%. Changes in these inputs and market demand will have a material impact on the estimated value.

LCTI currently leases a 12,100 acre property located in Sonora along the US/México border. The lease has a purchase option that can be triggered at any time during the term of the lease which is 25 years. The property is located approximately 15 miles away from the border crossing at Lukeville, AZ via a federal highway and portions of the property are ocean front. Until the properties is utilized, developed, or improved by SEP, the landlord is responsible for maintenance, taxes, and insurance. LCTI intends to select a development partner to utilize LCTI’s licensed solar desalination technology to be deployed onsite.

## **Operating Companies**

### ***Intercorporate Relationships***

The following sets forth the subsidiaries of the company:

Teposolar Technologies Corp (“Teposolar”) and its wholly subsidiary, C&I Mechanical Ltd (“C&I”) operates an energy efficiency firm that focuses on large scale institutional clients and energy efficiency projects. The company intends to expand into building integrated and commercial solar projects that offer savings in operating costs for commercial and industrial developments.

Project Green Lonestar 1 Corp., (“PGL”) currently holds two technology licenses.

WK Management Services Inc. (“WKM”) is a subsidiary of PGL and is currently inactive.

Entropy Power Corp., will manage the operations of the waste to energy plants but is currently inactive.

HNNG Midstream LLC is currently inactive

HNNG Energy LLC is currently inactive

### ***Affiliates***

**East Bay Farms, LLC**, an affiliate LCTI company operates an environmental credit program progress in with LCTI’s land mitigation business. East Bay is in the process of receiving Corps of Engineers approval for a 1,900 acre wetland mitigation bank known as the Gulf Coastal Plains Wetland Mitigation Bank. When approved, this mitigation bank will provide mitigation credits that will compensate for adverse impacts to U.S. Coastal and wetland areas, resulting from developments and projects along the coastline from the Texas/Louisiana border to Surfside, Texas. East Bay Farms, LLC also has exclusive water rights to East Bay Bayou in Chambers County, Texas. LCTI currently owns 27.5% of East Bay Farms LLC as of the date of this report.

**Industrial Commercial Mechanical LLC**, an affiliate LCTI company provides a broad range of comprehensive energy solutions including designs and implementation of energy savings projects, energy conservation, energy infrastructure outsourcing, power generation and energy supply, and risk management. The Company performs an in-depth analysis of the property, designs an energy efficient solution, installs the required elements, and maintains the system to ensure energy savings during the payback period. The savings in energy costs is often used to pay back the capital investment of the project over a five- to twenty-year period, or reinvested into the building to allow for capital upgrades that may otherwise be unfeasible. LCTI currently owns 50% of Industrial Commercial Mechanical LLC as of the date of this report

## **Basis of Preparation**

The Company’s unaudited condensed consolidated Financial Statements for the three months ended November 30, 2012, have been prepared in accordance with IFRS applicable to the preparation of financial statements, including IAS 34: Interim Financial Reporting and IFRS 1:First-time Adoption of International Financial Reporting Standards, as adopted by the International Accounting Standard Board (“IASB”). The accounting policies applied are based on IFRS policies issued and outstanding at November 30, 2012,

### **New accounting standards and interpretations**

The International Accounting Standard Board has issued the following standards, which have not yet been adopted by the Company. Effective dates of the standards are described below with early adoption permitted. The Company does not expect to adopt these new and amended standards before their effective dates.

- a) International Accounting Standard (“IAS”) 1 – Presentation of Financial Statements (“OCI”) was amended to change the disclosure of items presented in OCI, including a requirement to separate items presented in OCI into two groups based on whether or not they may be recycled to income or loss in the future. This amendment is effective for years beginning on or after July 1, 2012.
- b) IFRS 9, ‘Financial Instruments’ was issued in November 2009 as the first step in its project to replace IAS 39 ‘Financial Instruments: Recognition and Measurement’. IFRS 9 introduces new requirements for classifying and measuring financial assets that must be applied starting January 1, 2013, with early adoption permitted. The IASB intends to expand IFRS 9 during the intervening period to add new requirements for classifying and measuring financial liabilities, de-recognition of financial instruments, impairment and hedge accounting. The Company is currently assessing the impact of this standard.
- c) IFRS 10, ‘Consolidated Financial Statements’ was issued in May 2011 and will supersede the consolidation requirements in SIC-12 ‘Consolidation – Special Purpose Entities’ and IAS 27 ‘Consolidated and Separate Financial Statements’ effective for annual periods beginning on or after January 1, 2013, with early application permitted. IFRS 10 builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company. The standard also provides additional guidance to assist in the determination of control where this is difficult to assess. The Company is currently assessing the impact of this standard.
- d) IFRS 11, ‘Joint Arrangements’ was issued in May 2011 and will supersede existing IAS 31, ‘Joint Ventures’ effective for annual period beginning on or after January 1, 2013, with early application permitted. IFRS 11 provides for the accounting of joint arrangement by focusing on the rights and obligations of the arrangement, rather than its legal form (as is currently the case). The standard also eliminates the option to account for jointly controlled entities using the proportionate consolidation method. The Company is currently assessing the impact of this standard.
- e) IFRS 12, ‘Disclosure of Interests in Other Entities’ was issued in May 2011 and is a new and comprehensive standard on disclosure requirements for all forms of interests in other entities including subsidiaries, joint arrangements, associates and unconsolidated structured entities. IFRS 12 is effective for annual periods beginning on or after January 1, 2013, with earlier application permitted. The Company is currently assessing the impact of this standard.
- f) IFRS 13, ‘Fair Value Measurement’ was issued in May 2011 and sets out in a single IFRS a framework for measuring fair value. IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This definition of fair value emphasizes that

fair value is a market-based measurement, not an entity-specific measurement. In addition, IFRS 13 also requires specific disclosures about fair value measurement. IFRS 13 is effective for annual periods beginning on or after January 1, 2013, with earlier application permitted. The Company is currently assessing the impact of this standard.

### **Critical accounting estimates and judgments**

The preparation of the consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Estimates and judgments are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual outcomes can differ from these estimates.

The key sources of estimation uncertainty that have a significant risk of causing material adjustment to the amounts recognized in the financial statements are:

#### **Impairment of non-financial assets**

Impairment exists when the carrying value of an asset or CGU exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Company is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash inflows and the growth rate used for extrapolation purposes.

#### **Valuation of non-financial assets**

In determining the fair value of non-financial assets, including intangible assets, investments in affiliates, mitigation land, and joint venture, assumptions were made regarding future cash flows, comparable sales of similar projects, as well as general business and economic conditions that prevail and are expected to prevail. By nature, asset valuations are subjective and do not necessarily result in precise determinations. The valuation of non-financial assets is subject to material measurement uncertainty. It is reasonably possible, based on existing knowledge, that change in future conditions in the near term could require a material change in the recorded amount. Significant inputs factors into the valuations included projected sales, estimated value of mitigation credits, a royalty rates, terminal growth rate, and discount rates. Changes in these inputs and market demand will have a material impact on the estimated value.

#### **Cost in excess of billings**

Mechanical subcontracting revenue, construction costs, unearned contract revenue, and costs in excess of billings include amounts derived using the percentage of completion method applied to construction contracts. Percentage completion is calculated based on the costs incurred on each construction contract at the end of the respective accounting period divided by the total estimated costs for the contract. To determine the estimated cost to complete the construction contract, judgment, assumptions and estimates are required to evaluate issues related to the level of advancement, material and labor costs to complete the project, labor productivity, changes in

contract scope and subcontractor costs. Due to the nature of construction, estimates may change significantly from one accounting period to the next.

### Taxes

Provisions for taxes are made using the best estimate of the amount expected to be paid based on a qualitative assessment of all relevant factors. The Company reviews the adequacy of these provisions at the end of the reporting period. However, it is possible that at some future date an additional liability could result from audits by taxing authorities. Where the final outcome of these tax-related matters is different from the amounts that were initially recorded, such differences will affect the tax provisions in the period in which such determination is made.

### Provisions

A provision is recognized when the Company has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. A provision for onerous contracts is recognized when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The Company had no material provisions at November 30, 2012 and November 30, 2011.

### **Current projects in progress.**

The following projects are in the early stages of development. No assurance can be given that LCTI will be able secure adequate financing for the completion of these projects. No assurance can be given that LCTI will be able to obtain all necessary regulatory permits or other required government approvals for the following projects. If it is unable to obtain such financing, permits or approvals, then the projects that are affected by this will be cancelled, which could have a materially adverse effect on the Issuer's financial position.

#### ***Project I-Gulf Coastal Plains Wetland Mitigation Bank***

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation.

The value of a bank is defined in "compensatory mitigation credits." A bank's instrument identifies the number of credits available for sale and requires the use of ecological assessment techniques to certify that those credits provide the required ecological functions.

Mitigation banks are a form of "third-party" compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by a party other than the permittee. This transfer of liability has been a very attractive feature for many companies and other entities who have the required U.S. permits for activities conducted in wetlands or other U.S. waters. These companies and other entities would otherwise be responsible for the design, construction, monitoring, ecological success, and long-term protection of the site. Mitigation banks are the preferred compensatory mitigation method of the U.S. Army Corps of Engineers, the federal agency responsible for oversight of wetlands mitigation.

### *Project Description*

In 2010, LCTI acquired a 27.5% interest in East Bay Farms LLC, a Texas limited liability company. East Bay Farms LLC is in the process of receiving approval from the U.S. Army Corps of Engineers for a 1,900 acre mitigation bank site located along the Gulf Coast of Texas. The U.S. Army Corps of Engineers approval is expected in 2013

The Mitigation Bank will be developed on land which has functioned as an active rice farm. During the development Phases, areas not under active development will continue to be farmed under the U.S. Farm Service Administration guidelines.

The Mitigation Bank is located in Chambers County, Texas. The service area for the Mitigation Bank extends from the Texas-Louisiana border to the east and to the approximate middle of Harris and Galveston Counties, Texas to the west. This service area includes two of the busiest port systems and waterways in the United States; the Galveston-Houston and the Sabine-Neches waterways.

### ***Project 2- Tidal Mitigation Bank Texas***

LCTI through its affiliate expects to develop the LCTI Tidal Mitigation Bank developed on +/-3,500 acres owned by LCTI located in Port Bolivar, TX. The property is located southwest of Rollover Pass and is a barrier island making it unique in that tidal mitigation credits can be developed on the property. Tidal mitigation credits are typically sold at a higher premium.

The Mitigation Bank is located in Chambers County, Texas. The service area for the Mitigation Bank extends from the Texas-Louisiana border to the east and to the approximate middle of Harris and Galveston Counties, Texas to the west. This service area includes two of the busiest port systems and waterways in the United States; the Galveston-Houston and the Sabine-Neches waterways.

### ***Project 3-400 Metric Ton Waste to Energy Facilities***

The company has plans to develop three waste to energy plants located in Iuka - Mississippi, Beaumont – Texas, and Campeche – Mexico.

The facilities are expected generate synthesis gas (syngas) for the production of electricity from biomass such as forest wastes, plastics and municipal solid wastes (MSW) for each phase/and or transportations fuels.

Each facility will use licensed technologies provided by Prestige Thermal Equipment:

- 1) A proven and innovative gasification technology to generate the syngas from the waste streams
- 2) A catalyst and process that will convert the syngas into ethanol, diesel/biodiesel, or other chemicals such as naphtha. The plant will recover waste-heat to make steam that will be used to make electricity for on-site power consumption, limited peaking power, and black start capability.

## **Selected Annual Information**

The following table summarizes selected financial data for the Company for the three most recently completed fiscal years. The information set forth below should be read in conjunction with the Company's financial statements, prepared in accordance with IFRS.

	<b>Year Ended August 31 2012 (unaudited) \$</b>	<b>Year Ended August 31 2011 (unaudited) \$</b>	<b>Year Ended August 31 2010 (unaudited) \$</b>
Total assets	100,979,330	81,430,663	47,640,055
Total long term liabilities	2,736,140	3,750,000	-
Total revenues from operations	3,578,845	3,805,516	-
Other gain (loss)	8,178,000	47,902	-
Income (loss) for the year	1,479,191	(4,087,593)	(1,868,860)
Basic and diluted income (loss) per share	0.01	(0.01)	0.00

## **Selected Financial Data**

The following selected financial data for the fiscal quarters shown below is derived from the financial statements of the Company.

	<b>Three Months Ended Nov. 30, 2012 IFRS \$</b>	<b>Three Months Ended Aug. 31, 2012 IFRS \$</b>	<b>Three Months Ended May 31, 2012 IFRS \$</b>	<b>Three Months Ended Feb. 29, 2012 IFRS \$</b>	<b>Three Months Ended Nov. 30, 2011 IFRS \$</b>	<b>Three Months Ended Aug. 31, 2011 IFRS \$</b>	<b>Three Months Ended May 31, 2011 IFRS \$</b>
Total assets	99,091,998	100,979,329	101,125,143	102,751,234	79,817,966	81,430,663	83,510,640
Total long term liabilities	2,505,011	2,736,140	5,316,566	5,633,393	3,001,130	3,750,000	3,787,000
Total revenues from operations	840,231	1,738,821	325,092	474,297	1,040,634	1,707,531	2,097,985
Other gain (loss)	1,763,676	-	-	8,178,000	-	-	47,902
Net income (loss)	(10,040)	(1,677,791)	(1,980,911)	6,240,836	(1,043,819)	(1,290,582)	(855,206)
Basic and diluted gain (loss) per share	(0.00)	(0.01)	(0.01)	0.03	(0.00)	(0.00)	(0.00)

## **Results of Operations**

### ***Three months ended November 30, 2012***

During three months ended November 30, 2012, the Company had a net loss of \$10,040 compared to a net loss of \$1,043,819 for the same period in 2011. The decrease in net loss is mainly attributed to a gain of \$1,763,676 for debt forgiveness related to the promissory note from the acquisition of Teposolar Technologies Corp. and its subsidiary Commercial and Institutional Mechanical LLC as described in Note 4 of unaudited condensed consolidated financial statements for the three months ended November 30, 2012.

The Company had operating revenue of \$840,231 for the three months ended November 30, 2012 compared to \$1,040,634 for the same period in 2011. All revenue currently comes from the operations at Teposolar Technologies Corp. The decrease in revenue is attributed to Teposolar experiencing a decrease in projects it was contracted to perform.

The Company had total expenses of \$1,919,452 for the three months ended November 30, 2012 compared to \$1,253,067 for the same period in 2011. The largest increases in expenses were attributed to amortization, salaries and wages, professional fees, and management and consulting expenses. Amortization expenses increased to \$1,115,761 during the three months ended November 30, 2012 compared to \$681,750 for the same period in 2011. The increase in amortization expense resulted from the acquisition of intellectual property related to a waste to energy technology that was valued at \$16,850,000 and amortized over 8 years as shown in Note 10 of the unaudited condensed consolidated financial statements for the three months ended November 30, 2012. Salaries and wages expense was \$118,486 during the three months ended November 30, 2012 compared to \$76,089 during the same period in 2011. This increase is due to officers of the Company accruing salaries during the three months ended November 30, 2012. Officers did not accrue salaries during the three months ended November 30, 2011. Professional fees expense increased to \$100,122 during the three months ended November 20, 2011 from \$416 for the same period in 2011. This increase is mainly attributed to the additional cost of being a reporting issuer. Management and consulting expense increased to \$119,865 during the three months ended November 30, 2012 from \$2,000 during the same period in 2011. This increase is mainly attributed to the additional cost of being a reporting issuer.

### **Liquidity / Capital Resources**

As at November 30, 2012, the Company had \$486,312 in cash compared to \$917,476 in cash as at November 30, 2011. As at November 30, 2012, the Company had accounts receivable of \$1,006,672 compared to accounts receivable of \$2,621,961 as at November 30, 2011. As at November 30, 2012 the Company had a working capital deficiency of \$2,105,792 compared to a working capital deficiency of \$1,289,929 as at November 30, 2011. The decrease in cash and working capital resulted from the decrease in revenues of Teposolar and increased general and administrative expenses associated with being a reporting issuer. The decrease in accounts receivable resulted solely from the decrease in revenue of Teposolar.

The Company will require additional financing in order to carry out its business plan and to grow and expand its operations. It intends to raise additional funds through private sales of debt and equity securities. It is possible that required future financing will not be available or, if available, will not be available on favorable terms. If the Company issues treasury shares to finance its operations or expansion plans, control of the Company may change and its shareholders may suffer dilution of their investment. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise respond to competitive pressures and remain in business.

### **Financing Activities**

There were no financing activities during the three months ended November 30, 2012 and August 31, 2011.

### **Off-Balance Sheet Arrangements**

The Company has no off-balance sheet arrangements.

## Transactions with Related Parties

During the three months ended November 30, 2012, the Company:

1. Has accrued salaries for Officers and Directors totaling \$252,136.
2. Paid \$58,550 in consulting fees to a Company with common directors and shareholders.

During the three months ended November 30, 2011, the Company:

1. The Company paid \$6,000 in consulting fees to a Company with common director and shareholders.
2. The Company incurred \$1,120 in accounting fees to a Company with common director and shareholders.

## Share Capital

### *Authorized share capital*

As at November 30, 2012, the Company has authorized an unlimited number of voting common shares without nominal or par value.

### *Shares issued and outstanding*

	Number	Amount
<b>Balance, August 31, 2011</b>	<b>298,381,990</b>	<b>\$ 84,813,418</b>
Reinstatement of founders' shares <sup>(1)</sup>	54,000,000	-
Cancellation of shares for services <sup>(2)</sup>	(42,840,000)	-
EnCap Investments Inc. capital prior to reverse takeover transaction <sup>(3)</sup>	4,690,704	355,796
Elimination of private SEP share capital <sup>(4)</sup>	(309,541,990)	-
Elimination of EnCap Investments Inc. share capital <sup>(4)</sup>	-	(355,796)
Shares issued to private Sustainable Energy Properties shareholders <sup>(4)</sup>	134,583,460	311,880
Elimination of cross ownership <sup>(5)</sup>	-	(55,999)
Balance August 31, 2012	139,274,164	\$ 85,069,298
Shares transferred for lease payments <sup>(6)</sup>	-	1,090,956
Balance November 30, 2012	139,274,164	\$ 86,160,254

1. On January 27, 2012 54,000,000 common shares of officers and director that were previously cancelled were reinstated.
2. On November 10, 2011 the Company cancelled 42,840,000 common shares that were previously issued for services.
3. On February 10, 2012 4,690,704 common shares of the Company were outstanding prior to the RTO with share capital of \$355,796.
4. On February 10, 2012 the company completed the RTO with SEP and common shares of SEP were exchanged at a 2.3:1 basis for common shares of the Company.

5. On February 10, 2012 the Company completed the RTO with SEP and SEP's investment in the Company of \$55,999 was eliminated.

6. On November 10, the Company transferred 474,346 shares previously held by Z Carbon Companies Corp. for lease payments (Note 21)

*Escrow shares*

As at November 30, 2012 included in issued capital are 78,292,369 common shares held in escrow of which 77,241,369 are to be released up to February 15, 2015.

*Stock options*

The Company has established a stock option plan for its directors, officers and technical consultants under which the Company may grant options to acquire a maximum number of common shares equal to 10% of the total issued and outstanding common shares of the Company.

The exercise price of the options granted under the Plan will be determined by the Board of Directors, but will be at least equal to the closing trading price for the common shares for the last trading day prior to the grant and otherwise the fair market value price. The term of any options granted shall not exceed the maximum permitted time period under applicable regulations.

A summary of the share option transaction for the three months ended November 30, 2012 and the year ended August 31, 2012 are as follows:

	Number of options	Weighted average exercise price \$
Outstanding at August 31, 2011	-	
Converted to LCTI stock options upon RTO	360,000	0.10
Granted	2,333,333	0.25
Outstanding at August 31, 2012	2,693,333	0.23
Granted	-	-
<b>Outstanding at November 30, 2012</b>	<b>2,693,333</b>	<b>0.23</b>

360,000 stock options of LCTI outstanding as at January 30, 2012, exercisable at \$0.10 per option with an expiry date of January 30, 2013, were deemed as part of the consideration for the reverse takeover, and these options were valued on January 30, 2012 the date of the reverse takeover, using a Black Scholes option pricing model with the following assumptions: dividend yield of 0%; volatility of 120%; risk free interest rate of 1.25%; an expected life of 0.92 years. As a result, the fair value of the stock options was estimated at \$8,531 and the amount was recorded as part of the reverse takeover transaction cost in the unaudited consolidated statement of operations and comprehensive income (loss) for the year ended August 31, 2012.

On February 27, 2012, the Company granted to directors, officers, and consultants of the Company 2,333,333 stock options to acquire common shares of the Company. The Options will vest quarterly

over a period of one year in four equal batches with the first batch vesting May 31, 2012 and are exercisable at a price of \$0.25 per share for a period of two years from the date of issuance. The fair value of the stock options was estimated on the date of grant using the Black Scholes option pricing model with the following assumptions: dividend yield of 0%; volatility of 120%; risk free interest rate of 1.25%; and an expected life of 2 years. As a result, the fair value of the stock options was estimated as \$98,020. \$49,010 has been recorded as an expense in the statement of operations and comprehensive income (loss) during the year.

The following table summarizes stock options outstanding as at November 30, 2012:

<b>Exercise prices (\$)</b>	<b>Number outstanding</b>	<b>Weighted average remaining contractual life (years)</b>	<b>Number exercisable</b>	<b>Exercise price for exercisable options (\$)</b>
0.10	360,000	0.39	360,000	0.10
0.25	2,333,333	1.50	2,333,333	0.25
0.23	2,693,333	1.35	2,693,333	0.23

The estimated weighted average fair value of share options granted during the year was \$0.04 per option. The fair value of each share option grant was estimated on the date of grant, as determined by using the Black-Scholes option pricing model with the following weighted average assumptions:

	<b>November 30, 2012</b>	<b>August 31, 2012</b>
Risk-free interest rate (%)	-	1.25%
Expected life (years)	-	1.86
Expected volatility (%)	-	120%
Expected dividend yield (%)	-	0%

*Total Common Shares, Warrants and Options outstanding as at the date of this MD&A*

The following table shows the number of Common Shares, Warrants, and Options issued and outstanding as at the date of this MD&A

Number of Common Shares issued and outstanding	139,274,164
Number of Warrants issued and outstanding	-
Number of Options outstanding	2,693,333
<b>Total Fully Diluted</b>	<b>141,967,497</b>

## **Risks and Uncertainties**

An investment in the company involves a substantial degree of risk and should be regarded as highly speculative due to the nature of the business of the company. These risks include, but are not limited to:

- the early stage of development of the business of the Company;
- the future capital requirements of the Company;
- dependence upon management and employees;
- labour relations;
- management of growth;
- return on investment/dividends;
- volatility;
- conflicts of interest;
- currency risk;
- company's revenues are expected to be negatively impacted by the deterioration of the economy
- current financial crisis is expected to result in less favorable financing terms and tighter operating covenants, which may prevent the Company or its subsidiaries from obtaining financing and operating loans;
- can be no assurance that the Company will be successful in executing strategic plan, or that its strategic plan will enable it realize its business objectives;
- success of the Company will depend in part on successful execution of large projects that carry significant risk;
- future acquisitions and investments may have a negative impact on the Company;
- U.S. based investors may have difficulty bringing suit and enforcing judgments against the Company;
- insurance coverage may not be adequate or available to cover all potential losses that may be incurred through damage to the Company's assets;
- environmental regulation may negatively impact the Company's ability to satisfy its financial and other obligations of the Company;
- there can be no assurance that the Company will successful in obtaining regulatory permits or other required government approvals for certain projects;
- and there can be no assurance that the Company will be successful in protecting its intellectual property.

## **Risks related to the Company**

**Investors should carefully consider the following risk factors.**

An investment in securities of the company should be considered highly speculative and should only be considered by those persons who can afford a total loss of their investment. In addition to the other information in this Listing Statement, an investor should carefully consider each of, and the cumulative effect of the following risk factors, in addition to the risk factors of the company set out in the financial statements attached hereto.

### ***Early Stage of Development***

The company has a very limited history of operations and is in the early stage of development. As such, the company will be subject to many risks common to such enterprises, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources and lack of revenues. There is no assurance that the company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of its early stage of operations.

### ***Future Capital Requirements***

The Company will require additional financing in order to carry out its long term business plan and to grow and expand its operations. It intends to raise additional funds through private sales of debt and equity securities. It is possible that required future financing will not be available or, if available, will not be available on favourable terms. If the Company issues treasury shares to finance its operations or expansion plans, control of the Company may change and its shareholders may suffer dilution of their investment. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise respond to competitive pressures and remain in business.

As of the date of this MD&A, no additional sources of financing have been identified by the Company and there can be no assurance any will be available. If future financing is not available on terms that are commercially acceptable to the Company, then operations may be decreased or halted, the value of the Company Shares could decline and investors could lose some or all of their investments in the company.

### ***Dependence on Management and Employees***

Holders of Company Shares must rely upon the experience and expertise of the management and employees of the company. The Company's success is dependent upon its ability to attract and retain experienced management and employees. The Company does not currently have in place key man insurance on its management.

### ***Labour Relations***

The largest component of the Company's overall expenses will be salary, wages and benefits. Any significant increase in these expenses could impact the financial results of the Company. In addition, if there are any labour disruptions, then the operations of the Company would likely be interrupted and possibly stopped. This would have a serious and material adverse effect on the Company's ability to stay in business and investors could lose their entire investment in the Company.

### ***Management of Growth***

Any expansion of the Company's business may place a significant strain on its financial, operational and managerial resources. There can be no assurance that the Company will be able to implement and subsequently improve its operations and financial systems successfully and in a timely manner in order to manage any growth it experiences. There can be no assurance that the Company will be able to manage growth successfully. Any inability of the Company to manage growth successfully could have a material adverse effect on its business, financial condition and results of operations.

### ***Return on Investment/Dividends***

The Company does not intend to pay dividends on its outstanding common shares. Return on investment, if any, would have to come from an increase in the value of the Company Shares. There

is no assurance that the value of the Company Shares will increase or that, if they do, that there will be sufficient volume of trading to allow investors to sell their shares at the increased market price. If the market price does not increase or there is insufficient volume of trading, investors will not only be unable to gain a return on their investment but they may lose their entire investment in the company.

***The market price of the Company Shares is expected to be volatile. An investor should not consider an investment in the Company Shares unless the investor is capable of sustaining an economic loss of the entire investment.***

The market price of the Company Shares could be subject to significant fluctuation in response to variations in quarterly and yearly operating results, the success of the Company's business strategy and other factors. The market price could also be affected by other variables, including the general condition of the market, the strength of the economy, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. In addition, the stock market experiences price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of effected companies. These fluctuations may adversely affect the market price of the Company Shares. Therefore, investors could suffer significant losses if the price of the Company is depressed or the market is illiquid when an investor seeks liquidity and needs to sell the Company Shares. The Company Shares are highly speculative and an investor should not consider an investment in the Company unless the investor is capable of sustaining an economic loss of the entire investment.

### ***Conflicts Of Interest***

Certain of the directors of the Company are also directors, officers or shareholders of other companies and such associations may give rise to conflicts of interest from time to time. The directors of the Company will be required by law to act honestly and in good faith with a view to the best interests of the Company and to disclose any interest which they may have in any project or opportunity of the Company. If a conflict arises at a meeting of the board of directors, any director in a conflict will disclose his interest and abstain from voting on such matter. In determining whether or not the Company will participate in any project or opportunity, the director will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time. Failure to properly deal with conflicts of interest by directors and officers of the Company could have a material adverse effect on the financial position of the Company.

### ***Currency Risk***

The bulk of ongoing activities of the Company will be transacted in currencies other than Canadian dollars. The principal business activities of the Company will be denominated in U.S. dollars. As a result, Canadian investors will be affected by currency fluctuations between Canadian and U.S. dollars.

***The Company's revenues are expected to be negatively impacted by the deterioration of the economy.***

The Company's revenues are expected to be negatively impacted by the deterioration of the economy in the regional markets in which the Company operates, and the Company's financial results are expected to be sensitive to loss of consumer confidence and the rising level of unemployment, among other factors. Although the Company cannot specifically correlate the impact of macro-economic conditions on its activities, the Company's management believes that the continued decline in economic conditions in Canada or the United States, or in any other region in

which the Company may operate, will result in decreased demand for the products and services that the Company sells and, to the extent that this decline continues or increases in severity, the Company's business, financial condition, liquidity and results of operations could be materially adversely affected.

***The current financial crisis is expected to result in less favourable commercial financing terms and tighter operating covenants, which may prevent the Company or its subsidiaries from obtaining financing and operating loans.***

In light of these and other significant developments, concerns by investors regarding the stability of the U.S. financial system is expected to result in less favorable commercial financing terms, including higher interest rates or costs and tighter operating covenants, which, in turn, may prevent the Company or its subsidiaries from obtaining financing and operating loans when needed.

***There can be no assurance that the Company will be successful in executing its strategic plan, or that its strategic plan will enable it to realize its business objectives.***

There can be no assurance that the Company's business and growth strategy will enable it to achieve profitability in future periods. The Company's future operating results will depend on a number of factors, including: (i) its ability to continue to successfully execute its strategic initiatives; (ii) the efficiency and effectiveness of its marketing programs in building product and brand awareness; (iii) its ability to realize greater levels of profitability; (iv) its ability to hire, train, manage and retain qualified staff; (v) its ability to continuously improve its service to achieve new and enhanced customer benefits, better quality and reduced costs; (vi) its ability to successfully identify and respond to emerging trends in technology, sustainable energy, sustainable development and environmental services; (vii) the level of competition in the aforementioned industry; and (viii) general economic conditions and consumer confidence.

There can be no assurance that it will be successful in executing its strategic plan or that this strategic plan will enable it to achieve its anticipated sales growth rates or to achieve profitability. Failure to successfully execute any material part of its strategic plan could have a material adverse effect on the Company's business, financial condition, liquidity and results of operations.

There can be no assurance that the Company will be able to effectively manage its anticipated growth, and any failure to do so could have a material adverse effect on its business, financial condition, liquidity and results of operations.

***The success of the Company will depend in part on successful execution of large projects that carry significant risk.***

A substantial portion of the Company's anticipated revenues will be from large projects, some of which are conducted through joint ventures and/or subsidiaries. These projects may carry significant risk and as such, could result in significant losses. If any of the Company's future partners fail to perform their obligations, the Company may be required to make additional investment or provide additional services which could adversely affect the operations and financial position of the Company. The contract price on large projects is based on cost estimates based on a number of assumptions. Given the size of these projects, if these assumptions prove incorrect, whether due to faulty estimates, unanticipated circumstances, or a failure to properly assess risk, the projects could have a material adverse effect on the Company's business, financial condition, liquidity and results of operations.

***Future acquisitions and investments may have a negative impact on the Company.***

The Company may expand its operations in the future through the acquisition of companies and technologies and additional investments. The Company may seek to enter into joint ventures or other partnership agreements with third parties. Suitable acquisitions may not be found. Acquired companies may or may not be successfully and/or profitably operated by the Company or its subsidiaries. Joint ventures or any other form of alliance with third parties may or may not be successfully and/or profitably operated by the company, its subsidiaries, or third parties. If our future acquisitions or joint ventures are not successful, the Company may go out of business and investors will lose all of their investment in the Company.

***U.S. based investors may have difficulty bringing suit and enforcing judgments against the Company.***

The Company is organized under the laws of the Province of British Columbia, Canada. Consequently, it may be difficult for United States investors to effect service of process within the United States upon the Company or upon its directors or officers, or to realize in the United States upon judgments of United States courts predicated upon civil liabilities under the *United States Securities and Exchange Act of 1934*, as amended. Furthermore, it may be difficult for investors to enforce judgments of U.S. courts based on civil liability provisions of the U.S. federal securities laws in a foreign court against the Company or any of its non-U.S. resident officers or directors.

***Insurance coverage may not be adequate or available to cover all potential losses that may be incurred through damage to the Company's assets.***

It is intended that the Company will maintain insurance coverage in respect of its potential liabilities, including theft and the accidental loss of value of its assets from risks, in amounts, with such insurers, and on such terms as it considers appropriate, taking into account all relevant factors. However, there are certain types of losses, generally of a catastrophic nature, such as earthquakes and floods, which may be uninsurable or not economically insurable. It is expected that management of the Company will use discretion in determining amounts, coverage limits and deductibility provisions of insurance, with a view to maintaining appropriate insurance coverage on the Company's assets and the business at a reasonable cost and on suitable terms. This may result in insurance coverage that, in the event of a substantial loss, would not be sufficient to pay the full current market value or current replacement cost of the Company's lost investment. Certain factors also might make it unattractive to use insurance proceeds to replace the property after such property has been damaged or destroyed. Under such circumstances, the insurance proceeds received by the Company might not be adequate to restore its economic position with respect to such property. There are no assurances that the Company's anticipated insurance coverage will continue to be available to it on reasonable terms, including reasonable premium, deductible and coinsurance requirements or that the Company's insurer will not disclaim coverage of any future claim. The Company's business, financial condition, liquidity and results of operations could be materially adversely affected if any of the foregoing developments were to occur.

***Environmental regulation may negatively impact the Company's ability to satisfy its financial and other obligations of the Company.***

The Company's lease properties which are subject to certain federal, state, provincial and/or local laws and regulations relating to environmental protection, including those governing past or present releases of hazardous materials. Certain of these laws and regulations may impose liability on certain classes of persons for the costs of investigation or remediation of such contamination, regardless of fault or the legality of the original disposal. These persons include the present or former owner or a person in care or control of a contaminated property and companies that generated, disposed of or

arranged for the disposal of hazardous substances found at the property. As a result, the Company may incur costs to clean up contamination present on, at or under its leased properties, even if such contamination was present prior to the commencement of the subsidiaries' operations at the site and was not caused by its activities which could materially affect its business, financial condition, liquidity and results of operations, and therefore, its ability to satisfy its financial and other obligations to the Company.

***There can be no assurance that the Company will be successful in obtaining regulatory permits or other required government approvals for certain projects.***

No assurance can be given that the Company will be able to obtain all necessary regulatory permits or other required government approvals for certain projects that it intends to carry out in the future. If it is unable to obtain such permits or approvals, then the projects that are affected by this will be cancelled, which could have a materially adverse effect on the Company's financial position.

***There can be no assurance that the Company will be successful in protecting its intellectual property.***

No assurance can be given that third party companies will not independently develop substantially similar branding to the Company. The Company may rely on trademarks, copyrights, trade secrets, confidentiality procedures and contractual provisions to protect its proprietary rights. Despite its efforts to protect its proprietary rights, unauthorized parties may attempt to obtain and use information that the Company regards as proprietary. Stopping unauthorized use of the Company's proprietary rights may be difficult, time-consuming and costly. There can be no assurance that the Company will be successful in protecting its proprietary rights and, if it is not, its business, financial condition, liquidity and results of operations could be materially adversely affected.

## **Commitments and Contingencies**

### *Prestige Thermal Americas LLC*

The Company is to provide or secure rights to an approximately [40,000 square feet] manufacturing facility to be utilized for manufacturing and assembly of the technology licensed to the Company by GEI Green Energy Industries (pty) Ltd. at a future date to be determined by the Managers of PTA.

### *Leases*

On May 17, 2010 the Company entered into a lease agreement in Tishomingo County in Mississippi for a portion of the Tri-State Commerce Park. The lease is for a 65 acre portion of the 3,500 acre property as well as 3,500 sq/ft of furnished office space. At the Company's option it may lease additional portions of the properties under similar terms and conditions. The office space has minimum lease payments of \$4,200 annually.

Additional lease payments for the 65 acres being leased are calculated as 5% of gross revenue or \$1,000 per month, whichever is greater, for onsite projects with annual payments capped at \$350,000 once 20 full time employees are hired and \$250,000 once 30 full time employees are hired.

The Company entered into the following leases in Texas and the Sonora and Campeche areas of Mexico:

Effective Date	Lease	Location	Acres	Annual Rental Payment (0-3 years) common shares	Annual Rental Payment (3-25 years)	Optional Purchase Price	Original Lease Term
June 1, 2010	Mexico #1	Senora, Mexico	12,105	\$1,000,000	\$1,000,000	\$10,000,000	25
June 1, 2010	Mexico #2	Campeche, Mexico	897	\$76,000	\$76,000	\$760,000	25
April 12, 2010	Texas #1	Beaumont, Texas, USA	14	\$15,000	\$15,000	\$300,000	25

Lease payments for the first three years from the effective date of the lease are payable in common stock of the Company. Subsequent years are payable with equity in onsite development projects. If lessor declines payment with equity in onsite developments then the lease payments, at the option of the Company, are payable in cash or common stock of the Company. At the end of the first three years, if the value of the shares issued has a fair market value of less than \$1.00 per share, the Company will be required to pay the difference in cash or additional shares of the Company. Until the properties are utilized, developed, or improved by the Company, the landlord is responsible for maintenance, taxes, and insurance on all of the properties. The Company has the option to purchase the land, payable in cash or common shares of the Company, at any time.

On November 30, 2010, the Company assigned the leases to Z Carbon Companies Corp, a company with common shareholders and directors. The shares of the Company required to be issued in the original lease will be transferred from shares already issued to directors and officers on behalf of Z Carbon. Z Carbon Companies Corp. is considered a Special Purpose Entity (“SPE”) in accordance with *SIC-12 Consolidation – Special Purpose Entities* because Z Carbon is controlled by officers and directors of the Company. Its accounts have been consolidated into these consolidated financial statements. Z Carbon made an annual lease payment for the three months ended November 30, 2012 which is included in the statement of financial position and holds no other assets or liabilities other than the leases.

The leases may be terminated by the Company after the initial 3-year term, upon sixty days’ notice by the lessee.

Included in accounts payable and accrued liabilities at November 30, 2012 is \$922,747 related to unpaid leases. Lease expense recognized in general and administrative expense for the three months ended November 30, 2012 was \$272,751.

## **Financial Risk Factors**

The Company's financial instruments are exposed to certain financial risks, including credit risk, liquidity risk and market risk (interest rate risk and currency risk).

### ***Fair values***

The Company's financial instruments include cash and cash equivalents, amounts receivable, advances and accounts payable. The fair values of the financial instruments approximates their carrying values.

### ***Credit Risk***

Financial instruments that potentially subject the Company to credit risk consist of cash and amounts recoverable. Cash deposits are maintained with a financial institution of reputable credit and are redeemable on demand. Accounts receivable at November 30, 2012 is \$1,006,672. The Company evaluates the credit worthiness of its partners and establishes an allowance for doubtful accounts that corresponds to the specific credit risk of its customers, historical trends and economic circumstances. As at November 30, 2012 and August 31, 2012 no allowance was considered necessary as all the Company's receivables are bonded.

### ***Liquidity Risk***

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to managing liquidity is to ensure that it will have sufficient liquidity to meet liabilities when due. To the extent that the Company does not believe it has sufficient liquidity to meet obligations, it will consider securing additional equity funding, or engage in negotiations to extend terms with creditors. As at November 30, 2012, the Company has a working capital deficiency of \$2,105,792. The Company manages liquidity risk through the management of its capital structure.

### ***Interest-Rate Risk***

The Company earns an immaterial amount of interest income, and The Company has a revolving line of credit for up to \$350,000 from the International Bank of Commerce with a maturity date of April 25, 2012. Interest is New York prime rate + 1% with a minimum interest of 5.75% per annum. New York Prime rate is 3.25% as of the date of this report. As of November 30, 2012, the Company has drawn \$335,025 (August 31, 2012 - \$335,400) from the facility. A director and officer of the Company has placed a personal guarantee on this facility.

## **Other Material Facts**

To the knowledge of management of the company, there are no other material facts about the company that are not elsewhere disclosed herein and which are necessary in order for this MD&A to contain full, true and plain disclosure of all material facts relating to each of the company.

### **Subsequent Events**

A former owner and manager of ICM transferred their 25.5% ownership of ICM to the Company on January 16, [2013](#). The Company now owns 50% of ICM.

### **Other**

Additional information relating to the Company's operations and activities can be found by accessing the Company's other public documents filed on SEDAR at [www.sedar.com](http://www.sedar.com).