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# LCTI Low Carbon Technologies International Inc.

A British Columbia Corporation

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## ANNUAL REPORT

For the fiscal year ended: August 31, 2013

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All information contained in this Annual Report has been compiled to fulfill the disclosure requirements of Rule 15c2-11(a)(5) promulgated under the Securities Exchange Act of 1934, as amended. The enumerated captions contained herein correspond to the sequential format as set forth in the *OTC Pink Basic Disclosure Guidelines for Providing Adequate Current Public Information* provided by OTC Markets Group, Inc..

\*THIS STATEMENT HAS NOT BEEN FILED WITH THE FINRA OR ANY OTHER REGULATORY AGENCY

**Item 1. Name of the Issuer and its Predecessor (if any).**

LCTI Low Carbon Technologies International Inc. (“LCTI” or “the Issuer”) was originally incorporated under the laws of the province of British Columbia on August 11, 2008 under the provisions of the British Columbia Business Corporations Act (“BCBCA”) under the name *EnCap Investments Inc.*

On February 10, 2012, the Issuer acquired Sustainable Energy Properties, Inc., a Wyoming Corporation (“SEP”) as its operating business by way of merging SEP with EnCap Acquisition Inc., a wholly owned subsidiary of the Issuer (“the Acquisition”). Pursuant to the agreement, the Issuer acquired shares of SEP from the shareholders of SEP in consideration for shares of the Issuer. The surviving entity SEP is the wholly owned operating subsidiary of the Issuer; there was no change to the legal structure of the Issuer. Upon completion of the transaction, on January 30, 2012, the name of the Issuer was changed to *LCTI Low Carbon Technologies International Inc.*

SEP was incorporated under the laws of the state of Wyoming on February 9, 2009 under the provisions of the Wyoming Business Corporations Act (“WBCA”). SEP’s head office is located at 2800 Post Oak Boulevard, Suite 4100, Houston TX 77056; its registered office is located at 1821 Logan Avenue, Cheyenne, Wyoming, 82001.

**Item 2. Address of the Issuer’s Principal Executive Offices.**

2800 Post Oak Boulevard, Suite 4100, Houston TX 77056 USA  
Phone: (832) 390-2238  
[www.lctiinc.com](http://www.lctiinc.com)

For investor relations please contact:

Crescendo Communications, LLC  
Direct: (212) 671-1021  
Main: (212) 671-1020  
Fax: (347) 923-9520  
Email: [dwaldman@crescendo-ir.com](mailto:dwaldman@crescendo-ir.com)  
Website: [www.crescendo-ir.com](http://www.crescendo-ir.com)

**Item 3. Security Information.**

The Issuer trades on the pink sheets maintained by OTC Markets Group, Inc. under the symbol “LWCTF”.

The exact title and class of securities outstanding.

<u>Title</u>	<u>Class</u>	<u>CUSIP No.</u>	<u>Symbol</u>
Common Stock	n/a	50184H 10 5	LWCTF

***Common Stock***

The Articles of Incorporation of the Issuer authorize the issuance of an unlimited number of shares of common stock, without par value. As at the date of this report, 139,274,164 Issuer Shares are issued and outstanding, of which 47,395,823 Issuer Shares issued to certain insiders, officers and directors are subject to escrow pursuant to the Escrow Agreement entered into among the Issuer, the Transfer Agent and certain Issuer Shareholders.

Holders of common stock are entitled to one vote per share on all matters to be voted on by the stockholders. Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution, or winding up of the Company, the holders of common stock are entitled to share ratably in all of our assets which are legally available for distribution after payment of all debts and other liabilities and liquidation preference of any outstanding stock.

Holders of our common stock have no preemptive rights to purchase common stock. There are no conversion or redemption rights or sinking fund provisions with respect to the common stock. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

### ***Preferred Stock***

The Articles of Incorporation of the Issuer do not authorize the issuance of preferred stock.

### ***Debt Securities***

The Issuer has no outstanding debt securities.

### ***Options/Warrants***

#### ***Stock Option Plan***

The Issuer has established a Stock Option Plan pursuant to which the board of directors of the Issuer may from time to time, in its discretion, and in accordance with the policies of the CNSX, grant to directors, officers, consultants, employees or management company employees of the Issuer, non-transferable options to purchase Issuer Shares, provided that the number of Issuer Shares reserved for issuance will not exceed 10% of the then issued and outstanding Issued Shares. Each option to purchase an Issuer Share will be exercisable for a period of up to five years from the date of grant. The number of Issuer Shares reserved for issuance to any individual director, officer, employee or management company employee of The Issuer, together with any Issuer Shares reserved for issuance pursuant to options granted to that person during the previous 12 months will not exceed 5% of the then issued and outstanding Issuer Shares, and the number of Issuer Shares reserved for issuance to any consultant or person employed in investor relations activities on behalf of the Issuer will not exceed 2% of the then issued and outstanding Issuer Shares, unless at the time of grant the CNSX permits otherwise. Options may be exercised the greater of 12 months after the completion of the acquisition of SEP and 90 days following cessation of the optionee's position with the Issuer, or 30 days for optionees employed in investor relations activities, or such lesser period as may be specified by the Board of the Issuer at the time of granting the option, provided that if the cessation of office, directorship, employment, or consulting arrangement was by reason of death, the option may be exercised within a maximum period of one year after such death, subject to the expiry date of such option.

Subject to the discretion of the Board, options granted to an optionee under the Stock Option Plan shall fully vest on the date of grant. Options granted to consultants providing investor relations services must vest (and not otherwise be exercisable) in stages over a minimum of 12 months with no more than  $\frac{1}{4}$  of the options vesting in any 3 month period.

The exercise price of the shares covered by each option shall be determined by the Board. The exercise price will not be less than the price permitted by the CNSX or other regulatory body having jurisdiction.

The following table sets out the particulars of the stock options currently outstanding. Each option is exercisable to purchase one Issuer Share on the terms set out below:

Optionee	Number of Issuer Shares to be reserved under Option	Exercise Price per Resulting Issuer Share	Expiry Date
Michael Lege <sup>(2)</sup>	229,583	\$0.25	March 1, 2014
Charles Delacey <sup>(2)</sup>	75,000	\$0.25	March 1, 2014
Brandon Jarnagin <sup>(1)</sup>	154,585	\$0.25	March 1, 2014
Investor Cubed Inc.	400,000	\$0.25	March 1, 2014
Thomas Harrison	229,583	\$0.25	March 1, 2014
Eugene Allen	229,583	\$0.25	March 1, 2014
Steven Katirai	145,000	\$0.25	March 1, 2014
Jake Watkin	72,500	\$0.25	March 1, 2014
Chris Key	48,333	\$0.25	March 1, 2014
Gerry Metcalfe	48,333	\$0.25	March 1, 2014
Gary Bush	120,833	\$0.25	March 1, 2014
Gerardo Hubard	217,500	\$0.25	March 1, 2014
Gerardo Alvarez Herrera	145,000	\$0.25	March 1, 2014
Andrey Olhovich	145,000	\$0.25	March 1, 2014
Harley Sinclair <sup>(2)</sup>	72,500	\$0.25	March 1, 2014
Crescendo Communications LLC	200,000	\$0.10	November 5, 2018
Total:	2,533,333		

**Notes:**

1. These options were granted to directors and officers of the Issuer.
2. These options were issued to former executive officers and directors of the Issuer.

**Dividend Policy**

The Company has not issued any dividends on the common stock to date, and does not intend to issue any dividends on the common stock in the near future. We currently intend to use all profits to further the growth and development of the Company.

The Company was incorporated in the province of British Columbia, Canada on August 1, 2008 under the provisions of BCBCA .

**The name and address of the transfer agent:**

Equity Financial Trust  
 1185 West Georgia Street, Suite 1620, Vancouver, BC V6E 4E6  
 Phone: (604) 696-4230  
 Fax: (604) 696-9860  
[www.equityfinancialtrust.com](http://www.equityfinancialtrust.com)

Equity Financial Trust is registered with the SEC as its appropriate regulatory authority (“ARA”).

#### **Item 4. Issuance History**

There have been no events that resulted in changes in total shares outstanding by the issuer in the past two fiscal years and any interim period.

#### **Item 5. Financial Statements.**

The financial statements of the Issuer as and for August 31, 2013 were published separately on OTC Disclosure & News Service in a Quarterly Report filing dated December 2, 2013, and are incorporated herein by reference.

#### **Item 6. Description of the Issuer's Business, Products and Services.**

##### ***Business Overview***

LCTI Low Carbon Technologies International Inc. ("LCTI") is a USA based clean-tech company focused on developing, owning and operating clean-tech projects and investments.

LCTI acquires operating businesses, clean-tech technologies & strategic real estate assets.

Technologies will be utilized in the development of clean-tech projects which are strategically located on LCTI real estate assets.

The technology licenses will be combined with the profitable operating businesses, clean-tech companies are created.

LCTI issues sub-licenses to third parties for each technology & in exchange for the technology licenses receives project equity and licensing royalties.

Over the next 12 months, LCTI also intends to carry out its business plan through the continued operation of its divisions and to seek partners and clients for potential developments of cleantech energy projects and to issue sublicenses to third parties for the LCTI portfolio of cleantech technologies.

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 February 28, 2013, the Company owns 50% 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 received U.S. Army Corps of Engineers approval for a 1,900 acre wetland mitigation bank known as the Gulf Coastal Plains Wetland Mitigation Bank on August 16th, 2013. 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 has already begun negotiating deposits. 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.

## ***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.

### *A2E Joint Venture*

Within this division lies LCTI's 50% interest in A2E LLC. A2E LLC has been granted rights for a technology that utilizes algae to development biodiesel. A2E LLC has licensed the rights to the technology from Suneco Energy and plans to deploy the technology at a site in Mexico.

### *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

The site is located adjacent to a specialty woods lumber mill located in Campeche, Mexico and owned and operated by Transforesta. Transforesta, intends to provide wood waste to LCTI for use in a future Waste to Energy facility.

### *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.

## 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.

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 of 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.

## *Development of Business*

The Issuer was a Capital Pool Company as defined in the CPC Policy of the Toronto Stock Exchange (“TSX”). The Issuer made its Initial Public Offering of 1,230,000 Issuer Shares for gross proceeds of \$123,000 by way of an amended and restated final prospectus dated December 8, 2008, which was filed in the Provinces of Alberta and British Columbia. The Initial Public Offering and a concurrent private placement offering of \$77,000 were completed on December 23, 2008 and the Issuer Shares began trading on the Exchange effective January 12, 2009, under the symbol “ENC.P”. On March 31, 2009, the Issuer completed a private placement offering for gross proceeds of \$169,070 and issued a total of 1,690,704 Issuer Shares.

On April 17, 2009, the Issuer entered into a letter of intent with SEP to acquire all of the issued and outstanding SEP Shares in exchange for Issuer Shares. On July 15, 2010, as amended by addendums dated January 6, 2011, January 8, 2012, and January 26, 2012, the Issuer entered into an Agreement with EnCap Acquisition and SEP, to acquire the business and assets of SEP by merging with EnCap Acquisition.

EnCap Acquisition and SEP completed the transaction under the WBCA on January 30, 2012 as evidenced by a stamped Articles of Merger and issuance of a Certificate of Merger from the Wyoming Secretary of State. Rather than receiving securities of EnCap Acquisition, SEP Shareholders each received one Issuer Share for every two and three tenths SEP Shares held. Other than the issuance of Issuer Shares in consideration for SEP Shares, the Issuer itself was not involved in the transaction and was not amalgamated with SEP pursuant to the Merger Agreement. As such, there was no change to the legal structure of the Issuer pursuant to the transaction. Upon completion of the Acquisition, the name of the Issuer was changed to *LCTI Low Carbon Technologies International Inc.*

The transaction was completed on January 30, 2012. The Issuer effectively acquired all of the SEP Shares issued and outstanding on the basis of two and three tenths SEP Shares issued and outstanding for one fully paid and non-assessable Issuer Share. Each issued and outstanding common share of EnCap Acquisition held by the Issuer was converted into a common share of LCTI, and continues to be owned by the Issuer.

The Acquisition was effected as follows:

- SEP and EnCap Acquisition transaction was completed on January 30, 2012 under the WBCA to become LCTI;
- every two and three tenths SEP Shares issued and outstanding became one Issuer Share;
- all of the property and assets of each of SEP and EnCap Acquisition are now the property and assets of LCTI and LCTI will be liable for all of the liabilities and obligations of each of SEP and EnCap Acquisition;
- LCTI is now a wholly-owned subsidiary of the Issuer;
- the Issuer’s name was changed to LCTI Low Carbon Technologies International Inc. on January 30, 2012;
- the Issuer issued 134,583,460 Issuer Shares to the former SEP Shareholders;
- some of the Issuer Shares issued pursuant to the transaction to the directors, officers, insiders and non-insiders of the Issuer were placed in escrow.
- The offer and issuance of the Issuer Shares to the SEP Shareholders pursuant to the transaction were effected pursuant to certain available exemptions from:
- the prospectus and registration requirements of the Securities Act (British Columbia) and the securities legislation of such other Canadian jurisdictions as applicable; and

- the registration requirements of the U.S. Securities Act and all applicable state securities and blue sky laws.
- Immediately prior to the completion of the Acquisition, there were 309,541,990 SEP Shares outstanding and 4,690,704 Issuer Shares issued and outstanding. The aggregate number of issued and outstanding Issuer Shares upon completion of the Acquisition was 139,274,164. .

From February 9, 2009 to date, SEP issued an aggregate of 309,541,990 Shares for assets and services rendered at prices ranging from US\$0.055 to \$3.00 per SEP Share.

SEP issued 4,000,000 SEP Shares to PG Lonestar in respect of a grant of the exclusive option to purchase all of the issued and outstanding shares of PG Lonestar. **This was a non-arm's length transaction.**

On May 15, 2009, SEP acquired all of the issued and outstanding shares of HNNG Midstream Partners, LLC, a wholly-owned subsidiary of HNNG Development, LLC by the issuance of 15,000,000 SEP Shares. SEP also acquired all of the issued and outstanding shares of HNNG Energy, L.L.C., a wholly-owned subsidiary of HNNG Development, LLC by the issuance of 10,000,000 SEP Shares and the issuance of 3,000,000 shares of Entropy Power, its wholly-owned subsidiary . The acquisitions were made for the purpose of deploying the HNNG technology to develop high nitrogen natural gas resources. As part of these acquisitions, SEP also acquired a decommissioned nitrogen rejection plant, an interest in certain oil and gas properties, and exclusivity in Mexico and an option to purchase exclusivity for North America for the HNNG technology. This was an arm's length transaction.

In December 2009, SEP filed a lawsuit against HNNG Holdings, LLC, HNNG Development, LLC and certain of its officers and directors for breach of contract. SEP remained the sole shareholder of each of HNNG Midstream and HNNG Energy L.L.C. and settled the lawsuit.

On October 22, 2010, SEP issued 3,000,000 SEP Shares to Zero Carbon RDL Limited pursuant to a technology license agreement. This was an arm's length transaction. The license agreement granted exclusive manufacturing, distribution, and marketing licensing rights for North and South America to a portfolio of clean-tech technologies in various stages of development. SEP issued 200,000 SEP Shares for each of the fifteen technologies. As part of this licensing arrangement, the licensor shall reinvest the first US\$5,000,000 generated from the sale of SEP Shares received into the technology portfolio for research and development and to develop additional demonstration facilities. LCTI's licensed rights to the technologies are indefinite.

The following table summarizes the technologies that are part of this portfolio licensed to LCTI:

Brief Description	Design Capability
Atmospheric electrical energy harvesting technology	To harvest electrostatic energy from the atmosphere and convert it into readily usable DC and/or AC power
Active thermoregulation technology	Concentration, storage and recirculation of high and low temperature liquids for active thermoregulation of the built environment
Bio-composite building components and system production technology	Efficient use and processing of recyclable/low embedded energy materials into built environments
Controlled environmental horticulture technology	Utilizing the controlled environmental infrastructure and distilled water of desalination systems to efficiently and sustainably produce highly nutritional plants
Energy storage technology	Efficient storage of thermal and electrical energy
Electrowinning of precious and rare earth metals	Efficient extraction of precious and rare earth metals, including decontamination
Centrifugal materials processing system	Efficient processing of liquids and powders to increase materials efficiency and reduces energy consumption, including concrete structure mass reduction

Brief Description	Design Capability
Desalination and salt production	Efficient mineral extraction from saline solutions without chemical additives to produce distilled water and pure salt
Kinetic energy (water and wind) conversion	Efficient conversion of environmental kinetic energy into mechanical, thermal, or electrical power
“Skysails” for shipping	High power traction kites to reduce marine transport costs
Concentrated solar energy capture and power conversion	Efficient conversion of solar radiation into thermal and/or electrical energy
Hydrofoil assisted marine vessels	Displacement and waterline reduction of marine vessels reduces unwanted ship movement and emissions while increasing fuel efficiency
Nano-Carbon Fiber	Production of nano-carbon fiber from waste with minimal energy consumption
Efficient transport technology	Ultra light, efficient transport solution using high strength materials and efficient energy storage
Low cost zero carbon power and CO <sub>2</sub> sequestration	Continuous cycle oil reservoir gas injection, CO <sub>2</sub> sequestration, enriched gas production and zero carbon power generation
Bison Vehicles	Technology for hybrid military vehicles

On October 15, 2010, SEP acquired PG Lonestar in exchange for 185,000,000 SEP Shares in addition to the 4,000,000 SEP Shares issued for the exclusive option to purchase PG Lonestar. The assets of PG Lonestar include approximately 4,000 acres of land located along the Texas Gulf Coast. This land is owned by WK Management. LCTI, in co-operation with its partners and technology providers, plans to utilize portions of this property for the development and manufacturing of acquired technologies. LCTI, along with its partners, also plans to utilize portions of this property as a mitigation bank and they intend to sell mitigation credits. As part of the PG Lonestar acquisition SEP also acquired two technology licenses. The first is for the exclusive manufacturing, distribution, and marketing licensing rights in North and South America for electric and hybrid urban buses and utility vehicles (the “**ZEM License**”). Other models currently under development include a hybrid garbage truck and 12 meter versions of the electric and hybrid buses. The second is for exclusive manufacturing, distribution, and marketing licensing rights in North and South America for energy efficient LED streetlights and a heat transfer device useful in the thermal management of LED lighting units and other commercial applications requiring heat transfer (the “**LCL License**”). **This was a non-arm’s length transaction.** Both licenses were acquired by PG Lonestar with SEP Shares received for the option to purchase PG Lonestar.

The ZEM License was acquired by the issuance of 500,000 SEP Shares and is a perpetual license.

The LCL License was acquired by the issuance of 500,000 SEP Shares and is a perpetual licence. In addition, LCTI shall pay the licensor 5% of revenues earned as a result of exploiting the technology. These issuer Shares will be released by the licensee upon delivery of full specifications necessary for successful use, installation, and/ or production of the technology.

On December 10, 2010, SEP acquired a 27.5% interest in East Bay Farms LLC (“East Bay”), a Texas limited liability company by the issuance of 5,000,000 SEP Shares. LCTI’s environmental credit program is progressing 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. Though Corps of Engineers approval for the mitigation bank is pending, East Bay has already begun to take reservation deposits for the credits to be produced on this site. East Bay Farms, LLC also has exclusive water rights to East Bay Bayou in Chambers County, Texas. East Bay Farms, LLC has the right to withdraw from East Bay Bayou 2,240 acre feet of water for agricultural purposes and 5,320 acre feet of water for industrial purposes on an annual basis. [Note: 1 Acre-Foot = 325,851 gallons]. Currently East Bay Farms has the right to extract and use over 2.4 Billion Gallons per year. This was an arm’s length transaction.

On April 1, 2011, SEP acquired Teposolar and its subsidiary, C&I Mechanical Ltd., for \$3,750,000 payable by way of a promissory note and 700,000 SEP Shares. The SEP Shares were issued to the general partners of C & I Mechanical. **This was a non-arm's length transaction.**

On September 25, 2012 the terms of the promissory note and associated debt related to the acquisition of Teposolar and its subsidiary C&I were modified. The modified terms of the promissory note are as follows:

- a) The principal sum of the promissory note was reduced from \$3,750,000 to \$2,500,000.
- b) All interest accrued from April 1, 2011 to September 25, 2012 was forgiven.
- c) Two equal payments of \$1,250,000 are due on October 1, 2014 and October 1, 2015.
- d) Interest shall accrue at the rate of 5% per annum following the date of the first payment on October 1, 2014.

If mutually agreed the payments may be made with common shares of SEP. Concurrently with the above acquisition, Teposolar acquired all of the issued and outstanding limited partnership interests and 100% of the common shares of the general partner of C&I Mechanical Ltd., a Texas Limited Partnership. SEP acquired 100% of Teposolar and assumed all responsibilities related to the promissory note.

As part of the PG Lonestar acquisition, the Issuer acquired a long term lease with option to purchase on an ~800 acre property located in Campeche, Mexico. The lease which was executed on June 1, 2010 has a purchase option that can be triggered at any time during the 25 year term of the lease. The purchase option may be payable with project-specific equity for onsite developments. If the landlord declines payment by way of project-specific equity, the option exercise price will be payable in cash or Issuer Shares. The lease payments for the first three years are 76,000 Issuer Shares paid annually. Subsequent years are payable, at the option of the Issuer in cash or Issuer Shares. With the owner of the property responsible for maintenance, taxes, and insurance until development begins and flexible payment terms including project-specific equity, the financial responsibility associated with the property has been minimized while the Issuer, along with its Mexican partners, explore possible developments and future projects to deploy the Issuer's low carbon and sustainable solutions on the property. The sub-leases may be terminated by the Issuer after the initial 3-year term, upon 60 days notice. The leases may be terminated by the landlords if the Issuer fails to create an Internal Development Plan, as defined in the lease agreement, within 3 years of June 1, 2010, the date of the original lease agreement.

On November 30, 2010, wholly owned subsidiary, PG Lonestar 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 square feet of office space. The Issuer has full access to utilize most of the site's extensive infrastructure further described below. At the Issuer's option it may lease additional portions of the properties under similar terms and conditions. The fully furnished and operational office space has lease payments of \$4,200 annually. Additional lease payments for the 65 acres being leased and optional lease payments 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 Tishomingo County site is a former Tennessee Valley Authority Nuclear Power & NASA Rocket facility developed at a cost of \$4 billion dollars\*. The site is located at the juncture of the Tennessee River and the Tennessee Tombigbee Waterway with connections to the Mississippi-Ohio-Missouri River Systems and the Gulf of Mexico. The entire site includes the following:

- 3,500 acres of land, including a buffer zone;
- approximately 169,000 square feet of furnished space in an office building;
- approximately 600,000 square feet of industrial space;
- a barge dock;
- twenty-four hour, seven day a week security;

- dual feed electricity;
- onsite fire department;
- onsite rail and rail yard;
- bridge cranes with lifting capacity of up to 400 tons; and,
- an electrical substation.

This transaction was an arm's length transaction

*\*Source Tishomingo County Economic Development Authority*

On February 21, 2012 the Issuer acquired 50% of the membership units of Prestige Thermal Americas LLC ("Prestige") in exchange for the Issuer formally agreeing to utilize Prestige's Waste to Energy ("WTE") technologies for the first two WTE projects that the Issuer plans to develop in the USA. As part of the transaction Prestige will utilize approximately 40,000 sq. ft. of the Issuer's real estate assets for the Prestige Americas USA based manufacturing and pre-assembly facility. The Issuer will also work jointly with Prestige to secure the appropriate project financing.

GEI Green Energy Industries of South Africa provided the license to Prestige Thermal Americas LLC to manufacture the Prestige Thermal Energy Branded Equipment.

On March 2, 2012 the Issuer acquired 24.5% of the membership units of Industrial Commercial Mechanical LLC("ICM") in exchange for an initial capital contribution of up to \$4,900 and a commitment to loan ICM up to \$98,000 to fund operations. On January 16, 2013 the Company acquired an additional 25.5% interest in ICM. ICM's principal service is 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.

On April 12, 2013 the Company secured a 43.5% of the membership units in Northwest Critical Minerals, LLC ("NCM"), a Rare Earth Elements (REE) mining company. LCTI agreed to issue non-exclusive licenses for certain technologies from its portfolio in exchange for the 43.5% interest.

On March 20, 2013 the Company secured a 50% of the membership units in A2E LLC, a Texas limited liability company ("A2E") in exchange for the Issuer formally agreement to provide or secure the real estate for the first project of A2E and funding start up costs. A2E has been granted rights to a technology that utilized algae for biodiesel production.

### ***Governmental Regulation***

#### ***Impact of United States Energy Regulations on the Company's Operations***

LCTI is not aware of any environmental protection or regulation that negatively impacts it business.

#### ***Impact of Canadian Regulation on the Company's Operations***

To LCTI's knowledge, there are no risks associated with foreign operations of LCTI and no dependence of the segments upon the foreign operations.

### ***Research and Development***

In the year ending August 31, 2012 the Issuer spent \$nil on research and development. For the year ended August 31, 2013 the Issuer spent \$nil on its research and development activities.

## *Employees*

As of the date of this report, the Issuer and its subsidiaries employed 32 employees, 32 of which are a full-time employees. Management believes that relations with all employees are good.

## *Intellectual Property*

LCTI, including its subsidiaries, holds the following licenses:

1. “Technology, Manufacturing Assembly and Distribution License Agreement” between Zero Emissions Ltd. and PG Lonestar dated October 20, 2010 (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 PG Lonestar can sub-license all aspects of the license, including the right to third parties to grant sub-licenses themselves.

The consideration paid for the ZEM License was the issuance of 500,000 SEP Shares to Zero Emissions Ltd.

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.

2. “Technology, Manufacturing Assembly and Distribution License Agreement” between Low Carbon Lighting Ltd. and PG Lonestar dated June 2010 (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 PG Lonestar can sub-license all aspects of the license, including the right to third parties to grant sub-licenses themselves.

Consideration for the LCL License was the issuance of 500,000 SEP Shares to Low Carbon Lighting Ltd.

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.

3. “Technology, Capability, Manufacturing, Assembly and Distribution License Agreement” between Zero Carbon RDL Limited (“Zero Carbon”) and SEP dated October 22, 2010 (the “**Cap Tech License.**”)

The Cap Tech 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 Cap Tech 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.

The consideration paid for the Cap Tech License was the issuance of 3,000,000 SEP Shares to Zero Carbon.

Zero Carbon agrees that the first \$5,000,000 generated from the sale of the Issuer shares that it receives pursuant to the Cap Tech License will be reinvested into the technology portfolio to develop the demonstration facilities

The technology covered by the Cap Tech 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 (250c) or super cooled (-50oC) 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 at MEDRC 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 Kuntor 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.

### **Item 7. Description of the Issuer’s Facilities.**

<b>Asset</b>	<b>Location</b>	<b>Description</b>
Office	Houston, TX	Office space leased
Office	Kountze, TX	Office space leased
Office	Beaumont, TX	Office space leased
Land (~13 acres)	Beaumont, TX	~13 acres of undeveloped land in Senora, Mexico currently controlled by Issuer through a 25-year lease with purchase option.
Land (~12,000 acres)	Senora, Mexico	~12,000 acres of undeveloped land in Senora, Mexico currently controlled by Issuer through a 25-year lease with purchase option.
Land (~4,000 acres)	Bolivar, TX	~4,000 acres of undeveloped land 100% owned by the Issuer in Bolivar, Texas. The majority of the tract is to be developed into a mitigation bank with ~100 acres being suitable for commercial or industrial development.
Land (~800 acres)	Campeche, Mexico	~800 acres of undeveloped land in Campeche, Mexico currently controlled by Issuer through a 25-year lease with purchase option .
Tri-State Commerce Park	Mississippi, USA	65 acres of undeveloped land and 3,500 sq/ft of office space currently being leased by Issuer for future development. 25-year lease allows access and full usage off onsite amenities including use of railway and port.

Asset	Location	Description
Natural Gas Nitrogen Extraction Plant	Oklahoma, USA	Decommissioned natural gas plant 100% owned by Issuer utilizing a nitrogen rejection technology in Oklahoma, USA.
Construction Equipment	Beaumont, TX	Construction equipment utilized by Teposolar Technologies Corp, a wholly owned subsidiary of the Issuer.
Automobiles	Beaumont, TX	~15 construction vehicles utilized by Teposolar Technologies Corp, a wholly owned subsidiary of the Issuer.

## Item 8. Officers, Directors and Control Persons.

### *Security Ownership of Management, Directors and Control Persons*

The following table shows the beneficial ownership of our common stock as of August 31, 2013. The table shows the amount of shares owned by:

- (1) each person known to us who owns beneficially more than five percent of the outstanding shares of any class of the Company's stock, based on the number of shares outstanding as of August 31, 2013;
- (2) each of the Company's Directors and Executive Officers, as well as any control persons; and
- (3) all of its Directors and Executive Officers as a group.

The percentage of shares owned is based on 139,274,164 shares being outstanding as of August 31, 2013. Where the beneficially owned shares of any individual or group in the following table includes any options, warrants, or other rights to purchase shares in the Company's stock, the percentage of shares owned includes such shares as if the right to purchase had been duly exercised.

Name and Municipality of Residence	Number of Issuer Shares	Number of Issuer Stock Options	Percentage of Securities	Owned both of record and beneficially, of record only, or beneficially only
Bryan Scott Jarnagin, 4010 Bluebonnet St. Suite 209 Houston, TX, 77025	50,231,606 <sup>(1)</sup>	-	35.79%	of record and beneficially
Paul Cox, 609 Granville Suite 1040 PO Box 10354 Vancouver, BC	37,393,529	-	26.50%	of record
Brandon Jarnagin, 4010 Bluebonnet St. Suite 209 Houston, TX, 77025	16,903,553 <sup>(2)</sup>	154,585	11.75%	of record and beneficially
Michael Lege, 4010 Bluebonnet St. Suite 209 Houston, TX, 77025	108,695	229,583	0.24%	of record
TTF Fund I Ltd. 8137 Gladys Suite 102 Beaumont, TX 77706	8,695,652	-	6.24%	of record
<b>TOTAL:</b>	<b>111,770,087</b>	<b>459,168</b>	<b>80.58%</b>	

1. 100,000 of these shares are held in the name of Entropy Partners LLC which is controlled by Bryan Jarnagin. Mr. Bryan Scott Jarnagin disclaims investment and dispositive control over these shares.

*Beneficial Ownership of Securities:* Pursuant to Rule 13d-3 under the Securities Exchange Act of 1934, involving the determination of beneficial owners of securities, includes as beneficial owners of securities, any person who directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has, or shares, voting power and/or investment power with respect to the securities, and any person who has the right to acquire beneficial ownership of the security within sixty days through means including the exercise of any option, warrant or conversion of a security.

### ***Director and Executive Officer Summary***

The following table sets forth the names and ages of our current directors and executive officers, their principal offices and positions and the date each such person became a director or executive officer. The Board of Directors elects our executive officers annually. Our directors serve one-year terms or until their successors are elected, qualified and accept their positions. The executive officers serve terms of one year or until their death, resignation or removal by the Board of Directors. Brandon Jarnagin, Vice President and director of the Issuer, is the son of Bryan Jarnagin, CEO, CFO and director of this Issuer. In addition, there was no arrangement or understanding between any executive officer and any other person pursuant to which any person was selected as an executive officer.

<b>Name, Municipality of Residence and Position(s)</b>	<b>Principal Occupation for Past Five Years<sup>(1)</sup></b>	<b>Director Since</b>
<b>Bryan Scott Jarnagin</b> Houston, TX <i>CEO, President and Director</i>	CEO of SEP since February 2009; Chairman and CEO, Entropy Partners, LLC, January 2006 to June 2010; Partner, Green Atlantic Partners, December 2002 to January 2008.	February 9, 2009
<b>Brandon Jarnagin</b> Houston, Texas <i>VP/ Director</i>	Vice President/ Director of SEP. Partner with Entropy Partners, LLC a US based firm focused on the sustainable energy and environmental technologies sectors. Previously business analyst for The American Productivity and Quality Center. Previously, analyst for Green Atlantic Partners, lead estimator and commercial sales manager for a Houston, TX based commercial construction firm.	November 11, 2012

**Notes:**

1. The information as to principal occupation, business or employment and securities beneficially owned or controlled is not within the knowledge of management of the Issuer and has been furnished by the respective nominees.

### ***Legal and Disciplinary History***

No officer, director or control person of the Company has been the subject of:

1. A conviction in a criminal proceeding or named as a defendant in a pending criminal proceeding (excluding traffic violations and other minor offenses);
2. The entry of an order, judgment, or decree, not subsequently reversed, suspended or vacated, by a court of competent jurisdiction that permanently or temporarily enjoined, barred, suspended or otherwise limited such person's involvement in any type of business, securities, commodities, or banking activities;
3. A finding or judgment by a court of competent jurisdiction (in a civil action), the Securities and Exchange Commission, the Commodity Futures Trading Commission, or a state securities regulator of a violation of federal or state securities or commodities law, which finding or judgment has not been reversed, suspended, or vacated; or
4. The entry of an order by a self-regulatory organization that permanently or temporarily barred, suspended or otherwise limited such person's involvement in any type of business or securities activities.

**Item 9. Third Party Providers.**

***Securities Counsel***

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3355 W. Alabama St. Suite 1150  
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(713) 888-0040  
(800) 836-0714 fax  
rcutler@cutlerlaw.com

***Independent Registered Public Accounting Firm***

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(972) 420-0032 fax

***Investor Relations***

Crescendo Communications, LLC  
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Main: (212) 671-1020  
Fax: (347) 923-9520  
Website: [www.crescendo-ir.com](http://www.crescendo-ir.com)

**Item 10. Issuer Certifications.**

***PRINCIPAL EXECUTIVE OFFICER'S CERTIFICATION***

I, Bryan Scott Jarnagin, the Chief Executive Officer and Chief Financial Officer of LCTI Low Carbon Technologies International Inc. hereby certify that:

1. I have reviewed this Annual Report of LCTI Low Carbon Technologies International Inc.
2. Based on my knowledge, this disclosure statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this disclosure statement; and
3. Based on my knowledge, the financial statements, and other financial information included or incorporated by reference in this disclosure statement, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this disclosure statement.

Dated: December 15, 2013

/s/ Bryan Scott Jarnagin

By: Bryan Scott Jarnagin  
Title: CEO/CFO

***PRINCIPAL FINANCIAL OFFICER'S CERTIFICATION***

I, Bryan Scott Jarnagin, the CFO of LCTI Low Carbon Technologies International Inc., hereby certify that:

1. I have reviewed this Annual Report of LCTI Low Carbon Technologies International Inc.
2. Based on my knowledge, this disclosure statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this disclosure statement; and
3. Based on my knowledge, the financial statements, and other financial information included or incorporated by reference in this disclosure statement, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this disclosure statement.

Dated: December 15, 2013

/s/ Bryan Scott Jarnagin

By: Bryan Scott Jarnagin

Title: CEO/CFO