

Global Clean Energy Holdings, Inc.
Form 10-K
April 15, 2009

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

- ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2008
- TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number: 0-12627

GLOBAL CLEAN ENERGY HOLDINGS, INC.
(Exact name of Small Business Issuer as specified in its charter)

Utah
(State or other jurisdiction of
incorporation or organization)

87-0407858
(I.R.S. Employer
Identification Number)

6033 W. Century Blvd, Suite 895,
Los Angeles, California 90045
(Address of principal executive
offices)

(310) 641-4234
Issuer's telephone number:

Securities registered under Section 12(b) of the Act: None.

Securities registered under Section 12(g) of the Act: Common Stock, no par value.

Indicate by check mark if the registrant is a well known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and, (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein and, will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
filer o filer o (Do not check if a smaller reporting company) company p

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant as of June 30, 2008 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$8,865,000.

The outstanding number of shares of common stock as of April 8, 2009 was 229,381,338, which includes 4,567,519 shares of common stock currently held in escrow.

Documents incorporated by reference: None

Table of Contents

Form 10-K

	Page
PART I	1
ITEM 1. BUSINESS.	1
ITEM 1A. RISK FACTORS	11
ITEM 1B. UNRESOLVED STAFF COMMENTS.	20
ITEM 2. PROPERTIES.	20
ITEM 3. LEGAL PROCEEDINGS.	20
ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.	20
PART II	20
ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.	20
ITEM 6. SELECTED FINANCIAL DATA.	22
ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.	22
ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.	26
ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.	26
ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.	26
ITEM 9A(T) CONTROLS AND PROCEDURES.	26
ITEM 9B. OTHER INFORMATION	28
PART III	28
ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE.	28
ITEM 11. EXECUTIVE COMPENSATION.	30
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.	32
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.	33
ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.	34
PART IV	35

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This Report, including any documents which may be incorporated by reference into this Report, contains “Forward-Looking Statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact are “Forward-Looking Statements” for purposes of these provisions, including our plans to cultivate, produce and market non-food based feedstock for applications in the biofuels market, any projections of revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, and any statements of assumptions underlying any of the foregoing. All Forward-Looking Statements included in this document are made as of the date hereof and are based on information available to us as of such date. We assume no obligation to update any Forward-Looking Statement. In some cases, Forward-Looking Statements can be identified by the use of terminology such as “may,” “will,” “expects,” “plans,” “anticipates,” “intends,” “believes,” “estimates,” “potential,” “continue,” or the negative thereof or other comparable terminology. Although we believe that the expectations reflected in the Forward-Looking Statements contained herein are reasonable, there can be no assurance that such expectations or any of the Forward-Looking Statements will prove to be correct, and actual results could differ materially from those projected or assumed in the Forward-Looking Statements. Future financial condition and results of operations, as well as any Forward-Looking Statements are subject to inherent risks and uncertainties, including any other factors referred to in our press releases and reports filed with the Securities and Exchange Commission. All subsequent Forward-Looking Statements attributable to the company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements. Additional factors that may have a direct bearing on our operating results are described under “Risk Factors” and elsewhere in this report.

Introductory Comment

Throughout this Annual Report on Form 10-K, the terms “we,” “us,” “our,” and “our company” refer to Global Clean Energy Holdings, Inc., a Utah corporation formerly known as Medical Discoveries, Inc., and, unless the context indicates otherwise, also includes our wholly-owned subsidiary, MDI Oncology, Inc., a Delaware corporation, and Global Clean Energy Holdings LLC a wholly-owned Delaware limited liability company.

PART I

ITEM 1. BUSINESS.

Summary Overview

Global Clean Energy Holdings, Inc. is a Los Angeles-based biofuel feedstock development and operations company with international capabilities in eco-friendly biofuel feedstock research, and sustainable agriculture cultivation, production, and distribution. We are currently focusing our initial efforts on the commercialization of oil and biomass derived from the seeds of *Jatropha curcas* - a native non-edible plant indigenous to many tropical and sub-tropical regions of the world, including Mexico, the Caribbean and Central America. *Jatropha* oil is used for the production of high quality biodiesel - an important renewable energy fuel quickly gaining commercial acceptance worldwide. The residual derived from the press cake once the oil is extracted is a high quality biomass that can be used as a high quality replacement for fossil fuels. The *Jatropha* plant requires less water and fertilizer than conventional crops, and can be grown on desert and other lands not suitable for the production of food crops. Through a joint venture, we currently own and operate an approximately 5,149 acre *Jatropha* plantation in Mexico. We also have been managing, and will later this month finalize the acquisition of an existing approximately 400 acre *Jatropha* farm in Belize. Our business plan, and our current principal business activities include the planting, cultivation, harvesting and processing of *Jatropha* to generate seed oils and biomass for use in the biofuels industry, including the production of bio-diesel. Bio-diesel is a diesel-equivalent, processed fuel derived from biological sources (such as plant oils), which can be used in diesel engines. In addition to generating revenues from the sale of seed oils and biomass, we also plan to sell the carbon credits that our operations generate. Under the 1997 Kyoto Protocol, a worldwide carbon credit trading market has been established where sellers sell their excess carbon credits and buyers purchase the carbon credits they need to meet their greenhouse gas reduction requirements. Our farm activities are anticipated to generate a significant amount of such carbon credits that we plan to sell to third parties. Because of our knowledge in the production of bio-diesel and in the renewable energy sector, we may also, from time to time, provide consulting services in the bio-energy sector to third parties.

Organizational History.

This company was incorporated under the laws of the State of Utah on November 20, 1991. Until 2007, we were a developmental-stage bio-pharmaceutical company engaged in the research and develop of pharmaceutical products. In 2005, we formed MDI Oncology, Inc., a Delaware corporation, as a wholly owned subsidiary to acquire certain pharmaceutical intellectual properties from the liquidation estate of Savetherapeutics, A.G. in Germany. The pharmaceutical assets that we acquired and currently still own include SaveCream, a drug candidate that we were developing for the treatment and reduction of breast cancer tumors.

Early in 2007, our Board of Directors determined that we could no longer fund the development of our drug candidates and that we could not obtain additional funding for our drug development activities. Accordingly, in 2007, we decided to sell all of our pharmaceutical assets and enter into a new business. Since our decision to sell SaveCream and the related pharmaceutical assets, we have entered into negotiations with several pharmaceutical companies to sell those assets, and during 2008 we temporarily engaged a regional investment banking firm to assist us with the sale of those assets. To date we have not been able to sell SaveCream, and we currently are still marketing our remaining legacy pharmaceutical assets.

Having decided to dispose of our pharmaceutical assets, we considered entering into a number of other businesses that would enable us to enhance shareholder value. Our Board decided to develop a business to produce and sell seed oils, including seeds oils harvested from the planting and cultivation of *Jatropha curcas* plant, for the purpose of providing feedstock oil intended for the generation of methyl ester, otherwise known as bio-diesel (the "Jatropha Business"). Our Board concluded that there was a significant opportunity to participate in the rapidly growing biofuels industry, which previously was mainly driven by high priced, edible oil-based feedstocks. In order to commence our new Jatropha Business, effective September 7, 2007, we (i) hired Richard Palmer, an experienced energy executive, and a founding member of Global Clean Energy Holdings LLC to act as the our new President, Chief Operating Officer and future Chief Executive Officer, (ii) engaged Mobius Risk Group, LLC, a Texas company engaged in providing energy risk advisory services, to provide us with consulting services related to the development of the Jatropha Business, and (iii) acquired certain trade secrets, know-how, business plans, term sheets, business relationships, and other information relating to the cultivation and production of seed oil from the *Jatropha* plant for the production of bio-diesel from Global Clean Energy Holdings LLC.

In October 2007, we relocated our principal executive offices from Salt Lake City, Utah, to 6033 W. Century Blvd, Suite 895, Los Angeles, California 90045, and our current telephone number at that address is (310) 641-4234. In 2008 we changed our name to "Global Clean Energy Holdings, Inc." to reflect our new focus on the bio-diesel alternative energy market. We maintain a website at www.gceholdings.com. Our annual reports (previously on Form 10-KSB), quarterly reports (previously on Form 10-QSB and hereafter on Form 10-Q), current reports on Form 8-K and amendments to such reports filed or furnished pursuant to section 13(a) or 15(d) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), and other information related to this company, are available, free of charge, on our website as soon as we electronically file those documents with, or otherwise furnish them to, the Securities and Exchange Commission. Our Internet website and the information contained therein, or connected thereto, are not and are not intended to be incorporated into this Annual Report on Form 10-K.

The Jatropha Business.

Acquisition of Jatropha Business Technology

In connection with our efforts to commence the Jatropha Business, on September 7, 2007, we entered into a share and exchange agreement (the "Global Agreement") pursuant to which we acquired all of the outstanding ownership interests in Global Clean Energy Holdings, LLC, a Delaware limited liability company ("Global LLC"). Global LLC is a company that owns certain trade secrets, know-how, business plans, term sheets, business relationships, and other information relating to the cultivation and production of seed oil from the seed of the *Jatropha* plant, for the purpose of providing feedstock oil intended for the production of bio-diesel. Richard Palmer and Mobius Risk Group, LLC, a Texas limited liability company engaged in providing energy risk advisory services ("Mobius"), were the sole owners of the outstanding equity interests of Global LLC.

In exchange for all of the outstanding ownership interests in Global LLC, we issued 63,945,257 shares of our common stock to Richard Palmer and Mobius. The shares issued to Mr. Palmer and Mobius in the acquisition of Global LLC represented 35% of our outstanding shares of common stock immediately after the acquisition. Of the 63,945,257 shares issued under the Global Agreement, 36,540,146 shares were issued and delivered to Mr. Palmer (5,220,021 shares) and Mobius (31,320,125 shares) at the closing of the Global Agreement without any restrictions. The remaining 27,405,111 shares of common stock were, however, issued as restricted shares, subject to forfeiture in the event that certain specified performance milestones are not achieved. The restricted shares have been held by us in escrow until such shares are either released or cancelled. An aggregate of 23,490,095 restricted shares were issued to Mobius, and 3,915,016 restricted shares were issued to Palmer. If and when certain specified milestones are achieved, the restricted shares were to be released and delivered to Mr. Palmer and Mobius in accordance with the terms and conditions of the Global Agreement. During the time that the restricted shares were restricted and subject to forfeiture, the restricted shares were to be outstanding shares for all purposes and shall be entitled to vote and

receive dividends, if any are declared. As of March 31, 2009, a total of 22,837,592 of Mr. Palmer and Mobius' restricted shares have been released from the restrictions and delivered on a pro rata basis per the terms of the Global Agreement to Mr. Palmer and Mobius.

In order to obtain the expertise necessary to exploit the assets we acquired under the Global Agreement, we also entered into an employment agreement with Richard Palmer, and a consulting agreement with Mobius. For a description of Mr. Palmer's employment agreement, see "Item 11. Executive Compensation—Employment Agreement." We engaged Mobius as consultant to obtain Mobius' experience and expertise in the feedstock/bio-diesel market to assist us in developing our new business operations. The consulting agreement with Mobius was terminated in August 2008, and we have hired our own employees and independent contractors to perform the services previously provided to us by Mobius.

Management of our Mexico Operations—Lodemo Services Agreement

In 2007 we decided to initiate our Jatropha Business in Mexico. In order to obtain the logistical support and local assistance necessary to operate large scale agricultural and product delivery operations in Mexico, on October 15, 2007 we entered into a Service Agreement (the "Lodemo Agreement") with Corporativo LODEMO S.A DE CV, a Mexican corporation (the "Lodemo Group"). The Lodemo Group is a privately held Mexican company with substantial land holdings, significant experience in fuel distribution and sales, liquids transportation, logistics, land development and agriculture.

Under our supervision, the Lodemo Group will be responsible for the establishment, development, and day-to-day operations of our Jatropha Business in Mexico, including the extraction of the oil from the Jatropha seeds, the delivery of the Jatropha oil to buyers, the purchase or lease of land in Mexico, the establishment and operation of one or more Jatropha nurseries, the clearing, planting and cultivation of the Jatropha fields, the harvesting of the Jatropha seeds, the operation of the our oil extraction facilities, and the logistics associated with the foregoing. Although the Lodemo Group will be responsible for identifying and acquiring the farmland, ownership of the farmland or any lease or ownership thereto will be held directly by us. The Lodemo Group will be responsible for hiring and managing all necessary employees. We will bear all direct and budgeted costs of the Jatropha Business in Mexico.

The Lodemo Group will provide the foregoing and other necessary services for a fee primarily based on the number of hectares of Jatropha under cultivation. We have agreed to pay the Lodemo Group a fixed fee per year of \$60 per hectare of land planted and maintained with minimum payments based on 10,000 hectares of developed land, to follow a planned planting schedule. The agreement has a 20-year term but we may terminate the agreement under certain circumstances. The Lodemo Group also will potentially receive incentive compensation for controlling costs below the annual budget established by the parties, production incentives for increase yield and a sales commission for biomass sales. The Lodemo Group currently is managing the 5,149 acre plantation that we operate through our GCE Mexico I, LLC joint venture (see, "Item 1. Description of Business— GCE Mexico I, LLC," below). Some of the day-to-day operations for the Jatropha Business in Mexico will be transferred to Asideros Globales Corporativo, a Mexican subsidiary we formed to facilitate a more efficient operations and to comply with Mexican tax laws.

Business Strategy

We currently anticipate that our core activities initially will consist of planting, cultivating, harvesting and processing of Jatropha plant feedstock to generate seed oils and biomass for use in the biofuels industry, including the production of bio-diesel and certain other biofuels. Bio-diesel is a diesel-equivalent, processed fuel derived from biological sources (such as plant oils), which can be used in diesel engines and as a replacement for fuel oil. The term "biofuels" refers to a range of biological based fuels including biodiesel, synthetic diesel, ethanol and biomass, most of which have environmental benefits that are the major driving force for their introduction. Using biofuels instead of fossil fuels reduces net emissions of carbon dioxide and other green house gases, which are associated with global climate change. Biofuels further the concept of energy independence and environmental responsibility, while generating new jobs in new markets. This creates a social, environmental and economic gain from the production, distribution and end use of biofuels. As the world consumes larger volumes of fossil fuels, and further depletes the supplies of such fossil fuels, alternate sources of energy need to be developed to support growing economies.

In addition to producing and selling feedstock to generate seed oils and biomass for use as biodiesel, our business strategy is to also generate carbon credits under the 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change, which carbon credits we can sell to third parties. This Kyoto Protocol has created a worldwide carbon credit trading market where sellers sell their excess carbon credits and buyers purchase the carbon credits they need to meet their greenhouse gas reduction requirements. Our plantation activities are anticipated to generate a significant amount of such carbon credits that we plan to sell to third parties.

We have identified the *Jatropha curcas* plant as our primary feedstock for producing bio-diesel and other biofuels. The *Jatropha* plant is a perennial tree, that produces an inedible fruit with large seeds containing a high percentage of high quality inedible oil. The entire fruit, including the seeds, has excellent properties necessary for the production of biofuels. Our current business plan proposes to utilize the entire fruit of the *Jatropha* plant for biofuel production, including the oils produced from the fruit, as well as the hull, seed cover, seed oil and seed cake (press cake).

In connection with our new feedstock operations, we have identified strategic locations in North America, the Caribbean, Central America and South America ideally suited to our proposed planting, cultivation, harvesting and processing activities, in which we plan to establish cultivation, harvesting and processing operations. All of the areas identified have been selected for a number of key strategic reasons, including proximity to large ports for logistics purposes, relatively stable democratic governments, favorable trade agreements with the United States, low-cost land, reasonably priced labor, favorable weather conditions and acceptable soil conditions. As described below, we have acquired farm properties in the Yucatan, Mexico on which we have commenced planting *Jatropha*, and have also entered into an agreement to purchase an operating *Jatropha* farm in Belize (which acquisition is scheduled to occur by the end of April 2009).

Since the *Jatropha* plant is indigenous to Mexico, we decided to initiate our new business plan and related agricultural development activities in Mexico. We have identified a wide range of varieties of the *Jatropha* plant in Mexico, which we are currently propagating and studying. Our research and development activities will focus on plant and soil sciences, plant breeding and other related activities. We continue to study and identify the best suited *Jatropha* varieties, as well as optimum growth conditions, in order to maximize our output of the *Jatropha* fruit and seed oil.

As described below, through our GCE Mexico I, LLC joint venture, we have acquired 2,000 hectares (approximately 5,149 acres) of land in the State of Yucatan Mexico, which we believe is ideal for establishing and maintaining what we plan to be the first of several larger farms in which we will cultivate the *Jatropha* plant. Our initial business plan is to acquire the rights to use up to 20,000 hectares in Mexico for purposes of setting up farms on which we will cultivate the *Jatropha* plant. We anticipate that our current 2,000 hectare plantation will yield 1-2 million gallons of feedstock oil when fully planted with mature plants. We own a 50% interest in this joint venture and are the managing entity for all the farm and business activities.

In October of 2008 we also entered into an agreement to purchase a 400 acre *Jatropha* farm in Belize. The 2008 closing of this acquisition has been delayed, and the purchase of this farm is now scheduled to occur by the end of April 2009. This farm currently is cultivated and produces *Jatropha* seeds that we have used for planting in our Mexico farm and that are being sold to third parties. We are also evaluating other locations in the Caribbean, Central America and South America for purposes of establishing *Jatropha* farms.

Our business plan also proposes the construction of a seed oil extracting facility in which we would extract the feedstock oil from the *Jatropha* seed, and collect the remaining biomass for sale to interested buyers. We have not yet identified a location for the seed oil extracting facility; however, we plan to locate the facility relatively close to the ultimate end user of the biomass in order to minimize the costs and logistics of transporting the biomass to prospective buyers.

We anticipate that our primary focus will be in the feedstock oil market, and our operations will primarily comprise the planting, harvesting and sale of feedstock oil to end users in the energy industry for production of bio-diesel and other biofuels. In the short term, while developing Jatropha farms, we expect to generate short-term revenues through the sale of Jatropha seeds for germination, through forward sale contracts for feedstock oil and biomass to be produced at our facilities, and through the potential sale of carbon offset credits.

Depending on future economic, political and other factors, we may in the future expand our operations beyond the feedstock oil market. For example, our business plan contemplates the possibility of entering into a joint venture for the constructing of a bio-diesel refinery in which we would produce bio-diesel using the feedstock oil that we produce. In any event, we anticipate we will still remain a feedstock oil company primarily, and that our bio-diesel production, if any, would be derived from only a portion of the feedstock oil we produce. If economic and other factors at the time encourage us to invest in bio-diesel production, we anticipate that we may develop or acquire additional refining capacity in other strategic locations.

Our employees, advisors and consultants are senior energy professionals with extensive experience in the energy and biofuels market, the production of bio-diesel and in the renewable energy sector in general. Accordingly, we may also provide advisory services to other companies regarding their bio-fuels and/or feedstock development operations, on a fee for services basis. We are currently in negotiations with third parties to provide such biofuel consulting services in locations that are not directly competitive to our existing or planned sites.

We are still a development stage company, and we anticipate that we will require significant time and capital to develop our new operations into a stable and profitable business.

Principal Products

The production of biofuels feedstock is primarily a logistical agricultural operation. It needs to be supported with strong plant and soils sciences to improve productivity, quality and plant stability. The Jatropha curcas plant will be our primary agricultural focus for the foreseeable future. The Jatropha plant is a perennial, inedible tree, and all of its by-products can be used for fuel and biomass energy production. It is a very efficient tree that produces high quality seed oil and high-energy content biomass.

Bio-diesel Oil Feedstock

The feedstock oil needed for the production of bio-diesel that is currently available on the market today is primarily supplied from edible plant seed oils including soy, canola (rapeseed) and palm. There are other types of feedstock utilized including animal fats and recycled cooking grease, but they make up a small portion of the market supply. Our primary source of bio-diesel feedstock will be from the oil produced from the Jatropha plant. One advantage of the Jatropha plant is that its oil and meal is inedible, and the cultivation of the plant, which will primarily be for use in the biofuels industry, does not compete for resources with other crops grown primarily for food consumption.

Biomass Feedstock

The Jatropha plant produces a fruit (about the size of a walnut) containing three large seeds that contain 32%-38% oil content by weight. The non-oil components of the fruit, which represents 62-68% of the total fruit, contains high energy biomass (carbon values) that is an excellent source of feedstock for a number of energy producing processes including direct combustion, gasification, power production, and cellulosic ethanol (alcohol) production.

Carbon Credits

Biofuels production and use is a very effective means to reduce both local and global pollution from emissions that cause climate change. Growing trees and plants which sequesters carbon from the atmosphere and burning biofuels offsets the production of greenhouse gasses resulting from the consumption of petroleum or other fossil-based fuels. Many biofuels produce less pollution, including CO₂, NO_x, SO_x and PM₁₀. Through the 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol), signatory countries are required to reduce their overall greenhouse gas emissions, or carbon footprint. As of November 2007, 174 parties are signatories to and have ratified the Kyoto Protocol. The United States of America is not a signatory to the Kyoto Protocol. Signatory countries require local industry and other local energy end-users to either reduce their greenhouse gas emissions, or purchase greenhouse gas emission credits (carbon credits). This requirement has created a worldwide "Carbon Credit Trading Market" where sellers sell their excess carbon credits and buyers purchase the carbon credits they need to meet their greenhouse gas reduction requirements. The development of agricultural-based energy projects may produce carbon credits through the sequestration (storing) of carbon by the growing of trees and plants, or by the offset of other sequestered carbon. Selling carbon credits represents potential additional revenue that will help to offset capital requirements for our plantation and other development activities.

In our case, Certified Emission Reductions (CERs) may be generated through Clean Development Mechanism projects in non-Annex 1 nations, which include Mexico, the Caribbean, Central and South America. Assuming full capacity at a 20,000-hectare *Jatropha* farm, we estimate that we could generate more than 250,000 metric tons of sellable carbon credits annually.

Current Operations

Mexico. Effective April 23, 2008, we entered into a limited liability company agreement ("LLC Agreement") for GCE Mexico I, LLC, a Delaware limited liability company ("GCE LLC"), with six other unaffiliated investors. GCE LLC was organized primarily to acquire 2,000 hectares (approximately 5,149 acres) of land (the "Jatropha Farm"), directly or through subsidiaries, located in the State of Yucatan in Mexico to be used primarily for the (i) cultivation of *Jatropha curcas*, (ii) the marketing and sale of the resulting fruit, seeds, or pre-processed crude *Jatropha* oil, whether as biodiesel feedstock, biomass or otherwise, and (iii) the sale of carbon value, green fuel value, or renewable energy credit value (and other similar environmental attributes) derived from activities at the Jatropha Farm. GCE LLC acquired the Jatropha Farm through a subsidiary in which GCE LLC owns a 99% interest, and we own a 1% interest.

Since the acquisition of the approximately 5,149 acres of raw land, we have developed a commercial seedling nursery and approximately 2,500 acres have been improved, with approximately 750 acres planted with *Jatropha* plants. All the necessary roads and other infrastructure have been developed on the farm. In addition, we have acquired equipment to improve the rate of land preparation and planting on the Jatropha Farm. As a result, we anticipate that the Jatropha Farm will be fully planted by the end of calendar 2009. We also expect that the trees planted in 2008 and early 2009 will produce seeds in CY 2009 which we will sell to third parties for propagation. We currently own 500 common membership units in GCE LLC, comprising 50% of the issued and outstanding membership units of GCE LLC. The remaining 50% in common membership units were issued to the third party investors. (This company and the other members of GCE LLC holding the common membership units are collectively referred to as "Common Members.") In addition, an aggregate of 1,000 preferred membership units were issued to investors ("Preferred Members"). Under GCE LLC's operating agreement, the Preferred Members were required to invest a total of approximately \$2,233,000 in GCE LLC, all of which was invested in 2008. In addition, the Preferred Members are required to make additional capital contributions to GCE LLC, as requested by management and as required by the operation of the Jatropha Farm in 2009 and the following years. As a result, through March 31, 2009, the Preferred Members have contributed a total of \$3,486,000 to GCE LLC. The Preferred Members will continue to fund the ongoing operation in accordance with the approved annual budgets provided by management. This funding will continue until the Jatropha Farm generates adequate revenue to sustain operations, which is expected to occur by the

end of calendar year 2009 The Preferred Members will be entitled to a preferential 12% per annum cumulative compounded return on their investment.

6

The two Preferred Members also directly funded the purchase by GCE LLC of the approximately 5,149 acres of land in the State of Yucatan in Mexico by making a \$2,051,282 loan to pay the purchase price of that land. The land was acquired in the name of GCE LLC's Mexico subsidiary and is secured by a mortgage in the amount of \$2,051,282 in favor of the Preferred Members. The mortgage bears interest at the rate of 12% per annum, and interest is required to be paid quarterly. However, GCE LLC has agreed that interest shall accrue until such time as there is sufficient cash flow to pay all accrued interest. The entire mortgage, including any unpaid interest, is due April 23, 2018.

GCE LLC is managed under the supervision of a board of directors comprising four members, two of whom we have appointed and the remainder by the Preferred Members. However, as the manager of the joint venture, we manage the day-to-day operations of GCE LLC and the operations in Mexico. We do not receive any compensation for our services as manager of GCE LLC, although GCE LLC is required to reimburse us for the expenses, including managerial services of our employees, we incur in connection with the management of GCE LLC.

Belize. On October 29, 2008, we entered into a Stock Purchase Agreement with the four shareholders of Technology Alternatives Limited, a company formed under the laws of Belize ("TAL"), pursuant to which we agreed to purchase all of the issued and outstanding shares of TAL. TAL owns and operates a 400 acre farm in subtropical Belize, Central America, that currently is producing Jatropha. TAL also has been performing plant science research and has been providing technical advisory services for propagation of Jatropha for a number of years.

Under the original Stock Purchase Agreement, in consideration for the purchase of all of the shares of TAL, we agreed to issue to the four former shareholders of TAL an aggregate of 12,702,757 unregistered shares of our common stock. The sellers had previously made U.S. \$453,611 of loans to TAL to fund the operations of TAL. Under the Stock Purchase Agreement, we were supposed to replace TAL's U.S. \$453,611 obligation with new 90-day promissory notes issued by TAL to the sellers. These new promissory notes were to be secured by the deed of legal mortgage on the 400 acre farm owned by TAL. Accordingly, should TAL and/or this company fail to repay the promissory notes, the sellers could have foreclosed on the 400 acre Jatropha farm.

We were scheduled to take over the operations of the 400 acre farm in Belize in 2008. However, due to administrative delays in Belize relating to the transfer of the TAL shares to us, the closing of the TAL acquisition was postponed and currently is scheduled to occur during April 2009. We have, however, been actively involved in the activities of the TAL farm. As a result of the delay in the transfer of ownership to us, we have held further discussions with the sellers regarding the price and terms under which we are acquiring TAL. As a result of those discussions, the purchase price of TAL has been reduced as follows: (i) the principal amount of the promissory notes issued to the sellers has been decreased from U.S. \$453,611 to US \$303,611, and (ii) the number of shares that we will issue to the sellers has been reduced from an aggregate of 12,702,757 unregistered shares of our common stock to 8,952,756 shares.

The Belizean farm is located in Teakettle, Cayo, Belize. It comprises approximately 400 acres of prime land with approximately 1.0 mile of river frontage. The farm has an operating nursery capable of producing high quality seedling and rooted cuttings. The farm has been planted in four stages over the past three years with a derivative of the Cape Verde variety of Jatropha which was further developed in the Caribbean and imported into Belize. The Jatropha trees are of varying ages and have been planted in a number of configurations to promote maximum growth and to further develop planting, inter-cropping and automated harvesting techniques. The older trees are all producing fruit and seeds. The seeds are of propagation quality and command a premium in the market. There is land which adjacent and in close proximity to the Teakettle farm where we can expand the farm.

Technology

Although we do not currently possess any patentable technology relating to our operations in the feedstock and biofuels market, we may develop technology as we design and implement our business plan. Any technology we develop will be in three main categories: (i) plant and science sciences, (ii) agricultural development, and (iii) material processing and end use applications. Such technologies developed are expected to assist in reducing costs, improving efficiency and allowing us to move the products higher in value creation. We intend to pursue patentable technologies, processes and plant varieties.

Market

According to OPEC and EIA estimates, the world demand for crude oil in 2008 was approximately 87.09 million barrels per day, with approximately 25% of that demand being diesel and fuel oil (distillate fuel oil). This equates to a global consumption of distillate fuel oil of approximately 21.8 million barrels per day, or 334.3 billion gallons per year. At a 5% blend with biodiesel, the world market for biodiesel exceeds 16.7 billion gallons per year.

U.S. distillate fuel oil consumption for 2005 was 4.12 million barrels per day, which equates to over 60 billion gallons of diesel and fuel oil consumed annually. At a 5% biodiesel blend, the US biodiesel market is over 3 billion gallons per year and growing.

In 2004, U.S. biodiesel refineries produced approximately 30 million gallons of neat (100%) bio-diesel fuel. In 2005, US refineries produced approximately 75 million gallons, in 2006 approximately 250 million gallons were sold, in 2007 450 Million gallons were sold and in 2008, due to increased feedstock costs, US refinery production was below 25% of its 1.5 billion capacity.

Based on our current business plan, our primary market will be in the direct sale of Jatropha feedstock oil for bio-diesel production and biomass energy production, and the sale of carbon credits. Our primary customers will be refiners of bio-diesel. We estimate that there are approximately 165 bio-diesel plants in the United States alone, which can utilize up to 100% of our crude or refined Jatropha oil.

Oil made from the seeds of the Jatropha plant has also recently been tested as an aviation fuel supplement by a number of airlines, including Air New Zealand, Japan Airlines, and Continental Airlines. The ability of Jatropha oil to replace kerosene-based jet fuel is being studied to reduce the aviation world's dependence on high-pollution crude oil.

We will generate our highest revenues and greatest margins from customers who have logistical capacity on a water port accessible from the Gulf of Mexico. This will reduce redundant transportation costs and allow us to ship large quantities economically. These customers have historically paid a higher price for feedstock oil, since the majority of feedstock oil supplies has been shipped from the Midwestern United States. We anticipate that our key customer profile will include well-financed, low-cost bio-diesel refiners.

As our business develops, we expect to utilize some distributors for sale of the Jatropha feedstock oil and the biomass by-products that we will produce.

Environmental Impact

Biofuels, including bio-diesel, have environmental benefits that are a major driving force for their introduction. Using biofuels instead of fossil fuels reduces net emissions of carbon dioxide and other greenhouse gasses, which are associated with global climate change. Biofuels are produced from renewable plant resources that “recycle” the carbon dioxide created when biofuels are consumed. Life-cycle analyses consistently show that using biofuels produced in modern facilities results in net reductions of greenhouse gas carbon emissions compared to using fossil fuel-based petroleum equivalents. These life-cycle analyses include the total energy requirements for the farming and production of the biomass resource, as well as harvesting, conversion and utilization. Biofuels help nations achieve their goals of reducing carbon emissions. Biofuels burn cleanly in vehicle engines and reduce emissions of unwanted products, particularly unburned hydrocarbons and carbon monoxide. These characteristics contribute to improvements in local air quality. In a life-cycle study published in October 2002, entitled “A Comprehensive Analysis of Bio-diesel Impacts on Exhaust Emissions, 2002,” the U.S. Environmental Protection Agency (“EPA”) analyzed bio-diesel produced from virgin soy oil, rapeseed (canola) and animal fats. The study concluded that the emission impact of bio-diesel potentially increased NOx emissions slightly while significantly reducing other major emissions.

Competition

Although there are a number of producers of biofuels, few are utilizing non-edible oil feedstock for the production of bio-diesel. The following table lists the companies we are aware of that are cultivating *Jatropha* for the production of bio-diesel:

British Petroleum (UK)	Plans to establish 100,000 hectares of <i>Jatropha</i> plantations in Indonesia to feed the 350,000-tonne-per-year biodiesel refinery that it is building in the country.
Van Der Horst Corporation (Singapore)	Building a 200,000-tpy biodiesel plant in Jurong Island in Singapore that will eventually be supplied with <i>Jatropha</i> from plantations it operates in Cambodia and China, and possible new plantations in India, Laos and Burma.
Mission Biofuels (Australia)	Hired Agro Diesel of India to manage a 100,000-hectare <i>Jatropha</i> plantation, and a contract farming network in India to feed its Malaysian and Chinese biodiesel refineries. Mission Biofuels has raised in excess of \$80 million to fund its operations.
D1 Oils (UK)	As of June 2007, together with its partners, D1 Oils has planted or obtained rights to offtake from a total approximately 172,000 hectares of <i>Jatropha</i> under cultivation worldwide. D1’s <i>Jatropha</i> plantations are located in Saudi Arabia, Cambodia, Ghana, Indonesia, the Philippines, China, India, Zambia, South Africa and Swaziland. In June 2007, D1 Oils and British Petroleum entered into a 50:50 joint venture to plant up to an additional 1 million hectares of <i>Jatropha</i> worldwide. British Petroleum funded the first £31.75 million of the Joint Venture’s working capital requirements through a purchase of D1 Oils equity, and the total Joint Venture funding requirement is anticipated to be £80 million over the next five years.
NRG Chemical Engineering (UK)	Signed a \$1.3 billion deal with state-owned Philippine National Oil Co. in May 2007. NRG Chemical will own a 70% stake in the joint venture which will involve the construction of a biodiesel refinery, two ethanol distilleries

and a \$600 million investment in Jatropha plantations that will cover over 1 million hectares, mainly on the islands of Palawan and Mindanao.

1 hectare = 2.47 acres

We believe there is sufficient global demand for alternative non-edible biofuel feedstock to allow a number of companies to successfully compete worldwide. In particular, we note that we are the only US-based producer of non-edible oil feedstock for the production of bio-diesel which gives us a unique competitive advantage over many foreign competitors when competing in the USA.

9

The price basis for our non-edible oil and biomass feedstock will be equivalent to other edible seed oil and biomass feedstocks. We have not found any substantial effort towards the production of any other non-edible oil worldwide that could compete with Jatropha. With the growing demand for feedstock, and the high price of oil and biofuels, we anticipate that we will be able to sell our Jatropha oil and biomass feedstock profitability.

Overview of Legacy Bio-Pharmaceutical Business.

Prior to our transition to our new Jatropha Business, we were engaged in the development of two potential drug candidates, of which a drug candidate we referred to as “SaveCream” was our principal asset. We purchased our SaveCream technologies from the liquidator of Savetherapeutics AG i.L., pursuant to an asset purchase agreement dated March 11, 2005. The SaveCream assets consist primarily of patents, patent applications, pre-clinical study data and anecdotal clinical trial data concerning SaveCream. We purchased the SaveCream assets for €2,350,000 payable as follows: €500,000 was paid at closing, €500,000 is due upon the conclusion of certain pending transfers of patent and patent application rights from SaveCream’s inventors to us, and €1,350,000 is due upon successful commercialization of the SaveCream. The intellectual property assets relating to the SaveCream assets consist of the following four patent families:

- “Substances and Agents for Positively Influencing Collagen.” This included a EU patent application and a Canadian patent.
- “Topical Treatment for Mastalgia.” This included U.S. patent application 10/416,096 filed October 30, 2001, and a European Union patent application.
- “Medicament for Preventing and/or Treating a Mammary Carcinoma Containing a Steroidal Aromatase Inhibitor.” This included a U.S. patent application, No. 09/646,355, filed November 16, 2000 and divisional and continuation applications based upon the initial application.
- “Aromatase Marking.” This included a U.S. Patent application, No. 10/487,953, filed August 28, 2002, as well as a European Union patent application.

Employees.

As of December 31, 2008, we had 139 full time employees, contract employees and consultants. Of these employees/consultants, 4 are located in the U.S., approximately 120 are in Mexico and 15 are in Belize. During the past year most of our Jatropha-related services were being provided to us through contract employees or consultants who were managed through the Lodemo Group under the management agreement we entered into with the Lodemo Group. As business levels require and as capital resources permit, we will hire full-time employees to fulfill these functions.

ITEM 1A

RISK FACTORS.

An investment in our securities involves a high degree of risk. You should carefully consider the risks described below before deciding to invest in or maintain your investment in our company. The risks described below are not intended to be an all-inclusive list of all of the potential risks relating to an investment in our securities. If any of the following or other risks actually occur, our business, financial condition or operating results and the trading price or value of our securities could be materially and adversely affected.

Risks Related To Our Business

We will need significant additional capital in order to fund our operations, which we may be unable to obtain. If we do not receive additional funding, we may not be able to achieve our business plan of further developing our bio-fuels business and we may even be forced to cease operations.

We currently do not have sufficient cash available to fund our working capital needs through 2009. During 2008, we were primarily engaged in establishing our Jatropha Business, acquiring our Mexico and Belize properties and attempting to sell our legacy pharmaceutical assets. Accordingly, we generated no revenues from our operations. We did not generate any revenues in 2008. In 2009, our only scheduled source of cash is expected to be the reimbursement payments we are receiving from GCE Mexico I, LLC, some management consulting fees we have commenced receiving for services we provide to third parties, and revenues that we expect to generate this year from sales of Jatropha seeds. These funds will not be sufficient to cover our operating expenses and we will need a significant amount of additional funding in order to acquire and operate additional Jatropha farms in accordance with our business plan. Our capital requirements in connection with our commercial operations will be significant, and we do not currently have any of the funds that we need for these purposes. Accordingly, we will need to obtain a significant amount of additional capital to continue to fund our operating expenses and to expand our Jatropha Business. We have not identified the sources for the additional financing that we will require, and we do not have commitments from any third parties to provide this financing. Certain investors may be unwilling to invest in our securities since we are traded on the OTC Bulletin Board and not on a national securities exchange, particularly if there is only limited trading in our common stock on the OTC Bulletin Board at the time we seek financing. There is no assurance that sufficient funding through a financing will be available to us at acceptable terms or at all. Any additional funding that we obtain in a equity or convertible debt financing is likely to reduce the percentage ownership of the company held by our existing security holders. The amount of this dilution may be substantial if the trading price of our common stock is low at the time of any financing from its current levels. There can be no assurance that financing will be available in amounts or on terms acceptable to us, if at all. If we are unable to obtain the needed additional funding, we will have to reduce or even totally discontinue our operations, which would result in a total loss to all of our shareholders.

We have limited operating history in the feedstock and bio-diesel industries, which makes it difficult to evaluate our financial position and our business plan.

Until 2007, we were a development stage bio-pharmaceutical company that generated only \$1,157,000 of revenues and accumulated net losses of over \$26 million. During 2007, we terminated our operations as a bio-pharmaceutical company and commenced developing a new business in the biofuels industry. However, since we have only recently commenced our operations as a biofuels company and did not own any Jatropha farms (directly or as a joint venture partner) until this past fiscal year, we have little operating history in that line of business on which a decision to invest in our company can be based. The future of our company currently is dependent upon our ability to implement our new business plan in the Jatropha Business. While we believe that our business plan, if implemented as drafted, will make our company successful, we have no operating history against which we can test our plans and assumptions, and therefore cannot evaluate the likelihood of success.

The Jatropha Business that we are commencing is a new and highly risky business that has not been conducted on a similar scale in North America.

Our business plan calls for a large scale planting and harvesting of Jatropha plants, primarily outside of the United States, and for the subsequent production and sale of Jatropha oil (and other Jatropha byproducts) for use as a biofuel primarily in the United States. We have commenced a new business and it will be subject to all of the risks normally associated with new businesses, including risks related to the large scale production of plants that have not heretofore been grown in large scale farms, logistical issues related to the oil and biomass produced at such new farms, market acceptance, uncertain pricing of our products, developing governmental regulations, and the lack of an established market for our products.

Since we currently have a limited amount of cash available, and are not generating any revenues from either our legacy bio-pharmaceutical business or our new Jatropha Business, we are dependent upon the sales proceeds to be derived from the sale of SaveCream, the sale of Carbon Credit purchase contracts, future delivery Jatropha oil purchase contracts, and on our ability to raise additional funds to continue our operations and existence.

We currently do not have sufficient cash available to fund our anticipated future operating needs in the near future. In addition, neither our legacy bio-pharmaceutical business, nor our new Jatropha Business currently generate sufficient revenues from which we can pay our administrative and operating expenses. In order to generate cash, we have been trying to (i) sell our SaveCream legacy pharmaceutical assets, (ii) enter into joint venture arrangements with third party investors interested in our Jatropha Business, (iii) negotiate forward carbon credit sales agreements, and (iv) consummate future delivery Jatropha oil purchase contracts, (v) sell seeds from our Belizean farm and (vi) provide fee based advisory services to third parties for farm development and management services. Unless we either sell our SaveCream asset or receive substantial funds from any of our other activities in the near future, we will face an immediate cash shortage, and will not be able to fund our anticipated operating expenses. No assurance can be given that we will find a buyer for our SaveCream assets or that any of our other initiatives will generate sufficient cash during the time periods in which those funds are required.

We currently incur significant administrative expenses, including the expenses of being a public company. However, we will not generate significant revenues to fund those expenses until we begin selling Jatropha oil, or until we complete the sales of carbon credit purchase contracts. Accordingly, we will need to obtain significant additional funding in the near future to continue our operations. Such additional funding could be obtained from the sale of equity, from forward purchase payments for our products, or from joint venture partnerships, third party strategic relationships, sale of seeds or the sale of advisory services. There can be no assurance that we will be able to obtain the capital we need from any of the foregoing sources, or, if we do obtain funding, that such funding will be on terms that are commercially favorable for us. In the event that we do not obtain funding to cover our administrative expenses in the near future, we will not be able to continue to operate and may have to cease all of our current operations.

Even if we do obtain sufficient funds to pay our administrative expenses, our Jatropha Business will require that we acquire and cultivate a large amount of land and otherwise incur significant initial start-up expenses related to establishing the Jatropha plantations required for our proposed business. We currently do not have the capital that is necessary to acquire or lease the large amount of land needed to operate Jatropha plantations or to otherwise fund the large up-front expenses, nor has any entity agreed to provide us with such funds. Accordingly, the success of our new Jatropha Business is contingent on, among other things, our ability to raise the necessary capital to fund our planned Jatropha Business expenditures. Historically, we have raised capital through the issuance of debt and equity securities. However, given the risks associated with a new, untested biofuels business, the risks associated with our common stock (as discussed below), the worldwide financial crisis that has severely affected the capital markets, and our status as a small, unknown public company, we expect in the near future, we will have a great deal of difficulty raising capital through traditional financing sources. Therefore, we cannot guarantee that we will be able to raise

capital, or if we are able to raise capital, that such capital will be in the amounts needed. Our failure to raise capital, when needed and in sufficient amounts, will severely impact our ability to develop our Jatropha Business.

As of December 31, 2008 we had outstanding a \$460,000 short-term promissory notes that is secured by a lien on all of this company's assets. Accordingly, a default under the secured promissory note could result in the foreclosure of all of our assets and the termination of our business.

As of December 31, 2008 we had outstanding a \$460,000 promissory note that is secured by a first priority security interest on all of our assets. The promissory note is scheduled to mature on July 13, 2009. Failure to fully repay the outstanding principal balance, plus all interest that accrues on that promissory note, upon maturity could result in the acceleration of the promissory note and the foreclosure of our assets. If we are unable to repay the note in full upon its maturity, or if we otherwise default under our obligations to the holder of the promissory note, the holder of the promissory note will have the right to foreclose on all of our assets, which would materially and adversely affect our ability to continue our operations and could terminate our existence. No assurance can be given that we will be able to repay the promissory note as scheduled.

Our business could be significantly impacted by changes in government regulations over energy policy.

Our planned operations and the properties we intend to cultivate are subject to a wide variety of federal, provincial and municipal laws and regulations, including those governing the use of land, type of development, use of water, use of chemicals for fertilizer, pesticides, export or import of various materials including plants, oil, use of biomass, handling of materials, labor laws, storage handling of materials, shipping, and the health and safety of employees. As such, the nature of our operations exposes us to the risk of claims with respect to such matters and there can be no assurance that material costs or liabilities will not be incurred in connection with such claims. In addition, these governmental regulations, both in the U.S. and in the foreign countries in which we may conduct our business, may restrict and hinder our operations and may significantly raise our cost of operations. Any breach by our company of such legislation may also result in the suspension or revocation of necessary licenses, permits or authorizations, civil liability and the imposition of fines and penalties, which would adversely affect our ability to operate and our financial condition.

Further, there is no assurance that the laws, regulations, policies or current administrative practices of any government body, organization or regulatory agency in the United States or any other jurisdiction, will not be changed, applied or interpreted in a manner which will fundamentally alter the ability of our company to carry on our business. The actions, policies or regulations, or changes thereto, of any government body or regulatory agency, or other special interest groups, may have a detrimental effect on our company. Any or all of these situations may have a negative impact on our operations.

Our future growth is dependent upon strategic relationships within the feedstock and bio-diesel industries. If we are unable to develop and maintain such relationships, our future business prospects could be significantly limited.

Our future growth will generally be dependent on relationships with third parties, including alliances with feedstock oil and bio-diesel processors and distributors. In addition, we will likely rely on third parties to oversee the operations and cultivation of the *Jatropha* plants in our non-U.S. properties. Accordingly, our success will be significantly dependent upon our ability to establish successful strategic alliances with third parties and on the performance of these third parties. These third parties may not regard their relationship with us as important to their own business and operations, and there is no assurance that they will commit the time and resources to our joint projects as is necessary, or that they will not in the future reassess their commitment to our business. Furthermore, these third parties may not perform their obligations as agreed. In the event that a strategic relationship is discontinued for any reason, our business, results of operations and financial condition may be materially adversely affected.

We will depend on key service providers for assistance and expertise in beginning operations and any failure or loss of these relationships could delay our operations, increase our expenses and hinder our success.

Because of our limited financial and personnel resources, and because our Jatropha farms are expected to be established primarily outside of the United States, we will have to establish and maintain relationships with several key service providers for land acquisition, the development and cultivation of Jatropha farms, labor management, the transportation of Jatropha oil and biomass, and other services. We have already established such a relationship with the Lodemo Group in Mexico concerning the cultivation and management of our Jatropha nurseries and farms in Mexico and the transportation of our products. Accordingly, our ability to develop our Jatropha Business in Mexico, and our success in Mexico, will to a large extent be dependent upon the efforts and services of the Lodemo Group. While the Lodemo Group has significant experience in diesel distribution and sales, liquids transportation, logistics, land development and agriculture, no assurance can be given that our joint operations with the Lodemo Group will be successful or that we will be able to achieve our goals in Mexico.

A significant decline in the price of oil could have an adverse impact in our potential profitability.

Our success is dependent in part upon the historic high price of crude oil and on the high price of seed oils that are currently used to manufacture bio-diesel. A significant decline in the price of either crude oil or the alternative seed oils will have a direct negative impact on our financial performance projections.

There are risks associated with conducting our business operations in foreign countries, including political and social unrest.

To date, we have acquired Jatropha farms in Mexico and have agreed to purchase another Jatropha farm in Belize. We expect that most, if not all, of our future agricultural operations will also be primarily located in foreign countries, particularly in Mexico. Accordingly, we are subject to risks not typically associated with ownership of U.S. companies and therefore should be considered more speculative than investments in the U.S.

Mexico is a developing country that has experienced a range of political, social and economic difficulties over the last decade. Our operations could be affected in varying degrees by political instability, social unrest and changes in government regulation relating to foreign investment, the biofuels industry, and the import and export of goods and services. Operations may also be affected in varying degrees by possible terrorism, military conflict, crime, fluctuations in currency rates and high inflation.

In addition, Mexico has a nationalized oil company, and there can be no assurance that the government of Mexico will continue to allow our business and our assets to compete in any way with their interests. Our operations could be adversely affected by political, social and economic unrest in Mexico and the other foreign countries we plan for commence agricultural operations.

The cost of developing and operating our agricultural projects significantly exceeds our current financial resources.

Our current business plan contemplates the cultivation of 20,000-hectare of Jatropha in Mexico. We also have plans for other large farms for feedstock/biofuel operations in other countries. Our plans also call for us to construct a plant nursery and research facility as well as a seed oil extraction facility. We currently do not have the funds necessary to fund these planned operations. Unless we are able to obtain the necessary funds on economically viable terms, our Jatropha business will not succeed, and we will not be able to meet our business goals. In addition, even if we obtain the initial funds necessary to establish our plantation and facilities, the costs to develop and implement our proposed farm and support facilities, and our other operational costs could significantly increase beyond our expectations due to economic factors, design modifications, implementation or construction delays or cost overruns. In such an event, our profitability and ultimately the financial condition of our company will be adversely affected.

We plan to grow rapidly and our inability to keep up with such growth may adversely affect our profitability.

We plan to grow rapidly and significantly expand our operations. We currently have a very small staff and few resources. If we succeed in significantly expanding our operations, our growth may place a significant strain on our management team and other company resources. We will not be able to implement our business strategy in a rapidly evolving market without effective planning and management processes. We have a short operating history and have not implemented sophisticated managerial, operational and financial systems and controls. If we grow significantly, we will have to manage multiple relationships with various strategic partners, including suppliers, distributors, and other third parties. To manage the expected growth of our operations and personnel, we will have to significantly supplement our existing managerial, financial and operational staff, systems, procedures and controls. We may be unable to supplement and complete, in a timely manner, the improvements to our systems, procedures and controls necessary to support our future operations, our operations will not function effectively. In addition, our management may be unable to hire, train, retain, motivate and manage required personnel, or successfully identify, manage and exploit existing and potential market opportunities. As a result, our business and financial condition may be adversely affected.

Our business will not be diversified because we will be primarily concentrated in one industry. As a consequence, we may not be able to adapt to changing market conditions or endure any decline in the bio-diesel industry.

We expect our business to consist primarily of sales of feedstock oil harvested from the Jatropha plant, and bio-diesel production and sales. We do not have any other lines of business or other sources of revenue to rely upon if we are unable to produce and sell feedstock oil and bio-diesel, or if the markets for such products decline. Our lack of diversification means that we may not be able to adapt to changing market conditions or to withstand any significant decline in the bio-diesel industry.

Reductions in the price of bio-diesel, and decreases in the price of petroleum-based fuels could affect the price of our feedstock, resulting in reductions in our revenues.

Historically, bio-diesel prices have been highly correlated to the Ultra Low Sulfur (“ULS”) diesel prices. Increased volatility in the crude oil market has an effect on the stability and long-term predictability of ULS diesel, and hence the biofuels prices in the domestic and international markets. Crude oil prices are impacted by wars and other political factors, economic uncertainties, exchange rates and natural disasters. A reduction in petroleum-based fuel prices may have an adverse effect on bio-diesel prices and could apply downward pressure on feedstock, affecting revenues and profits in the feedstock industry, which could adversely affect our financial condition.

There are several agreements and relationships that remain to be negotiated, executed and implemented which will have a critical impact on our operations, expenses and profitability.

Assuming that we obtain the necessary funds, directly or through future joint ventures, to acquire and develop additional Jatropha farms in Mexico or elsewhere, we will have to enter into numerous agreements, documents and relationships with the owners of the land and the providers of various services. All of these agreements and arrangements remain to be negotiated, executed and implemented before we can develop fully commence new operations, including agreements relating to the construction of our proposed seed processing plant and other support facilities for our Jatropha plantation in Mexico. In some cases, the parties with whom we would need to establish a relationship have yet to be identified. Our expectations regarding the likely terms of these agreements and relationships could vary greatly from the terms of any agreement or relationship that may eventually be executed or established. If we are unable to enter into these agreements or relationships on satisfactory terms, or if revisions or amendments to existing terms become necessary, the purchase and cultivation of additional land, or the construction of our proposed seed processing plant and the commencement of our related operations could be delayed. In such an event, our expenses could be increased and our ability to achieve profitability could be adversely affected.

Delays due to, among others, weather, labor or material shortages, permitting or zoning delays, or opposition from local groups, may hinder our ability to commence operations in a timely manner.

We could incur delays in the implementation of our plans to plant and harvest *Jatropha*, or our plans for the construction of support facilities, due to permitting or zoning delays, opposition from local groups, adverse weather conditions, labor or material shortages, or other causes. In addition, changes in political administrations at the federal, state or local level that result in policy changes towards the large scale cultivation of *Jatropha* or towards biofuels in general could result in delays in our timetable for development and commencement of operations. Any such delays could adversely affect our ability to commence operations and generate revenue.

We may be unable to locate suitable properties and obtain the development rights needed to build and expand our business.

Our business plan focuses on identifying and developing agricultural properties (farms, nurseries, etc.) for the production of biofuels feedstock. The availability of land for this activity is a key element of our projected revenue generation. Our ability to acquire appropriate land in the future is uncertain and we may be required to delay planting, which may create unanticipated costs and delays. In the event that we are not successful in identifying and obtaining rights on suitable land for our agricultural and processing facilities, our future prospects for profitability will likely be affected, and our financial condition and resulting operations may be adversely affected.

Technological advances in feedstock oil production methods in the bio-diesel industry could adversely affect our ability to compete and the value of your investment.

Technological advances could significantly decrease the cost of producing feedstock oil and biofuels. There is significant research and capital being invested in identifying more efficient processes, and lowering the cost of producing feedstock oil and biofuels. We expect that technological advances in feedstock oil/biofuel production methods will continue to occur. If improved technologies become available to our competitors, they may be able to produce feedstock oil, and ultimately biofuels, at a lower cost than us. If we are unable to adopt or incorporate technological advances into our operations, our ability to compete effectively in the feedstock/biofuels market may be adversely affected, which in turn will affect our profitability.

The development of alternative fuels and energy sources may reduce the demand for biofuels, resulting in a reduction in our profitability.

Alternative fuels, including a variety of energy alternatives to biofuels, are continually under development. Technological advances in fuel-engines and exhaust system design and performance could also reduce the use of biofuels, which would reduce the demand for bio-diesel. Further advances in power generation technologies, using cleaner hydrocarbon based fuels, fuel cells and hydrogen are actively being researched and developed. If these technological advances and alternatives prove to be economically feasible, environmentally superior and accepted in the marketplace, the market for biofuels could be significantly diminished or replaced, which would adversely affect our financial condition.

Our ability to hire and retain key personnel and experienced consultants will be an important factor in the success of our business and a failure to hire and retain key personnel may result in our inability to manage and implement our business plan.

We are highly dependent upon our management, and on Richard Palmer in particular. The loss of the services of one or more of these individuals may impair management's ability to operate our company or our ability to locate and develop new Jatropha farms. We have not purchased key man insurance on any of our officers, which insurance would provide us with insurance proceeds in the event of their death. Without key man insurance, we may not have the financial resources to develop or maintain our business until we could replace such individuals or to replace any business lost by the death of such individuals. We may not be able to attract and retain the necessary qualified personnel. If we are unable to retain or to hire qualified personnel as required, we may not be able to adequately manage and implement our business.

Our operating costs could be higher than we expect, and this could reduce our future profitability.

In addition to general economic conditions, market fluctuations and international risks, significant increases in operating, development and implementation costs could adversely affect our company due to numerous factors, many of which are beyond our control. These increases could arise for several reasons, such as:

- Increased cost for land acquisition;
- Increased unit costs of labor for nursery, field preparation and planting;
- Increased costs for construction of facilities;
- Increased transportation costs for required nursery and field workers;
- Increased costs of supplies and sub-contacted labor for preparing of land for planting;
- Increase costs for irrigation, soil conditioning, soil maintenance; or
- Increased time for planting and plant care and custody.

Upon completion of our field developments, our operations will also subject us to ongoing compliance with applicable governmental regulations, including those governing land use, water use, pollution control, worker safety and health and welfare and other matters. We may have difficulty complying with these regulations and our compliance costs could increase significantly. Increases in operating costs would have a negative impact on our operating income, and could result in substantially decreased earnings or a loss from our operations, adversely affecting our financial condition.

Fluctuations in the Mexican peso to U.S. dollar exchange rate may adversely affect our reported operating results.

The Mexican peso is the primary operating currency for our initial business operations while our financial results are reported in U.S. dollars. Because our costs will be primarily denominated in pesos, a decline in the value of the dollar to the peso could negatively affect our actual operating costs in U.S. dollars, and our reported results of operations. We do not currently engage in any currency hedging transactions intended to reduce the effect of fluctuations in foreign currency exchange rates on our results of operations. We cannot guarantee that we will enter into any such currency hedging transactions in the future or, if we do, that these transactions will successfully protect us against currency fluctuations.

Our future profitability is dependent upon many natural factors outside of our control. If these factors do not produce favorable results our future business profitability could be significantly affected.

Our future profitability is mainly dependent on the production output from our agricultural operations. There are many factors that can effect growth and fruit production of the Jatropha plant including weather, nutrients, pests and other natural enemies of the plant. Many of these are outside of our direct control and could be devastating to our

operations.

17

Risks Relating to Our Common Stock

Our stock is thinly traded, so you may be unable to sell your shares at or near the quoted bid prices if you need to sell a significant number of your shares.

The shares of our common stock are thinly-traded on the OTC Bulletin Board, meaning that the number of persons interested in purchasing our common shares at or near bid prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company which is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven, early stage company such as ours or purchase or recommend the purchase of our shares until such time as we became more seasoned and viable. As a consequence, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained. Due to these conditions, we can give you no assurance that you will be able to sell your shares at or near bid prices or at all if you need money or otherwise desire to liquidate your shares.

Our existing directors, officers and key employees hold a substantial amount of our common stock and may be able to prevent other shareholders from influencing significant corporate decisions.

As of March 31, 2009, our directors and executive officers beneficially owned approximately 29% of our outstanding common stock. These shareholders, if they act together, may be able to direct the outcome of matters requiring approval of the shareholders, including the election of our directors and other corporate actions such as:

- our merger with or into another company;
- a sale of substantially all of our assets; and
- amendments to our articles of incorporation.

The decisions of these shareholders may conflict with our interests or those of our other shareholders.

The market price of our stock may be adversely affected by market volatility.

The market price of our common stock is likely to be volatile and could fluctuate widely in response to many factors, including:

- fluctuation in the world price of crude oil;
- market changes in the biofuels industry;
- government regulations affecting renewable energy businesses and users;
- actual or anticipated variations in our operating results;
- our success in meeting our business goals and the general development of our proposed operations;

- general economic, political and market conditions in the U.S. and the foreign countries in which we plan to operate; and
- the occurrence of any of the risks described in this Annual Report.

Obtaining additional capital through the sale of common stock will result in dilution of shareholder interests.

We plan to raise additional funds in the future by issuing additional shares of common stock or other securities, which may include securities such as convertible debentures, warrants or preferred stock that are convertible into common stock. Any such sale of common stock or other securities will lead to further dilution of the equity ownership of existing holders of our common stock. Additionally, the existing options, warrants and conversion rights may hinder future equity offerings, and the exercise of those options, warrants and conversion rights may have an adverse effect on the value of our stock. If any such options, warrants or conversion rights are exercised at a price below the then current market price of our shares, then the market price of our stock could decrease upon the sale of such additional securities. Further, if any such options, warrants or conversion rights are exercised at a price below the price at which any particular shareholder purchased shares, then that particular shareholder will experience dilution in his or her investment.

We are unlikely to pay dividends on our common stock in the foreseeable future.

We have never declared or paid dividends on our stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business. We do not anticipate paying any cash dividends in the foreseeable future, and it is unlikely that investors will derive any current income from ownership of our stock. This means that your potential for economic gain from ownership of our stock depends on appreciation of our stock price and will only be realized by a sale of the stock at a price higher than your purchase price.

Trading of our stock may be restricted by the Securities and Exchange Commission's penny stock regulations, which may limit a shareholder's ability to buy and sell our stock.

The Securities and Exchange Commission has adopted regulations which generally define "penny stock" to be any equity security that has a market price less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. Our securities are covered by the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell to persons other than established customers and "accredited investors". The term "accredited investor" refers generally to institutions with assets in excess of \$5,000,000 or individuals with a net worth in excess of \$1,000,000 or annual income exceeding \$200,000 or \$300,000 jointly with their spouse. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the Securities and Exchange Commission, which provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for the stock that is subject to these penny stock rules. Consequently, these penny stock rules may affect the ability of broker-dealers to trade our securities. We believe that the penny stock rules discourage investor interest in and limit the marketability of our common stock.

ITEM 1B.

UNRESOLVED STAFF COMMENTS.

Not applicable.

ITEM 2.

PROPERTIES.

Currently, we operate out of offices located at 6033 W. Century Blvd, Suite 895, Los Angeles, California 90045. Our leased offices consist of 1,495 square feet and are leased at a monthly rate of \$ 1.80 per sq. ft. until the expiration of our lease in May 2009. While we have not yet decided whether we want to renew our current lease, we believe that there are sufficient other alternate facilities available for lease should we decide not to do so.

The Jatropha farm that we currently own through our GCE Mexico I, LLC joint venture consists of seven separate parcels of land collectively representing 2,084 hectares (approximately 5,149 acres). The farm is located approximately 12 miles northeast of Tizimin, Yucatan, Mexico and is approximately 110 miles from Merida and the port of Progreso, and 75 miles from Cancun. The prior land owners had used the land for raising cattle. As a result, a portion of the land was developed for commercial grazing. There are 14 wells on the land which were installed to irrigate the land. Irrigation systems have been installed for approximately 400 hectares. Since the acquisition of this land, we have developed a commercial seedling nursery and approximately 2,500 acres have been improved, with approximately 750 acres planted with Jatropha plants. All the necessary roads and other infrastructure have been developed on the farm.

ITEM 3.

LEGAL PROCEEDINGS.

On August 22, 2006, we initiated legal proceedings in Landgericht Hamburg, a German Federal Court in Hamburg - Germany, against Dr. Alfred Schmidt to obtain certain rights concerning "SaveCream", a developmental topical aromatase inhibitor cream relevant to our legacy bio-pharmaceutical business. No cross complaints have been filed against us in this matter. We acquired the "SaveCream" rights and certain other related intellectual property assets from the liquidator of Savetherapeutics AG i.L., a German corporation, pursuant to an asset purchase agreement dated as of March 11, 2005. On April 7, 2009 the court in Germany entered a judgment in our favor and ruled that the SaveCream patents and patent applications belong to our MDI Oncology subsidiary.

In addition, a judgment has been issued against us under a lawsuit filed against us for the collection of approximately \$60,000 of unpaid obligations that this company incurred prior to the date on which currently management took over in 2007. We have been unable to pay this judgment.

We may, from time to time, be subject to additional collection lawsuits related to the significant amount of outstanding and unpaid obligations we owe to a number of creditors.

ITEM 4.

SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this report.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

Prior to February 6, 2008, our common stock was traded on the OTC Bulletin Board under the symbol "MLSC." In connection with the change of our corporate name, our trading symbol was changed to "GCEH" on February 29,

2008. The following table sets forth the range of closing prices for our common stock for the quarters indicated. Such quotations reflect inter-dealer prices, without retail mark-ups, markdowns or commissions, and may not represent actual transactions.

20

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Fiscal Year Ended December 31, 2007	High Bid	Low Bid
First Quarter	\$.049	\$ 0.022
Second Quarter	\$.050	\$ 0.011
Third Quarter	\$.075	\$ 0.020
Fourth Quarter	\$.088	\$ 0.030
Fiscal Year Ended December 31, 2008	High Bid	Low Bid
First Quarter	\$.050	\$.025
Second Quarter	\$.120	\$.045