TECOGEN INC
Form S-1/A
February 11, 2013

As filed with the Securities and Exchange Commission on February 11, 2013

Registration No. 333-178697

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

Amendment No. 7 to

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

TECOGEN INC.
(Exact name of Registrant as specified in its charter)

Delaware	3585	04-3536131
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Tecogen Inc.
45 First Avenue
Waltham, MA 02451
(781) 622-1120
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Copy to:

John N. Hatsopoulos	Edwin L. Miller, Jr.
Chief Executive Officer	Sullivan & Worcester LLP
Tecogen Inc.	One Post Office Square
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(Name, address, including zip code, and telephone number, including area code, of agent for service)	

As soon as practicable after the effective date of this Registration Statement.
(Approximate date of commencement of proposed sale to the public)

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box: R
If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer: ¨	Accelerated filer: ¨	Non-accelerated filer: ¨	Smaller reporting company: R

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration

statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED FEBRUARY 11, 2013

PROSPECTUS

31,475,787 SHARES OF COMMON STOCK

Initial Public Offering

This prospectus relates to the resale of up to 31,475,787 shares of Tecogen Inc. Common Stock. These shares will be resold from time to time by the investors listed in the section titled “Selling Security Holders”, and we refer to the investors as the selling stockholders. We are not selling any securities under this prospectus and therefore will not receive any proceeds from the sale of securities by the selling stockholders. All costs associated with this registration will be borne by us.

We currently lack a public market for our common stock, or Common Stock. Selling stockholders will sell at a price of $0.80 per share until such time as our shares may be quoted on the OTC Bulletin Board or listed on a national or international securities exchange and thereafter at prevailing market prices or privately negotiated prices. The proposed maximum aggregate offering price is $25,180,630.

You should rely only on the information provided in this prospectus or any supplement to this prospectus. We have not authorized anyone else to provide you with different information.

A current prospectus must be in effect at the time of the sale of the shares of Common Stock discussed above. The selling stockholders will be responsible for any commissions or discounts due to brokers or dealers. We will pay all of the other offering expenses.

Each selling stockholder or dealer selling the Common Stock is required to deliver a current prospectus upon the sale. In addition, for the purposes of the Securities Act of 1933, as amended, or the Securities Act, selling stockholders may be deemed underwriters.

We are an “emerging growth company” under the federal securities laws and will therefore be subject to reduced public company reporting requirements.

THIS INVESTMENT INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD PURCHASE SHARES ONLY IF YOU CAN AFFORD A COMPLETE LOSS. WE URGE YOU TO READ THE “RISK FACTORS” SECTION BEGINNING ON PAGE 6, ALONG WITH THE REST OF THIS PROSPECTUS BEFORE YOU MAKE YOUR INVESTMENT DECISION.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION, OR THE SEC, NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES, OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

TABLE OF CONTENTS

	Page
Prospectus Summary	1
The Offering	4
Summary Consolidated Financial Data	5
Risk Factors	6
Special Note Regarding Forward Looking Statements	13
Use of Proceeds	14
Determination of Offering Price	14
Dilution	15
Selling Security Holders	15
Plan of Distribution	19
Description of Securities to be Registered	20
Experts	22
Legal Matters	23
Business	23
Market for Common Equity and Related Stockholder Matters	44
Selected Financial Data	47
Management's Discussion and Analysis of Financial Condition and Results of Operations	48
Changes In and Disagreements with Accountants on Accounting and Financial Disclosure	56
Management and Governance	57
Executive Officer and Director Compensation	61
Security Ownership of Certain Beneficial Owners and Management	69
Certain Relationships and Related Transactions	70
Where You Can Find Additional information	73
Financial Statements	F-1

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. No offers are being made hereby in any jurisdiction where the offer or sale is not permitted.

Unless otherwise indicated, information contained in this prospectus concerning our industry, including our market opportunity, is based on information from independent industry analysts, third-party sources and management estimates. Management estimates are derived from publicly-available information released by independent industry analysts and third party sources, as well as data from our internal research, and are based on assumptions made by us using data and our knowledge of such industry and market, which we believe to be reasonable. In addition, while we believe the market opportunity information included in this prospectus is generally reliable and is based on reasonable assumptions, such data involves risks and uncertainties and is subject to change based on various factors, including those discussed under the heading "Risk Factors."

TECOGEN INC.

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus. It is not complete and does not contain all of the information that you should consider before investing in our Common Stock. You should read the entire prospectus carefully, especially the risks of investing in our Common Stock discussed under “Risk Factors” and our consolidated financial statements and accompanying notes. In this prospectus, unless the context otherwise requires, “Tecogen,” “Company,” “we,” “us,” or “our,” refer to Tecogen Inc. and its subsidiaries.

Tecogen designs, manufactures, and sells systems that produce electricity, hot water, and air conditioning for commercial and industrial buildings. These systems, powered by natural gas engines, are efficient because they drive electric generators or compressors – which reduces the amount of electricity purchased from the utility – plus they use the engine’s waste heat for water heating, space heating, and/or air conditioning at the customer’s building, which we refer to as on-site. This technology is called combined heat and power, or CHP (also called cogeneration).

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water; and
- High-efficiency water heaters.

All of these are standardized, modular, small-scale CHP products, with a limited number of designs, that can serve many different types of customers. The market for these products is driven by their ability to reduce energy costs, carbon emissions, and customers’ dependence on the electric grid. Other factors behind the demand for gas-fueled CHP include America’s growing natural gas reserves and its domestic energy policies, as well as customers’ desire to become more socially responsible.

Our CHP technology uses low-cost, mass-produced engines manufactured by General Motors Company, or GM and Ford Motor Company, or Ford, which we modify to run on natural gas. In the case of our mainstay cogeneration and chiller products, the engines have proved to be cost-effective and reliable. In 2009, our research team developed a low-cost process for removing air pollutants from the engine exhaust. This low-emissions technology gives our natural gas engines exceptionally low levels of “criteria” air pollutants (those that are regulated by the U.S. Environmental Protection Agency, or EPA, because they can harm human health and the environment).

After a successful field test of more than a year, we introduced the technology commercially as an option to all of our products in 2012, under the trade name Ultra (patent pending). The Ultra low-emissions technology repositions our engine-driven products in the marketplace, making them comparable environmentally with emerging technologies such as fuel cells, but at a much lower cost and greater efficiency. With emissions far below those of current natural gas engines, our Ultra low-emissions technology may reset existing natural gas regulations for engines in some areas of the country.

Our CHP products are sold directly to customers by our in-house marketing team and by established sales agents and representatives, including American DG Energy Inc., or American DG Energy and EuroSite Power Inc., or EuroSite Power, which are affiliated companies. We have an installed base of more than 2,100 units. Many of these have been operating for almost 25 years. Our principal engine supplier is GM, and principal generator supplier is Marathon Electric. To produce air conditioning, our engines drive a compressor purchased from J&E Hall International.

In 2009, we created a subsidiary, Ilios Inc., or Ilios, to develop and distribute a line of high-efficiency heating products, starting with a water heater. The water heater is up to twice as efficient as conventional boilers in

commercial buildings and industrial processes, according to management estimates. As of the date of this prospectus, we own a 65.0% interest in Ilios. To date, Ilios has sold one of its water heaters and five are in production.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We expect this trend to continue until such time that we can sell a sufficient number of systems and achieve a cost structure to become profitable. We may not have adequate cash resources to reach the point of profitability, and we may never become profitable. Even if we do achieve profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

As of our fiscal year end, December 31, 2011, our principal executive officer and principal accounting officer performed an evaluation of controls and procedures and concluded that our controls were not effective to provide reasonable

TECOGEN INC.

assurance that information required to be disclosed by our Company in reports that we file under the Exchange Act, is recorded, processed, summarized and reported as when required. Management conducted an evaluation of our internal control over financial reporting and based on this evaluation, management concluded that our internal control over financial reporting was not effective as of December 31, 2011. We currently do not have personnel with a sufficient level of accounting knowledge, experience and training in the selection, application and implementation of generally acceptable accounting principles as it relates to complex transactions and financial reporting requirements. We also have a small number of employees dealing with general controls over information technology security and user access. This constitutes a material weakness in financial reporting. Any failure to implement effective internal controls could harm our operating results or cause us to fail to meet our reporting obligations. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock, and may require us to incur additional costs to improve our internal control system.

Tecogen was formed in the early 1960s as the Research and Development New Business Center of Thermo Electron Corporation, (which is now Thermo Fisher Scientific Inc.). For the next 20 years, this group performed fundamental and applied research in many energy-related fields to develop new technologies. During the late 1970s, new federal legislation enabled electricity customers to sell power back to their utility. Thermo Electron Corporation saw a fit between the technology and know-how it possessed and the market for cogeneration systems.

In 1982, the Research and Development group released its first major product, a 60-kilowatt (kW) cogenerator. In the late 1980s and early 1990s, we introduced air-conditioning and refrigeration products using the same gas engine-driven technology, beginning with a 150-ton chiller (tons are a measure of air-conditioning capacity). In 1987, Tecogen was spun out as a separate entity by Thermo Electron Corporation and in 1992 Tecogen became a division of the newly formed Thermo Power Corporation. In 2000, Thermo Power Corporation was dissolved, and Tecogen was sold to private investors including Thermo Electron Corporation’s original founders, Dr. George N. Hatsopoulos and John N. Hatsopoulos.

Tecogen has five affiliated companies, namely American DG Energy, EuroSite Power, GlenRose Instruments Inc., or GlenRose Instruments, Pharos LLC, or Pharos, and Levitronix Technologies LLC, or Levitronix. These companies are affiliates because several of the major stockholders of those companies, have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix. The business of GlenRose Instruments, Pharos and Levitronix is not related to the business of the Company.

American DG Energy, EuroSite Power, GlenRose Instruments, Pharos and Levitronix are affiliated companies by virtue of common ownership. The common stockholders include:

- John N. Hatsopoulos, the Company’s Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 11.5% of the company’s common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 6.8% of the company’s common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of the company’s common stock.
- Dr. George N. Hatsopoulos, who is John N. Hatsopoulos’ brother, and is also: (a) a director of American DG Energy and holds 14% of the company’s common stock; (b) an investor in Ilios and holds 3.1% of the company’s common stock; (c) an investor of GlenRose Instruments and holds 15.7% of the company’s common stock; (d) a founder and investor of Pharos and holds 24.4% of the company’s common stock; and (e) an investor of Levitronix and holds 21.4% of the company’s common stock.

John N. Hatsopoulos is the Company's Chief Executive Officer and is also the Chief Executive Officer of American DG Energy and the Chairman of GlenRose Instruments. On average, Mr. Hatsopoulos spends approximately 20% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

Although we may, from time to time, have one or a few customers who may represent more than 10% of our product revenue for a given year, we are not dependent on the recurrence of such revenue from those customers. Our product revenue is such that customers may make a large purchase once and may not likely ever make such a purchase again. Our equipment is built to last 20 or more years, therefore, we do not build our product revenue model depending on recurring transactions from the same customer. Our service revenue may lend itself to recurring revenue from a single customer; however, we currently do not have any service revenue customers who make up more than 10% of our total revenues on an annual basis. American DG Energy has been considered a major customer in certain years as disclosed in the accompanying financial statements, however, we do not consider our business as "dependent" upon its recurrence.

TECOGEN INC.

We were incorporated in the State of Delaware on November 15, 2000. Our business and registered office is located at 45 First Avenue, Waltham, Massachusetts 02451. Our telephone number is 781-466-6400. Our Internet address is http://www.tecogen.com. The information on, or that may be accessed through, our website is not incorporated by reference into this prospectus and should not be considered a part of this prospectus.

We have 61 full-time employees and 5 part-time employees. Our corporate, engineering and manufacturing operations are located in a 24,000 square foot facility in Waltham, Massachusetts.

TECOGEN INC.

THE OFFERING

Securities being offered:	Up to 31,475,787 shares of Common Stock.
Common Stock to be outstanding after this offering:	54,417,854 shares
Offering price:	The offering price of the Common Stock is $0.80 per share. There is no public market for our Common Stock. We cannot give any assurance that the shares offered will have a market value, or that they can be resold at the offered price if and when an active secondary market might develop, or that a public market for our securities may be sustained even if developed. The absence of a public market for our stock will make it difficult to sell shares. We intend to apply to the over-the-counter bulletin board, through a market maker that is a licensed broker dealer, to allow the trading of our Common Stock upon our becoming a reporting entity under the Exchange Act. If our Common Stock becomes so quoted and a market for the stock develops, the actual price of stock will be determined by prevailing market prices at the time of sale or by private transactions negotiated by the selling stockholders. The offering price would thus be determined by market factors and the independent decisions of the selling stockholders.
Securities issued and to be issued:	54,417,854 shares of our Common Stock are issued and outstanding as of the date of this prospectus, 31,475,787 of which are being offered pursuant to this prospectus. Because all of the Common Stock to be sold under this prospectus will be sold by existing shareholders, there will be no increase in our issued and outstanding shares as a result of this offering.
Use of proceeds:	We will not receive any proceeds from the sale of the Common Stock by the selling stockholders.

TECOGEN INC.

SUMMARY CONSOLIDATED FINANCIAL DATA

The summary consolidated statements of operations data for each of the years ended December 31, 2011 and 2010 have been derived from our audited consolidated financial statements that are included elsewhere in this prospectus. The summary consolidated balance sheet data as of September 30, 2012 and 2011 and the summary consolidated statements of operations data for each of the nine months ended September 30, 2012 and 2011 have been derived from our unaudited condensed consolidated financial statements that are included elsewhere in this prospectus. You should read this information together with the consolidated financial statements and related notes and other information under "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. Operating results for the nine months ended September 30, 2012 are not necessarily indicative of the results that may be expected for the year ended December 31, 2012.

			Nine Months Ended September 30,	
Consolidated Statement of Operations Data:	December 31, 2011	2010	2012 (unaudited)	2011 (unaudited)
Revenues	$11,065,210	$11,311,229	$9,689,984	$8,714,228
Cost of sales	6,179,098	6,597,205	5,703,507	4,818,318
Gross profit	4,886,112	4,714,024	3,986,477	3,895,910
Operating expenses				
General and administrative	5,986,762	4,973,794	4,851,398	4,495,533
Selling	782,252	290,505	915,842	381,617
	6,769,014	5,264,299	5,767,240	4,877,150
Loss from operations	(1,882,902)	(550,275)	(1,780,763)	(981,240)
Other income (expense)				
Interest and other income	38,402	23,574	38,380	25,262
Interest expense	(40,294)	(37,280)	(53,406)	(22,492)
	(1,892)	(13,706)	(15,026)	2,770
Loss before income taxes	(1,884,794)	(563,981)	(1,795,789)	(978,470)
Provision for state income taxes	—	—	—	—
Consolidated net loss	(1,884,794)	(563,981)	(1,795,789)	(978,470)
Less: Loss attributable to the noncontrolling interest	310,293	208,673	285,898	192,359
Net loss attributable to Tecogen Inc.	$(1,574,501)	$(355,308)	$(1,509,891)	$(786,111)
Net loss per share - basic and diluted	$(0.03)	$(0.01)	$(0.03)	$(0.02)
Weighted average shares outstanding - basic and diluted	48,211,652	45,882,631	52,395,435	47,721,641

Consolidated Balance Sheet Data:	December 31, 2011	2010	September 30, 2012 (unaudited)	2011 (unaudited)
Cash and cash equivalents	$3,018,566	$1,828,173	$684,896	$1,211,287
Restricted short-term investments	683,428	85,000	181,580	501,577
Working capital	4,935,145	2,485,926	4,118,095	2,667,330
Total assets	8,745,492	5,876,422	8,515,762	6,441,401
Total liabilities	3,522,328	2,884,743	3,769,459	3,355,500
Stockholders' equity	$5,223,164	$2,991,679	$4,746,303	$2,585,901

5

TECOGEN INC.

RISK FACTORS

The securities offered herein are highly speculative and should be purchased only by persons who can afford to lose their entire investment in us. You should carefully consider the following risk factors and other information in this prospectus before deciding to become a holder of our Common Stock. If any of the following risks actually occur, our business and financial results could be negatively affected to a significant extent.

Risks Relating to Our Business

Our business faces many risks. If any of the events or circumstances described in the following risks occurs, our business, financial condition, or results of operations could suffer and the trading price of our Common Stock (if and when it becomes publicly traded) could decline. Investors and prospective investors should consider the following risks and the information contained under the heading “Warning Concerning Forward-Looking Statements” before deciding whether to invest in our Common Stock.

Our operating history is characterized by net losses. We anticipate further losses, and we may never become profitable.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We expect this trend to continue until such time that we can sell a sufficient number of systems and achieve a cost structure to become profitable. We may not have adequate cash resources to reach the point of profitability, and we may never become profitable. Even if we do achieve profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

We experience significant fluctuations in revenues from quarter to quarter due to a preponderance of one-time sales.

We have low volume, high dollar sales for projects that are generally non-recurring, and therefore our sales have fluctuated significantly from period to period. For example, when compared to the previous quarter, our revenues in 2010 decreased during the first, second and fourth quarters and increased during the third quarter. In 2011, our revenue decreased during the first and fourth quarters and increased during the second and third quarters. Fluctuations cannot be predicted because they are affected by the purchasing decisions and timing requirements of our customers, which are unpredictable.

We may be unable to fund our future operating requirements, which could force us to curtail our operations.

To the extent that our funds are insufficient to fund our future operating requirements, we would need to raise additional funds through further public or private equity or debt financings depending upon prevailing market conditions. These financings may not be available to us, or if available, may be on terms that are not favorable to us and could result in significant dilution to our stockholders and reduction of the trading price of our stock (if then publicly traded). The state of worldwide capital markets could also impede our ability to raise additional capital on favorable terms or at all. If adequate capital were not available to us, we likely would be required to significantly curtail our operations or possibly even cease our operations.

We believe that our existing resources, including cash and cash equivalents and future cash flows from operations, are sufficient to meet the working capital requirements of our existing business until mid-late 2013. After that our cash requirements may increase.

If we experience a period of significant growth or expansion, it could place a substantial strain on our resources.

If our cogeneration and chiller products penetrate the market rapidly, we would be required to deliver even larger volumes of technically complex products or components to our customers on a timely basis and at a reasonable costs to us. We have never ramped up our manufacturing capabilities to meet large-scale production requirements. If we were to commit to deliver large volumes of products, we may not be able to satisfy these commitments on a timely and cost-effective basis.

The execution of our growth strategy is dependent upon the continued availability of third-party financing arrangements for our customers and is affected by general economic conditions.

The recent recession, current unstable economic conditions and limited availability of credit and liquidity could materially and adversely affect our business and results of operations because purchasers of our systems often require third party financing. Purchasers may be unable or unwilling to finance the cost to purchase our products or may be forced to cancel

previously submitted orders or delay taking shipment until suitable credit is again available. Collecting payment from customers facing liquidity challenges is also difficult.

We are dependent on a limited number of third-party suppliers for the supply of key components for our products.

We use third-party suppliers for components in many of our products. Our engine supplier is GM. Our generator supplier for our cogeneration products, other than the InVerde is Marathon Electric. To produce air conditioning, our engines drive a compressor purchased from J&E Hall International. The loss of one of our suppliers could materially and adversely affect our business, if we are unable to replace them. While alternate suppliers for the manufacture of our engine, generator and compressor have been identified, should the need arise, there can be no assurance that alternate suppliers will be available and able to manufacture our engine, generator or compressor on acceptable terms.

From time to time, shipments can be delayed because of industry-wide or other shortages of necessary materials and components from third-party suppliers. A supplier's failure to supply components in a timely manner, or to supply components that meet our quality, quantity, or cost requirements, or our inability to obtain substitute sources of these components on a timely basis or on terms acceptable to us, could impair our ability to deliver our products in accordance with contractual obligations.

We expect significant competition for our products and services.

Competition for our products is currently limited (see “Competitive Position and Business Conditions” in the “Business” section of this prospectus). Many of our competitors and potential competitors are well established and have substantially greater financial, research and development, technical, manufacturing and marketing resources than we do. If these larger competitors decide to focus on the development of distributed power or cogeneration, they have the manufacturing, marketing and sales capabilities to complete research, development and commercialization of these products more quickly and effectively than we can. There can also be no assurance that current and future competitors will not develop new or enhanced technologies or more cost-effective systems, and therefore, there can be no assurance that we will be successful in this competitive environment.

The Executive Order to accelerate investments in industrial energy efficiency may lead to increased competition .

An Executive Order to accelerate investments in industrial energy efficiency, including CHP, was promulgated in August 2012. The goal of the Executive Order is to supply 40 gigawatts of energy by 2020 from greater efficiency such as CHP systems. With this Executive Order, it is expected that a number of barriers to CHP development will be removed with effective programs, policies, and financing opportunities resulting in significant new capital investment in CHP. This initiative by the U.S. government may lead to increased competition in the CHP market.

If we are unable to maintain our technological expertise in design and manufacturing processes, we will not be able to successfully compete.

We believe that our future success will depend upon our ability to continue to develop and provide innovative products and product enhancements that meet the increasingly sophisticated needs of our customers.

However, this requires that we successfully anticipate and respond to technological changes in design and manufacturing processes in a cost-effective and timely manner. The development of new, technologically advanced products and enhancements is a complex and uncertain process requiring high levels of innovation, as well as the accurate anticipation of technological and market trends. There can be no assurance that we will successfully identify new product opportunities, develop and bring new or enhanced products to market in a timely manner, successfully

lower costs, and achieve market acceptance of our products, or that products and technologies developed by others will not render our products or technologies obsolete or noncompetitive.

The introduction of products embodying new technologies, and the shifting of customer demands or changing industry standards, could render our existing products obsolete and unmarketable. We may experience delays in releasing new products and product enhancements in the future. Material delays in introducing new products or product enhancements may cause customers to forego purchases of our products and purchase those of our competitors.

TECOGEN INC.

Our intellectual property may not be adequately protected.

We seek to protect our intellectual property rights through patents, trademarks, copyrights, trade secret laws, confidentiality agreements and licensing arrangements, but we cannot ensure that we will be able to adequately protect our technology from misappropriation or infringement. We cannot ensure that our existing intellectual property rights will not be invalidated, circumvented, challenged or rendered unenforceable.

We have applied for and obtained patents on certain key components used in our products. Our competitors may successfully challenge the validity of our patents, may design non-infringing products, or deliberately infringe our patents. There can be no assurance that other companies are not investigating or developing other similar technologies. In addition, our intellectual property rights may not provide a competitive advantage to us or that our products and technology will be adequately covered by our patents and other intellectual property. Any of these factors or the expiration, termination or invalidity of one or more of our patents may have a material adverse effect on our business.

We have filed for patents in the U.S. and Europe for our Ultra low-emissions technology. The outcome of the patent office application review is important because this technology will apply to all of our gas engine-driven products and may have licensing application to other natural gas engines. There is no assurance, however, that the Ultra low-emissions patent applications will be approved.

Our control software is protected by copyright laws or under an exclusive license agreement. Further, we rely on treatment of our technology as trade secrets through confidentiality agreements, which our employees and vendors are required to sign. We also rely on non-disclosure agreements with others that have or may have access to confidential information to protect our trade secrets and proprietary knowledge. These agreements may be breached, and we may not have adequate remedies for any breach. Our trade secrets may also be or become known without breach of these agreements or may be independently developed by competitors. Failure to maintain the proprietary nature of our technology and information could harm our results of operations and financial condition.

Others may assert that our technology infringes their intellectual property rights.

We may be subject to infringement claims in the future. The defense of any claims of infringement made against us by third parties could involve significant legal costs and require our management to divert time from our business operations. If we are unsuccessful in defending any claims of infringement, we may be forced to obtain licenses or to pay additional royalties to continue to use our technology. We may not be able to obtain any necessary licenses on commercially reasonable terms or at all. If we fail to obtain necessary licenses or other rights, or if these licenses are costly, our operating results would suffer either from reductions in revenues through our inability to serve customers or from increases in costs to license third-party technologies.

Our success is dependent upon attracting and retaining highly qualified personnel and the loss of key personnel could significantly hurt our business.

To achieve success, we must attract and retain highly qualified technical, operational and executive employees. The loss of the services of key employees or an inability to attract, train and retain qualified and skilled employees, specifically engineering, operations, and business development personnel, could result in the loss of business or could otherwise negatively impact our ability to operate and grow our business successfully.

Our business is subject to product liability and warranty claims.

Our business exposes us to potential product liability claims, which are inherent in the manufacturing, marketing and sale of our products, and we may face substantial liability for damages resulting from the faulty design or manufacture of products or improper use of products by end users. We currently maintain a moderate level of product liability insurance, but there can be no assurance that this insurance will provide sufficient coverage in the event of a claim. Also, we cannot predict whether we will be able to maintain such coverage on acceptable terms, if at all, or that a product liability claim would not harm our business or financial condition. In addition, negative publicity in connection with the faulty design or manufacture of our products would adversely affect our ability to market and sell our products.

We sell our products with warranties. There can be no assurance that the provision in our financial statements for estimated product warranty expense will be sufficient. We cannot ensure that our efforts to reduce our risk through warranty disclaimers will effectively limit our liability. Any significant occurrence of warranty expense in excess of estimates could have a material adverse effect on our operating results, financial condition and cash flow. Further, we have at times undertaken

programs to enhance the performance of units previously sold. These enhancements have at times been provided at no cost or below our cost. If we choose to offer such programs again in the future, such actions could result in significant costs.

Certain businesses and consumers might not consider cogeneration solutions as a means for obtaining their electricity and power needs.

Generating electricity and heat at the customers' building (on-site CHP) is an established technology, but it is more complex than buying electricity from the utility and using a furnace for heat. Customers have been slow to accept it in part because of this complexity. In addition, the development of a larger market for our products will be impacted by many factors that are out of our control, including cost competitiveness, regulatory requirements, and the emergence of newer and potentially better technologies and products. If a larger market for cogeneration technology in general and our products in particular fails to grow substantially, we may be unable to continue our business.

We operate in a highly regulated business environment, and changes in regulation could impose significant costs on us or could make our products less economical, thereby affecting demand for our products.

Several kinds of government regulations – at federal, state, and local levels and in other countries – affect our current and future business (see "Government Regulation and It Effect on Our Business" in the "Business" section of this prospectus). Our products must comply with various local building codes and must undergo inspection by local authorities. Our products are also certified by a third party to conform to specific standards. These certifications require continuous verification by a company that monitors our processes and design every three months. Our InVerde product is also certified to Europe's standard CE mark (European Conformity), which is mandatory for products imported into the European Union for commercial sale. If our products ceased to meet the criteria necessary for the applicable certifications, we may lose the ability to sell our products in certain jurisdictions, which may materially and adversely affect our business.

Regulatory agencies may further impose special requirements for the implementation and operation of our products that could significantly affect or even eliminate some of our target markets. We also may incur material costs or liabilities in complying with future government regulations. Furthermore, our potential utility customers must themselves comply with numerous laws and regulations, which may be complicated by further deregulation of the utility industry. Furthermore, our potential utility customers must themselves comply with numerous laws and regulations, which may be complicated by further deregulation of the utility industry. We cannot determine how such deregulation may ultimately affect the market for our products. Changes in regulatory standards or policies could reduce the level of investment in the research and development of alternative power sources, including our products. Any reduction or termination of such programs could increase the cost to our potential customers, making our systems less desirable and thereby adversely affect our business and financial condition.

Utilities or governmental entities could hinder our entry into and growth in the marketplace, and we may not be able to effectively sell our products.

Utilities or governmental entities on occasion have placed barriers to the installation of our products or their interconnection with the electric grid, and they may continue to do so. Utilities may charge additional fees to customers who install on-site CHP and rely on the grid for back-up power. These types of restrictions, fees, or charges could make it harder for customers to install our products or use them effectively, as well as increasing the cost to our potential customers. This could make our systems less desirable, thereby adversely affecting our revenue and other operating results.

In some instances, regional standards in our key markets have become sufficiently strict that the technical limits of controlling pollution from natural gas engines were exceeded. Our development of the Ultra low-emissions technology responded to the limits imposed in Southern California. We expect to get a CHP unit permitted in Southern California by year-end 2012, which would permit us to take advantage of California's rebate to engine CHP systems. There can be no assurance that we will be granted the permit in California or that we will be able to take advantage of rebate programs or incentives in other locations. If we fail to obtain this permit, we will be unable to take advantage of California's rebate program and our ability to compete in California will be impacted.

We may not achieve production cost reductions necessary to competitively price our products, which would adversely affect our sales.

We believe that we will need to reduce the unit production cost of our products over time to maintain our ability to offer competitively priced products. Our ability to achieve cost reductions will depend on our ability to develop low-cost design enhancements, to obtain necessary tooling and favorable supplier contracts, and to increase sales volumes so we can achieve

economies of scale. We cannot assure you that we will be able to achieve any such production cost reductions. Our failure to do so could have a material adverse effect on our business and results of operations.

We have granted sales representation rights to an affiliated company which restricts our distribution.

In New England, our affiliate American DG Energy has exclusive sales representation rights to our cogeneration products only (not including chillers) and exclusive rights to our Ultra low-emissions technology if it is applied to engines from other CHP manufacturers in projects developed by American DG Energy (see “The Company and Its Affiliates” in the “Business” section of this prospectus). As a result of these agreements, we have limited control over our distribution of certain products in New England, and this could have a material adverse effect on our business and results of operations.

Commodity market factors impact our costs and availability of materials.

Our products contain a number of commodity materials, from metals, which include steel, special high temperature alloys, copper, nickel and molybdenum, to computer components. The availability of these commodities could impact our ability to acquire the materials necessary to meet our requirements. The cost of metals has historically fluctuated. The pricing could impact the costs to manufacture our products. If we are not able to acquire commodity materials at prices and on terms satisfactory to us or at all, our operating results may be materially adversely affected.

Our products involve a lengthy sales cycle and we may not anticipate sales levels appropriately, which could impair our results of operations.

The sale of our products typically involves a significant commitment of capital by customers, with the attendant delays frequently associated with large capital expenditures. For these and other reasons, the sales cycle associated with our products is typically lengthy and subject to a number of significant risks over which we have little or no control. We expect to plan our production and inventory levels based on internal forecasts of customer demand, which is highly unpredictable and can fluctuate substantially. If sales in any period fall significantly below anticipated levels, our financial condition, results of operations and cash flow would suffer. If demand in any period increases well above anticipated levels, we may have difficulties in responding, incur greater costs to respond, or be unable to fulfill the demand in sufficient time to retain the order, which would negatively impact our operations. In addition, our operating expenses are based on anticipated sales levels, and a high percentage of our expenses are generally fixed in the short term. As a result of these factors, a small fluctuation in timing of sales can cause operating results to vary materially from period to period.

The economic viability of our projects depends on the price spread between fuel and electricity, and the variability of these prices creates a risk that our projects will not be economically viable and that potential customers will avoid such energy price risks.

The economic viability of our CHP products depends on the spread between natural gas fuel and electricity prices. Volatility in one component of the spread, the cost of natural gas and other fuels (e.g., propane or distillate oil), can be managed to some extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity may decline periodically due to excess generating capacity or general economic recessions.

Our products could become less competitive if electric rates were to fall substantially in the future. Also, potential customers may perceive the unpredictable swings in natural gas and electricity prices as an increased risk of investing in on-site CHP, and may decide not to purchase CHP products.

We are exposed to credit risks with respect to some of our customers.

To the extent our customers do not advance us sufficient funds to finance our costs during the execution phase of our contracts, we are exposed to the risk that they will be unable to accept delivery or that they will be unable to make payment at the time of delivery.

We may make acquisitions that could harm our financial performance.

To expedite development of our corporate infrastructure, particularly with regard to equipment installation and service functions, we anticipate the future acquisition of complementary businesses. Risks associated with such acquisitions include the disruption of our existing operations, loss of key personnel in the acquired companies, dilution through the issuance of additional securities, assumptions of existing liabilities, and commitment to further operating expenses. If any or all of these problems actually occur, acquisitions could negatively impact our financial performance and future stock value.

TECOGEN INC.

Our ability to access capital for the repayment of debts and for future growth is limited because the financial markets are currently in a period of disruption and recession, and the Company does not expect these conditions to improve in the near future.

Our ability to continue to access capital could be impacted by various factors including general market conditions and the continuing slowdown in the economy, interest rates, the perception of our potential future earnings and cash distributions, any unwillingness on the part of lenders to make loans to us, and any deterioration in the financial position of lenders that might make them unable to meet their obligations to us.

Our business is affected by general economic conditions and related uncertainties affecting the markets in which we operate. The current unstable economic conditions including the global recession could adversely impact our business in 2012 and beyond.

The current unstable economic conditions could adversely impact our business in 2012 and beyond, resulting in reduced demand for our products, increased rate of order cancellations or delays, increased risk of supplier bankruptcy, increased rate of supply order cancellation or delays, increased risk of excess and obsolete inventories, increased pressure on the prices for our products and services; and greater difficulty in collecting accounts receivable.

Risks Related to Ownership of our Common Stock

We could issue additional Common Stock, which might dilute the book value of our Common Stock.

Our board of directors has the authority, without action or vote of our stockholders, to issue all or a part of any authorized but unissued shares. Such stock issuances may be made at a price that reflects a discount from the then-current trading price of our Common Stock. We may issue securities that are convertible into or exercisable for a significant amount of our Common Stock. These issuances would dilute your percentage ownership interest, which would have the effect of reducing your influence on matters on which our stockholders vote, and might dilute the book value of our Common Stock. You may incur additional dilution of net tangible book value if holders of stock options, whether currently outstanding or subsequently granted, exercise their options or if warrant holders exercise their warrants to purchase shares of our Common Stock. There can be no assurance that any future offering will be consummated or, if consummated, will be at a share price equal or superior to the price paid by our investors even if we meet our technological and marketing goals.

Our quarterly operating results are subject to fluctuations, and if we fail to meet the expectations of securities analysts or investors, our share price may decrease significantly.

Our annual and quarterly results may vary significantly depending on various factors, many of which are beyond our control. If our earnings do not meet the expectations of securities analysts or investors, the price of our stock could decline. Also, because our sales are primarily made on a purchase order basis, customers may generally cancel, reduce or postpone orders, resulting in reductions to our net sales and profitability.

Investment in our Common Stock is subject to price fluctuations and market volatility.

Historically, valuations of many small companies have been highly volatile. The securities of many small companies have experienced significant price and trading volume fluctuations, unrelated to the operating performance or the prospects of such companies.

Future sales of Common Stock by our existing stockholders may cause our stock price to fall.

The market price of our Common Stock could decline as a result of sales by our existing stockholders of shares of Common Stock in the market or the perception that these sales could occur. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate and thus inhibit our ability to raise additional capital when it is needed.

Because we do not intend to pay cash dividends, our stockholders will receive no current income from holding our stock.

We have paid no cash dividends on our capital stock to date and we currently intend to retain all of our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any future debt or credit facility may

preclude us from paying these dividends. As a result, capital appreciation, if any, of our Common Stock will be your sole source of gain for the foreseeable future.

We are controlled by a small group of majority stockholders, and our minority stockholders will be unable to effect changes in our governance structure or implement actions that require stockholder approval, such as a sale of the Company.

George N. Hatsopoulos and John N. Hatsopoulos, who are brothers, beneficially own approximately 53.3% of our outstanding shares of Common Stock. These stockholders have the ability to control various corporate decisions, including our direction and policies, the election of directors, the content of our charter and bylaws and the outcome of any other matter requiring stockholder approval, including a merger, consolidation and sale of substantially all of our assets or other change of control transaction. The concurrence of our minority stockholders will not be required for any of these decisions.

We are controlled by our two founding shareholders, George N. Hatsopoulos and John N. Hatsopoulos. These shareholders are registering all of their holdings for resale and in the event this registration statement is declared effective, they will be able to sell all of their Common Stock.

John N. Hatsopoulos (78) and George N. Hatsopoulos (86) are registering all of their holdings for resale primarily for estate planning purposes. For that reason, the timing and the amount of any future sales by them is difficult to predict. George Hatsopoulos is a director but not an officer of the Company. John Hatsopoulos is the Chief Executive Officer and a key employee of the Company. If John Hatsopoulos or George Hatsopoulos were to sell a substantial portion of their shares in the Company, they would no longer have a substantial continuing interest in the Company. If that were to occur, it may have a material adverse effect on their performance as director or Chief Executive Officer, as applicable, and on the business of the Company. Further, substantial sales of their common stock may result in a decline in the market price of our Common Stock.

There has been a material weakness in our disclosure controls and procedures and our internal control over financial reporting, which could harm our operating results or cause us to fail to meet our reporting obligations.

As of our fiscal year end, December 31, 2011, our principal executive officer and principal accounting officer performed an evaluation of controls and procedures and concluded that our controls were not effective to provide reasonable assurance that information required to be disclosed by our Company in reports that we file under the Exchange Act, is recorded, processed, summarized and reported as when required. Management conducted an evaluation of our internal control over financial reporting and based on this evaluation, management concluded that the company’s internal control over financial reporting was not effective as of December 31, 2011. The Company currently does not have personnel with a sufficient level of accounting knowledge, experience and training in the selection, application and implementation of generally acceptable accounting principles as it relates to complex transactions and financial reporting requirements. The Company also has a small number of employees dealing with general controls over information technology security and user access. This constitutes a material weakness in financial reporting. Any failure to implement effective internal controls could harm our operating results or cause us to fail to meet our reporting obligations. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock, and may require us to incur additional costs to improve our internal control system.

Trading of our Common Stock may be restricted by the SEC’s “penny stock” regulations which may limit a stockholder’s ability to buy and sell our stock.

The SEC 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 may be 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 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 SEC that 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 other quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statement 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 and suitability requirements may have the effect of reducing the level of trading activity in the

secondary market for a 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 may discourage investor interest in and limit the marketability of our capital stock. Trading of our capital stock may be restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell our stock.

The recently enacted JOBS Act will allow us to postpone the date by which we must comply with certain laws and regulations and will reduce the amount of information provided by us in reports filed with the SEC. We cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are and we will remain an "emerging growth company", as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, until the earliest to occur of (i) the last day of the fiscal year during which our total annual gross revenues equal or exceed $1 billion (subject to adjustment for inflation), (ii) the last day of the fiscal year following the fifth anniversary of our initial public offering, (iii) the date on which we have, during the previous three-year period, issued more than $1 billion in non-convertible debt, or (iv) the date on which we are deemed a large accelerated filer under the Exchange Act.

For so long as we remain an emerging growth company as we will not be required to:

- have an auditor report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);
- submit certain executive compensation matters to shareholder non-binding advisory votes;
- submit for shareholder approval golden parachute payments not previously approved; and
- disclose certain executive compensation related items such as the correlation between executive compensation and financial performance and comparisons of the Chief Executive Officer's compensation to median employee compensation, when such disclosure requirements are adopted.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we are choosing to "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

We cannot predict if investors will find our common stock less attractive because we may rely on some of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. If we avail ourselves of certain exemptions from various reporting requirements, our reduced disclosure may make it more difficult for investors and securities analysts to evaluate us and may result in less investor confidence.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus include, among other things, statements about:

TECOGEN INC.

- our future financial performance, including our revenue, cost of revenue, operating expenses and ability to achieve and maintain profitability;
- our ability to market, commercialize and achieve market acceptance for our combined heat and power systems or any other product candidates or products that we may develop;
- our ability to innovate and keep pace with changes in technology;
- the success of our marketing and business development efforts;
- our ability to maintain, protect and enhance our intellectual property;
- the effects of increased competition in our market;
- our ability to effectively manage our growth and successfully enter new markets; and
- the attraction and retention of qualified employees and key personnel.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus, particularly in the “Risk factors” section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus are made as of the date of this prospectus, and we do not assume any obligation to update any forward-looking statements except as required by applicable law.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of Common Stock by the selling stockholders which are offered by this prospectus.

TECOGEN INC.

DETERMINATION OF OFFERING PRICE

The offering price for the shares in this offering was determined by our management. In determining the initial public offering price of the shares we considered several factors including the following:

- our status of business development;
- our new business structure and operations;
- prevailing market conditions, including the history and prospects for our industry;
- our future prospects and the experience of our management; and
- our capital structure.

Therefore, the public offering price of the shares does not necessarily bear any relationship to established valuation criteria and may not be indicative of prices that may prevail at any time or from time to time in the public market for the Common Stock. You cannot be sure that a public market for any of our securities will develop and continue or that the securities will ever trade at a price at or higher than the offering price in this prospectus.

DILUTION

We are not selling any of the shares of our Common Stock in this offering. All of the shares sold in this offering will be held by the selling stockholders at the time of the sale, so that no dilution will result from the sale of the shares.

TECOGEN INC.

SELLING SECURITY HOLDERS

The 31,475,787 common shares being offered for resale pursuant to this registration statement, or Common Shares, may be sold from time to time for the account of the selling security holders named in the following table. However, the selling security holders are not obligated to sell any of our Common Shares offered by this prospectus.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. Except as otherwise indicated, all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose. With respect to selling stockholders that are entities, the individuals who have voting or investment power over the shares, as indicated, disclaim beneficial ownership of the securities except for their pecuniary interest therein.

The table below contains information, to our knowledge, regarding each selling security holder's beneficial ownership of our Common Shares as of the date of this prospectus, and as adjusted to reflect the sale of the shares offered hereby, assuming that all of the shares offered hereby will be sold.

	Shares Beneficially Owned Prior to Offering		Shares Being	Shares Beneficially Owned After Offering	
Selling stockholder	Number	Percentage	Offered (1)	Number (2)	Percentage
John N. Hatsopoulos (3)	14,875,350	27.34 %	14,875,350	—	*
George N. Hatsopoulos (4)	14,206,077	25.96 %	14,206,077	—	*
Robert A. Panora (5)	778,400	1.43 %	653,400	125,000	*
Bruno Meier	500,000	*	500,000	—	*
Charles T. Maxwell (6)	325,000	*	300,000	25,000	*
Pictet Bank & Trust (7)	250,000	*	250,000	—	*
Angelina M. Galiteva (8)	225,000	*	100,000	125,000	*
Ahmed F. Ghoniem (9)	125,000	*	100,000	25,000	*
Hans Schopper	100,000	*	100,000	—	*
JNH 1989 Family Trust f/b/o Nia Marie Hatsopoulos (10)	230,491	*	170,480	60,011	*
JNH 1989 Family Trust f/b/o Alexander Hatsopoulos (11)	230,491	*	170,480	60,011	*
Bonnie J. Brown (12)	350,000	*	50,000	300,000	*
Total	32,195,809		31,475,787	720,022	

* Represents beneficial ownership of less than 1% of our outstanding Common Stock.
\+ Member of our Board of Directors.
\# Executive Officer

1. Shares beneficially owned by our security holders and offered hereby consist of 31,475,787 outstanding shares of Common Stock.
2. The number assumes each selling security holder sells all of its shares being offered pursuant to this prospectus.
3. Includes: (a) 8,540,838 shares of Common Stock held by J&P Enterprises LLC for the benefit of: (1) John N. Hatsopoulos and (2) Patricia L. Hatsopoulos. John N. Hatsopoulos is the Executive Member of J&P Enterprises LLC and has voting and investment power; (b) 2,375,077 shares of Common Stock held by John N. Hatsopoulos and his wife, Patricia L. Hatsopoulos, as joint tenants with rights of survivorship, each of whom share voting and investment power; and (c) 3,959,435 shares of Common Stock held by The John N. Hatsopoulos Family Trust 2007

for the

16

benefit of: (1) Patricia L. Hatsopoulos, (2) Alexander J. Hatsopoulos, and (3) Nia Marie Hatsopoulos, for which Dr. George N. Hatsopoulos and Ms. Patricia L. Hatsopoulos are the trustees.

4. Includes: (a) 5,968,504 shares of Common Stock, directly held by Dr. George N. Hatsopoulos; (b) 7,934,350 shares of Common Stock; held by Dr. Hatsopoulos and his wife, Daphne Hatsopoulos, as joint tenants, each of whom share voting and investment power; and (c) 303,223 shares of Common Stock issuable upon conversion of $90,967 principal amount of 6% convertible debentures. This amount does not include 2,272,391 shares held in the 1994 Hatsopoulos Family Trust for the benefit of Dr. and Mrs. Hatsopoulos' adult children, for whom Ms. Daphne Hatsopoulos and Mr. Gordon Erhlich are the trustees. Dr. Hatsopoulos disclaims beneficial ownership of the shares held by this trust. Dr. George N. Hatsopoulos is a director of the Company.
5. Includes 653,400 shares of Common Stock, directly held by Mr. Panora, who is the Chief Operating Officer and President of the Company.
6. Includes 300,000 shares of Common Stock, directly held by Mr. Maxwell, who is a director of the Company.
7. Includes 250,000 shares of Common Stock held by Pictet Bank & Trust. The address of Pictet Bank & Trust is Bayside Executive Park, West Bay Street and Blake Road, Nassau Bahamas. Mr. Eric Messmer is the authorized signatory of the company and may be deemed to exercise voting and/or dispositive power with respect to these shares.
8. Includes 100,000 shares of Common Stock, directly held by Ms. Galiteva, who is the Chairperson of the Board of the Company.
9. Includes 100,000 shares of Common Stock, directly held by Dr. Ghoniem, who is a director of the Company.
10. Includes 170,480 of Common Stock held in the JNH 1989 Family Trust for the benefit of Nia Marie Hatsopoulos, for whom Mr. and Mrs. Paris Nicolaidis are the trustees. Mr. John N. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.
11. Includes 170,480 of Common Stock held in the JNH 1989 Family Trust for the benefit of Alexander J. Hatsopoulos, for whom Mr. and Mrs. Paris Nicolaidis are the trustees. Mr. John N. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.
12. Includes 50,000 shares of Common Stock, directly held by Ms. Brown, who is the Chief Financial Officer of the Company.

Except for the current directors and officers as set forth in this Section and in the footnotes to the table above, other than Mr. Paris Nikolaidis, a former director of the Company who resigned from our Board of Directors on July 15, 2010, none of the selling stockholders has held any position or office, or had any other material relationship with the company within the past three years. See "Certain Relationships and Related Transactions" for a discussion of certain of the selling security holders' relationship to us and our affiliates.

TECOGEN INC.

The 31,475,787 Common Shares being offered for resale pursuant to this registration statement were acquired by the selling security holders as shown on the table below:

	Shares Issued	Date Issued(1)	Share Price	Amount
Founders Round One @ $0.0003 per share				
George N. Hatsopoulos	3,900,000	7/24/2001	$0.0003	$1,170
John N. Hatsopoulos & Patricia L. Hatsopoulos	2,375,077	7/24/2001	$0.0003	$713
John N. Hatsopoulos Family Trust 2008	1,524,923	7/24/2001	$0.0003	$457
Founders Round Two @ $0.03 per share				
George N. Hatsopoulos	1,627,609	11/15/2000	$0.030	$48,828
J&P Enterprises LLC	2,573,088	11/15/2000	$0.030	$77,193
John N. Hatsopoulos Family Trust 2008	1,326,912	11/15/2000	$0.030	$39,807
Robert A. Panora	100,000	5/15/2001	$0.030	$3,000
George N. Hatsopoulos	190,000	4/17/2002	$0.300	$57,000
Private Placement @ $0.30 per share				
Charles T. Maxwell	100,000	3/1/2004	$0.300	$30,000
Charles T. Maxwell	100,000	11/3/2006	$0.300	$30,000
Restricted Stock Award				
Robert A. Panora	533,400	12/4/2006	$0.001	$533
Robert A. Panora	20,000	12/4/2006	$0.001	$20
Bonnie J. Brown	50,000	12/13/2006	$0.001	$50
Angelina M. Galiteva	100,000	12/13/2006	$0.001	$100
Conversion of Debt into Equity @ $0.30 per share				
George & Daphne Hatsopoulos JT	2,191,600	1/1/2007	$0.300	$657,480
John N. Hatsopoulos Family Trust 2008	1,107,600	1/1/2007	$0.300	$332,280
George & Daphne Hatsopoulos JT	3,900,000	9/30/2008	$0.300	$1,170,000
George & Daphne Hatsopoulos JT	1,842,750	9/30/2008	$0.300	$552,825
J&P Enterprises LLC	3,900,000	9/30/2008	$0.300	$1,170,000
J&P Enterprises LLC	1,842,750	9/30/2008	$0.300	$552,825
Restricted Stock Award				
Ahmed F. Ghoniem	100,000	10/1/2008	$0.001	$100
Charles T. Maxwell	100,000	10/1/2008	$0.001	$100
Warrant Exercise @ $0.30 per share				
George N. Hatsopoulos	225,000	3/26/2010	$0.300	$67,500
J&P Enterprises LLC	225,000	3/26/2010	$0.300	$67,500
Conversion of Debt into Equity @ $0.50 per share				
George N. Hatsopoulos	25,895	9/24/2011	$0.500	$12,948
Private Placement @ $0.80 per share				
Bruno Meier	250,000	4/6/2012	$0.800	$200,000
Hans Schopper	100,000	5/10/2012	$0.800	$80,000
Pictet Bank & Trust	250,000	5/24/2012	$0.800	$200,000
JNH 1989 Family Trust f/b/o Nia Marie Hatsopoulos	166,667	9/30/2012	$0.300	$50,000
JNH 1989 Family Trust f/b/o Alexander Hatsopoulos	166,667	9/30/2012	$0.300	$50,000
JNH 1989 Family Trust f/b/o Nia Marie Hatsopoulos	3,813	9/30/2012	$0.800	$3,050
JNH 1989 Family Trust f/b/o Alexander Hatsopoulos	3,813	9/30/2012	$0.800	$3,050
Bruno Meier	250,000	12/3/2012	$0.800	$200,000
Shares upon future exercise of Convertible Debenture				
George N. Hatsopoulos (2)	303,223		$0.300	$90,967

Total shares registered	31,475,787	$5,749,496

1. Includes shares of Common Stock that have been issued on the dates described in the table above.
2. Includes 303,223 shares of Common Stock issuable upon conversion of $90,967 principal amount of 6% convertible debentures due September 24, 2013.

TECOGEN INC.

PLAN OF DISTRIBUTION

The selling security holders may, from time to time, sell, transfer, or otherwise dispose of any or all of their Common Shares on any stock exchange, market, or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling security holders will initially sell shares of our Common Stock at $0.80 per share, until such time as shares of our Common Stock may be quoted on the OTC Bulletin Board or listed on a national or international securities exchange. The selling security holders may use any one or more of the following methods when disposing of their Common Shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling security holders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling security holders may, from time to time, pledge or grant a security interest in some or all of the Common Shares owned in their name and, if they default in the performance of the secured obligations, the pledgees or secured parties may offer and sell the Common Shares, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act to include the pledgee, transferee or other successors in interest as the selling security holders under this prospectus. The selling security holders also may transfer the Common Shares in other circumstances, in which case the transferees, pledges, or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our Common Shares, the selling security holders may enter into hedging transactions with broker-dealers or other financial institutions and may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of Common Shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling security holders from the sale of the Common Shares offered by them will be the purchase price of the Common Shares less discounts or commissions, if any. The selling security holders reserve the right to accept and, together with their respective agents from time to time, to reject, in whole or in part, any proposed purchase of Common Shares to be made directly or through agents.

The selling security holders also may resell all or a portion of the Common Shares in transactions on the OTC Bulletin Board a national, or international securities exchange, if and when our shares are quoted on the OTC Bulletin Board or listed on a national, or international securities exchange, in reliance upon Rule 144 under the Securities Act, provided that such transaction meets the criteria and conforms to the requirements of that rule.

Any underwriters, broker-dealers, or agents that participate in the sale of the Common Shares may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions, or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act.

To the extent required, the Common Shares to be sold, the name of the selling stockholder, the respective purchase prices and public offering prices, the names of any agent, dealer, or underwriter, any applicable commissions or discounts with

respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Shares may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Shares may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling security holders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling security holders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling security holders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling security holders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

TECOGEN INC.

DESCRIPTION OF SECURITIES TO BE REGISTERED

Up to 31,475,787 shares of our Common Stock may be sold by the selling security holders pursuant to this prospectus. The shares of common shares being offered for resale pursuant to this prospectus may be sold from time to time for the account of the selling security holders named in the “Selling Security Holders” section of this prospectus.

General

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and bylaws are summaries and are qualified by reference to the charter and the bylaws that will be in effect upon the effectiveness of this registration statement. These documents are filed as exhibits hereto.

Upon the effectiveness of this registration statement, our authorized capital stock will consist of 100,000,000 shares of Common Stock, par value $0.001 per share.

The following description summarizes information about our capital stock. You can obtain more comprehensive information about our capital stock by reviewing our certificate of incorporation and bylaws as well as the Delaware General Corporation Law.

Common Stock

General. As of the date of this prospectus, there were 54,417,854 shares of our Common Stock outstanding, held of record by 110 stockholders.

Voting Rights. Each holder of Common Stock is entitled to one vote per share on all matters properly submitted to a vote of the stockholders, including the election of directors. Our charter will not provide for cumulative voting rights. Because of this, but subject to the rights of any then outstanding shares of preferred stock, the holders of a majority of the shares of Common Stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. An election of directors by our stockholders is determined by a plurality of the votes cast by stockholders entitled to vote on the election.

Dividends. Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of legally available funds.

Liquidation. In the event of our liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Rights and Preferences . Holders of our Common Stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our Common Stock with the exception of the investment of Southern California Gas Company on June 13, 2011, which has certain stockholder rights and a redemption right whereby the investor may redeem the shares for cash until the earlier of, the initiation of a public offering of the Company by filing a registration statement with the SEC, or five years, whatever comes first. The rights, preferences and privileges of holders of Common Stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. The filing of our registration statement on Form S-1 on December 22, 2011, resulted in the expiration of the rights and

preferences of the Southern California Gas Company; therefore as of September 30, 2012, we do not have any rights or preferences outstanding.

Stock Options

As of September 30, 2012, we had 4,431,000 options outstanding under our Stock Plan, each with a weighted average exercise price of $0.49 per share.

Warrants

As of September 30, 2012, there were no warrants outstanding.

TECOGEN INC.

Registration Rights

The Company is not a party to any registration rights agreements.

Delaware Anti-Takeover Law and Charter and Bylaws Provisions

Delaware Anti-Takeover Law. We are subject to Section 203 of the Delaware General Corporation Law. Section 203 of that law generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our Board of Directors, the business combination is approved in a prescribed manner or the interested stockholder acquired at least 85% of our outstanding voting stock in the transaction in which it became an interested stockholder. A "business combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder" and the sale of more than 10% of our assets. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

Certificate of Incorporation and Bylaws. Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change of control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our Common Stock if and when it becomes tradable. Among other things, our charter and bylaws:

- authorize the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- eliminate the ability of stockholders to call a special meeting of stockholders; and
- establish advance notice requirements for nominations for election to the Board of Directors or for proposing matters that can be acted upon at stockholder meetings.

The amendment of any provisions of our charter by the stockholders would require the approval of the holders at least two-thirds of our then outstanding Common Stock. Our by-laws may be amended or repealed by a majority vote of our Board of Directors or by the affirmative vote of the holders of at least two-thirds of our then outstanding Common Stock.

Over-the-Counter (OTC) Bulletin Board and National, or International Securities Exchange

Following the effectiveness of this registration statement, we intend to arrange for the quotation of our Common Stock on the OTC Bulletin Board or the listing of our Common Stock on a national or international securities exchange.

Authorized but Unissued Shares

The authorized but unissued shares of Common Stock and preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by regulatory authorities. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved Common Stock and preferred stock could make it more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock will be Continental Stock Transfer and Trust Company.

TECOGEN INC.

EXPERTS

The consolidated financial statements as of and for the periods ended December 31, 2011 and 2010, appearing in this registration statement and prospectus have been audited by McGladrey LLP (formerly McGladrey & Pullen, LLP), an independent registered public accounting firm, as stated in their report appearing elsewhere herein, and are included in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

No expert or counsel named in this prospectus as having prepared or certified any part of this prospectus or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the Common Stock was employed on a contingency basis, or had, or is to receive, any interest, directly or indirectly, in our Company or any of our parents or subsidiaries. Nor was any such person connected with us or any of our parents or subsidiaries, if any, as a promoter, managing or principal underwriter, voting trustee, director, officer, or employee.

LEGAL MATTERS

The validity of our Common Stock offered under this prospectus will be passed upon by Sullivan & Worcester LLP, Boston, Massachusetts.

TECOGEN INC.

BUSINESS

Overview

Tecogen designs, manufactures, and sells systems that produce electricity, hot water, and air conditioning for commercial and industrial buildings. These systems, powered by natural gas engines, are efficient because they drive electric generators or compressors – which reduce the amount of electricity purchased from the utility – plus they use the engine's waste heat for water heating, space heating, and/or air conditioning at the customer's building. We call this cogeneration technology CHP for combined heat and power.

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water; and
- High-efficiency water heaters.

All of these are standardized, modular, small-scale CHP products, with a limited number of designs that can serve many different types of customers. The market for these products is driven by their ability to reduce energy costs, carbon emissions, and customers' dependence on the electric grid. Other factors behind the demand for natural gas-fueled CHP systems include America's growing natural gas reserves and its domestic energy policies, as well as customers' desire to become more socially responsible. Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations.

Our CHP technology uses low-cost, mass-produced engines manufactured by GM and Ford, which we modify to run on natural gas. In the case of our mainstay cogeneration and chiller products, the engines have proved to be cost-effective and reliable. In 2009, our research team developed a low-cost process for removing air pollutants from the engine exhaust. This low-emissions technology gives our natural gas engines exceptionally low levels of "criteria" air pollutants (those that are regulated by the EPA because they can harm human health and the environment).

After a successful field test of more than a year, in 2012 we introduced the technology commercially as an option for all of our products under the trade name Ultra (patent pending). The Ultra low-emissions technology repositions our engine-driven products in the marketplace, making them comparable environmentally with emerging technologies such as fuel cells, but at a much lower cost and greater efficiency.

Our CHP products are sold directly to customers by our in-house marketing team and by established sales agents and representatives, including American DG Energy and EuroSite Power which are affiliated companies. We have an installed base of more than 2,100 units. Many have been operating for almost 25 years. Our principal engine supplier is GM, and principal generator supplier is Marathon Electric. To produce air conditioning, our engines drive a compressor purchased from J&E Hall International.

In 2009, we created a subsidiary, Ilios, to develop and distribute a line of high-efficiency heating products, starting with a water heater. These products are much more efficient than conventional boilers in commercial buildings and industrial processes (see "Our Products" below). As of the date of this prospectus, we own a 65.0% interest in Ilios.

Tecogen was formed in the early 1960s as the Research and Development New Business Center of Thermo Electron Corporation, which is now Thermo Fisher Scientific Inc. For the next 20 years, this group performed fundamental and

applied research in many energy-related fields to develop new technologies. During the late 1970s, new federal legislation enabled electricity customers to sell power back to their utility. Thermo Electron saw a fit between the technology and know-how it possessed and the market for cogeneration systems.

In 1982, the Research and Development group released its first major product, a 60-kilowatt (kW) cogenerator. In the late 1980s and early 1990s, they introduced air-conditioning and refrigeration products using the same gas engine-driven technology, beginning with a 150-ton chiller (tons are a measure of air-conditioning capacity). In 1987, Tecogen was spun out as a separate entity by Thermo Electron and in 1992 Tecogen became a division of the newly formed Thermo Power Corporation.

TECOGEN INC.

In 2000, Thermo Power Corporation was dissolved, and Tecogen was sold to private investors including Thermo Electron's original founders, Dr. George N. Hatsopoulos and John N. Hatsopoulos. Tecogen Inc. was incorporated in the State of Delaware on November 15, 2000. Our business and registered office is located at 45 First Avenue, Waltham, Massachusetts, 02451. Our telephone number is 781-466-6400.

Industry Background

During the 20th century, fossil-fuel power plants worldwide evolved toward large, complex central stations using high-temperature steam turbines. This technology, though steadily refined, reached a maximum efficiency of about 40% that persists to this day. According to the EPA website, the average efficiency of fossil-fuel power plants in the United States is 33% and has remained virtually unchanged for four decades.

The efficiency limitation reached in steam power plant design is universal in devices that convert the chemical energy from a burned fuel to electric power. This upper boundary is due not only to practical design limitations, but also to the fundamental thermodynamic barriers inherent in energy conversion. The limit can be exceeded only incrementally and at significant cost.

The best efficiency obtainable today is about 50%, from either a combined-cycle steam turbine or a fuel cell, as stated by the Northwest Power Planning Council report of August 2002, titled "Natural Gas Combined-cycle Gas Turbine Power Plants." A combined-cycle system incorporates a second turbine powered by exhaust gases from the first turbine. Large-scale replacement of existing power plants with combined-cycle technology would take decades, be very expensive, and yield marginal benefits. Fuel cells remain very expensive, and they are mostly confined to highly subsidized projects aimed at proving that the technology works.

CHP – which harnesses waste energy from the power generation process and puts it to work on-site – can boost the efficiency of energy conversion to nearly 90%, a better than two-fold improvement over central steam plants. Power generation alone, without capturing and using waste heat, cannot exceed an ideal, theoretical efficiency of about 70%, according to the basic thermodynamic laws governing energy conversion from fossil fuel combustion.

The implications of the CHP approach are significant. If CHP were applied on a large scale, global fuel usage might be curtailed dramatically. Small on-site power systems, in sizes like boilers and furnaces, would serve customers ranging from homeowners to large industrial plants. This is described as "distributed" energy, in contrast to central power.

CHP became recognized in the late 1970s as a technology essential to reduce fossil fuel consumption, pollution, and grid congestion. Since then, CHP has been applied increasingly around the world, mainly to reduce consumers' energy costs but also for its societal benefits. According to a report by the International Energy Agency, or IEA, titled "Sustainable energy technologies for today...and tomorrow (2009)," the value of CHP technology to customers and policy makers stems from the fact that CHP systems are "inherently energy efficient and produce energy where it is needed."

According to the IEA report, the benefits of CHP include:

- Dramatically increased fuel efficiency;
- Reduced emissions of carbon dioxide (CO2) and other pollutants;
- Cost savings for the energy consumer;
- Reduced need for transmission and distribution networks; and

- Beneficial use of local energy resources, providing a transition to a low-carbon future.

CHP generates about 10% of the world's electricity. With CHP-friendly policies in place, most countries could double or triple their existing CHP power output by 2030 (Figure 1). According to the IEA report, CHP could supply up to 24% of global generation, while meeting 40% of Europe's target reductions in carbon emissions.

TECOGEN INC.

Figure 1 - Major Economies' CHP Potential
Source: IEA report, Cogeneration and District Energy:
Sustainable energy technologies for today...and tomorrow (2009)
(Data from 2008)

For the United States, this IEA report indicates the potential for CHP could increase from approximately 8% share of electricity generation in 2005 to approximately 18% by 2030. Given U.S. electric demand of about 500,000 megawatts in 2012, CHP could account for up to 35,000 megawatts of new capacity through 2030 in a broad spectrum of sizes and market sectors. Moreover, an Executive Order to accelerate investments in industrial energy efficiency, including CHP released by the White House on August 30, 2012, has set a new national goal of 40 gigawatts, or GW, of new CHP in the United States, thus accelerating this IEA timetable by 10 years.

On-site CHP not only eliminates the loss of electric power during transmission, but also offsets the capital expense of upgrading or expanding the utility infrastructure. The national electric grid is already challenged to keep up with existing power demand. The grid consists of power generation plants as well as the transmission and distribution network consisting of substations and wires.

Power plants are aging, and plans for new power plants are on the decline (Figure 2). According to the U.S. Energy Information Administration's "Form EIA-860 Annual Electric Generator Report (2010)," the average age of a U.S. coal-fired power plant is 44 years. Coal plants account for about 30% of the nation's generation capacity.

TECOGEN INC.

Figure 2 – Proposed U.S. New Capacity: Coal, Natural Gas, Wind, and Nuclear
Source: National Energy Technology Laboratory, Tracking New Coal Fired Power Plants (2012).

In addition, the transmission and distribution network is operating at capacity in urban areas. Decentralizing power generation by installing equipment at customer sites not only relieves the capacity burden on existing power plants, but also unburdens transmission and distribution lines. This ultimately improves the grid's reliability and reduces the need for costly upgrades. Consolidated Edison, Inc., the electric utility of New York City and surrounding areas, intends to integrate energy efficiency, distributed generation, and demand response as a way to defer new infrastructure investments, according to the utility's 2010 long-range plan.

We believe that increasingly favorable economic conditions could improve our business prospects domestically and abroad. Specifically, we believe that natural gas prices might increase from their current depressed values, but only modestly, while electric rates could go up over the long-term as utilities pay for better emission controls, efficiency improvements, and the integration of renewable power sources. The net result of relative gas and electric prices could be greater cost savings and annual rates of return to CHP customers.

Moreover, we believe that natural gas could win favor politically as a domestic fuel with low carbon emissions. Government policy, both here and abroad, might promote CHP as a way to conserve natural resources and reduce carbon and toxic emissions. Renewable wind and solar sources could encounter practical limitations, while nuclear power is likely to be affected by its safety setbacks.

Tecogen's Strategy for Growth

Target markets and new customers

The traditional markets for CHP systems are buildings with long hours of operation and with coincident demand for electricity and heat. Traditional customers for our cogeneration systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings and military installations.

TECOGEN INC.

Traditional customers for our chillers overlap with those for our cogeneration systems. Chiller applications include schools, hospitals and nursing homes, office and apartment buildings, hotels, retailers, ice rinks and industrial facilities. Engine-driven chillers are ideal replacements for aging electric chillers, since they both take up about the same amount of floor space.

The Company believes that the largest number of potential new customers in the U.S. require less than 1,000 kW of electric power and less than 1,200 tons of cooling capacity. We are targeting customers in states with high electricity rates in the commercial sector, such as California, Connecticut, Massachusetts, New Hampshire, New Jersey and New York.

As stated earlier, the total US Market Potential in 2030 is projected to be 35,000 MW. In order to estimate the share of that market in our size range, we reference a study done by ICF International on the California market that breaks down projected market penetration by kW output range. According to Combined Heat and Power Market Assessment of the California Energy Commission (April 2010), in 2029, new CHP in the size range that fits our products (50 kW to 500 kW), is projected to be 476 MW in the base case, or 684 MW if incentives such as carbon credits and power export credits are considered. This size range constitutes 17.4% of the total California market potential in the base case, or 11% in the case with incentives. If we assume California's apportionment of small size CHP is applicable to the country, we can estimate the US market addressable by our products as 17.4% of 35,000 MW in the base case (11% with incentives) which amounts to 6,100 MW (3,864 MW with incentives). If we assume we can capture 30% of this market, the potential over the next twenty years is 11,600 – 18,300 InVerde (100 kW) units, or approximately $1.3 – 2.1 billion in revenue (@ $112,500 per unit).

An Executive Order to accelerate investments in industrial energy efficiency, was promulgated in August 2012. In response, the Department of Energy, or DOE, and the EPA released a new report titled "Combined Heat and Power: A Clean Energy Solution" that projects $40-$80 billion of new capital investment in CHP in the next decade based upon the goal of a 40 GW expansion of CHP of all sizes. Our potential market share of that market is difficult to predict.

The largest market sectors identified by ICF that are suitable for our products closely match our sales data from January 2007 through June 2012 (Figure 3).

Figure 3 - Tecogen Customer Distribution (CHP and Engine-Driven Chiller Systems)
From January 2007 through June 2012
Source: Tecogen Inc.

TECOGEN INC.

The ICF report reveals CHP's relatively low existing market penetration in the smaller system sizes. Given that multi-megawatt CHP is already well-established (Table 1), the market opportunity increases as size decreases. Small systems (less than 1 megawatt) may grow almost six-fold. The missed opportunity is evident and likely even more disproportionate nationally. Most areas of the country, except the Northeast, are essentially without measurable CHP systems.

Table 1 – CHP Market Penetration by Size in California and Potential Through 2029
Source: ICF International, Combined Heat and Power Market Assessment (2010)

System Size (MW)	<1	1-4.9	5-19.9	>20
2009 Inventory (MW)	200	350	750	7,900
New Potential Through 2029 (MW)	1,138	1,279	764	3,015
Relative Growth Potential (%)	569 %	365 %	102 %	38 %

The DOE/EPA report confirms that CHP is a "largely untapped resource" and states that there is significant technical market potential for CHP at commercial and institutional facilities at just over 65 GW. This report also indicates that there was a significant decline in CHP in the early 2000s due to deregulation of the power markets that resulted in market uncertainty and delayed energy investments. However, a significant rebound and expansion of the CHP market may occur because of the following emerging drivers:

1. Changing outlook for natural gas supply and pricing as a result of shale exploration
2. Growing State policymaking and support
3. Changing market conditions for the power and industrial sectors such as ageing power plants and boilers, as well as more strict air regulations.

We intend to seek customers, both domestic and international, in areas where utility pricing and government policy align with our advantages. These areas would include regions that have strict emissions regulations, such as California, or those that reward CHP systems that are especially non-polluting, such as New Jersey. There are currently 23 states that recognize CHP as part of their Renewable Portfolio Standards or Energy Efficiency Resource Standards and several of them, including New York, California, Massachusetts, New Jersey and North Carolina, have initiated specific incentive programs for CHP (DOE/EPA report).

Our new microgrid capability, where multiple InVerde units can be seamlessly isolated from the main utility grid in the event of an outage and re-connected to it afterward, will likewise be exploited wherever utilities have resisted conventional generator interconnection but have conceded to UL-certified inverters (such as Consolidated Edison in New York and Pacific Gas and Electric Company in California). Because our InVerde systems operate independently from the grid, we also plan to exploit the need for outage security in certain market segments. These segments include military bases, hospitals, nursing homes, and hotels.

As noted above in "Industry Background", the IEA report estimates that world power from CHP, currently at 10%, could increase to 24% under a best-case scenario. We hope to participate in a robust international market, which we believe will be as large as or larger than the domestic market.

Alliances

We continue to forge alliances with utilities, government agencies, universities, research facilities, and manufacturers. We have already succeeded in developing new technologies and products with several entities, including:

•

General Motors Company – supplier of raw materials pursuant to a supplier agreement since the development of our cogeneration product in the early 1960s.

- California Energy Commission – research and development contracts since 2004.
- Sacramento Municipal Utility District – has provided test sites for the Company since 2010.
- Southern California Gas Company and San Diego Gas & Electric Company, each a Sempra Energy subsidiary – have granted us research and development contracts since 2004.
- Lawrence Berkeley National Laboratory – research and development contracts since 2005.

TECOGEN INC.

- Consortium for Electric Reliability Technology Solutions – research and development contracts and provided a test site to the Company since 2005.
- The AVL California Technology Center – support role in performance of research and development contracts as well as internal research and development on our emission control system from August 2009 to November 2011.

We also have an exclusive licensing agreement from the Wisconsin Alumni Research Foundation (WARF) for its proprietary control software that enables our microgrid system. The software allows our products to be integrated as a microgrid, where multiple InVerde units can be seamlessly isolated from the main utility grid in the event of an outage and re-connected to it afterward. The licensed software allows us to implement such a microgrid with minimal control devices and associated complexity and cost. Tecogen pays WARF a royalty for each cogeneration module sold using the licensed technology. Such royalty payments have been in the range of $5,000 to $20,000 on an annual basis through the year ended December 31, 2012. In addition, WARF reserved the right to grant non-profit research institutions and governmental agencies non-exclusive licenses to practice and use the inventions of the Licensed Patents for Non-Commercial Research Purposes.

Our efforts to forge partnerships continue to focus on utilities, particularly to promote the InVerde, our most utility-friendly product. The nature of these alliances vary by utility, but could include simplified interconnection, joint marketing, ownership options, peak demand mitigation agreements, and customer services. We are currently installing a microgrid with the Sacramento Municipal Utility District at its headquarters in Sacramento, California, where the central plant will incorporate three InVerde systems equipped with our Ultra low-emissions technology. Some expenses for this project are being reimbursed to the utility through a grant from the California Energy Commission.

Certain components of our InVerde product were developed through a grant from the California Energy Commission. This grant includes a requirement that Tecogen pay royalties on all sales of all products related to the grant. As of December 31, 2012, such royalties accrued in accordance with this grant agreement were less than $10,000 on an annual basis.

We also continue to leverage our resources with government and industry funding, which has yielded a number of successful developments. These include the Ultra low-emissions technology, sponsored by the California Energy Commission and Southern California Gas Company, and new 35-kW engine technology we developed with the California Energy Commission’s support.

For the years ended December 31, 2011 and 2010, we spent $223,745 and $763,990, respectively, in research and development activities, all of which was reimbursed through grants from the California Energy Commission and the Consortium for Electric Reliability Technology Solutions.

Tecogen’s Solution

Our CHP products address the inherent efficiency limitation of central power plants by siting generation close to the loads being served. This allows customers with energy-intensive buildings or processes to reduce energy costs and operate with a lower carbon footprint. Furthermore, with technology we have introduced within the last two years, our products can now contribute to better air quality at the local level.

According to our estimates and public sources, our cogeneration systems convert up to 90% of the natural gas fuel to useful energy in the form of electricity and hot water or space heat. This compares to less than 40% for central power. Other on-site upgrades such as insulation or lighting can help cut energy use as well, but they do not displace nearly as much low-efficiency electricity. Our engine-driven chillers, when the waste heat is effectively used, offer similar

efficiency benefits compared with running an electric chiller plus a furnace or boiler.

Cogeneration and chiller products can often reduce the customer's operating costs (for the portion of the facility loads to which they are applied) by approximately 30% to 50% based on Company estimates, which provides an excellent rate of return on the equipment's capital cost in many areas of the country with high electric rates. Our chillers are especially suited to regions where utilities impose extra charges during times of peak usage, commonly called "demand" charges. In these cases, the gas-fueled chiller reduces the use of electricity during the summer, the most costly time of year.

Our water heater product, recently introduced by Ilios, operates like an electric heat pump but uses a natural gas engine instead of an electric motor to power the system, see "Our Products" for an explanation of the heat pump. The gas engine's waste heat is recovered and used in the process, unlike its electric counterpart, which runs on power that has already lost its waste heat. As of the date of this prospectus, we have sold one Ilios water heater and have five in production.

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The net effect is that our heat pump's efficiency far surpasses that of conventional boilers for water heating. Similarly, if used for space heating, the engine-powered heat pump would be more efficient than an electric heat pump, again because heat is recovered and used. The product's higher efficiency translates directly to lower fuel consumption and, for heavy use customers, significantly lower operating costs.

Our products also address the global objective of reducing greenhouse gas emissions. When burned to generate power, natural gas produces lower carbon emissions per unit of energy than any fossil fuel (Table 2), according to the EPA combined heat and power emissions calculator.

Table 2. Fossil Fuel Carbon Emissions
Source: EPA Emissions Calculator

Fuel	CO2 emissions, lb/million Btu
Natural Gas	116.7
Distillate Oil	160.9
Coal	206.7

Our products, in addition to using the lowest amount of carbon fuel, further reduce CO2 emissions (greenhouse gases) because of CHP's higher efficiency. Figure 4 compares the CO2 output of our products to that of the national electric grid and other generation technologies. Our products are far superior to the grid and even outperform the CHP technologies of fuel cells and microturbines.

Figure 4 – Comparison of Carbon Emissions (GHG) for Various Sources
Including Tecogen's CHP and Chiller Products
Source: Tecogen Inc.

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Furthermore, according to the EPA website's calculator, one Tecogen 100-kW CHP unit will reduce carbon emissions by 390 tons per year (based on 8,000 run-hours), the equivalent of 64 cars on the road. A microturbine of the same size would reduce carbon emissions by only 245 tons per year, the equivalent of 41 cars – less than two-thirds the emissions reduction of our CHP product. Our Ilios water heater also reduces CO2 emissions in proportion to its fuel savings.

In addition to reducing greenhouse gases, our products with Ultra low-emission controls can improve local air quality from other pollutants, such as NOx and CO (Figure 5). As shown below, the Ultra CHP system's emissions (D) are significantly less than the combination of the power plant and boiler (A + B) for the same energy output.

Figure 5 also compares the Ultra low-emissions CHP to the "best available control technology" (BACT) as defined by the EPA for natural gas engines. This reveals how dramatically Ultra reduces an engine's emissions and helps explain the negative perception that engines have historically had with respect to air quality. A central power plant is usually far away, so it doesn't affect local pollutant levels, and the boiler alone (B) produces far less air pollution than even the best engine (C).

Microturbines and fuel cells have been the low-emission alternatives to engines, but they produce more NOx than an Ultra low-emissions CHP unit (Figure 6). The Ultra low-emissions technology could transform the engine's reputation in the energy marketplace – it can now be considered a source of clean power.

Figure 5 – Emissions Levels of Criteria Pollutants from Various Sources
Compared to Tecogen's Ultra Low-Emissions Technology
Source: Tecogen Inc.

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Figure 6 — Comparison of Tecogen Ultra Low-Emissions Technology to Other Technologies
Source: Tecogen Inc.

Our Products

We manufacture natural gas engine-driven cogeneration systems and chillers, all of which are CHP products that deliver more than one form of energy. We have simplified CHP technology for inexperienced customers. Our cogeneration products are all standard, modular units that come pre-packaged from the factory. They include everything the customer needs to minimize the cost and complexity of installing the equipment at their site. The package incorporates the engine, generator, heat-recovery equipment, system controls, electrical switchgear, emission controls, and modem for remote monitoring and data logging.

All of our cogeneration systems and most of our chillers use the same engine, the TecoDrive 7400 model supplied by GM and modified by us to use natural gas fuel. The small 25-ton chiller uses a similar GM engine, the 3000 model. We worked closely with GM and the gas industry (including the Gas Research Institute) in the 1980s and 1990s to modify the engine and validate its durability. For the Ilios water heater, we introduced a more modern Ford engine that is enhanced for industrial applications. As of the date of this prospectus, we have sold one Ilios water heater and have five in production.

Our commercial product line includes:

- The InVerde® and TECOGEN® cogeneration units,
- TECOCHILL® chillers,
- Ilios high-efficiency water heaters, and
- Ultra low-emissions technology.

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InVerde Cogeneration Units

Our premier cogeneration product is the InVerde, a 100-kW CHP system that not only provides electricity and hot water, but also satisfies the growing customer demand for operation during a utility outage, commonly referred to as “black-start” capability. The InVerde incorporates an inverter, which converts direct current, or DC, electricity to alternating current, or AC. With an inverter, the engine and generator can run at variable speeds, which maximize efficiency at varying loads. The inverter then converts the generator’s variable output to the constant-frequency power required by customers (50 or 60 Hertz), as shown in Figure 7.

This inverter technology was developed originally for solar and wind power generation. The InVerde is the first commercial engine-based CHP system to use an inverter. Electric utilities accept inverter technology as “safe” by virtue of its certification to the Underwriters Laboratory interconnection standard (1741) – a status which the InVerde has acquired. This qualifies our product for a much simpler permitting process nationwide and is mandatory in some areas such as New York City and California. The inverter also improves the CHP system’s efficiency at partial load, when less heat and power are needed by the customer.

The InVerde’s black-start feature addresses a crucial demand from commercial and institutional customers who are increasingly concerned about utility grid blackouts and brownouts, natural disasters, security threats, and antiquated utility infrastructure. Multiple InVerde units can operate collectively as a standalone microgrid – a group of interconnected loads served by one or more power sources. The InVerde is equipped with software that allows a cluster of units to seamlessly share the microgrid load without complex controls.

The InVerde CHP system was developed in 2007, and we began shipping it in 2008. Our largest InVerde fleet is twelve units, which supply 1.2 megawatts of on-site power and about 8.5 million Btu/hr of heat (700,000 Btu/hr per unit).

Figure 7 - Diagram of InVerde CHP System
Source: Tecogen Inc.

TECOGEN Cogeneration Units

The TECOGEN cogeneration system is the original model introduced in the 1980s, which is available in sizes of 60 kW and 75 kW, producing up to 500,000 Btu/hr of hot water. This technology is based on a conventional single-speed generator. It is meant only for grid-connected operation and is not universally accepted by utilities for interconnection, in

contrast to the InVerde. Although this cogeneration product has the longest legacy and largest population, much of its production volume has been supplanted by the InVerde.

TECOCHILL Chillers

Our TECOCHILL natural gas engine-driven chillers are available in capacities ranging from 25 to 400 tons, with the smaller units air-cooled and the larger ones water-cooled. This technology was developed in 1987. The engine drives a compressor that makes chilled water; while the engine's free waste heat can be recovered to satisfy the building's needs for hot water or heat. This process is sometimes referred to as "mechanical" cogeneration, as it generates no electrical power, and the equipment doesn't have to be connected to the utility grid.

A gas-fueled chiller provides enough air conditioning to avoid most of the utility's seasonal peak charges for electric usage and capacity. In summer when electric rates are at their highest, natural gas is "off-peak" and quite affordable. Gas-fueled chillers also free up the building's existing electrical capacity to use for other loads.

Ilios High-Efficiency Water Heaters

Our newest product, the Ilios high-efficiency water heater uses a heat pump, which captures warmth from outdoor air even if it is moderately cool outside. Heat pumps work somewhat like a refrigerator, but in reverse. Refrigerators extract heat from inside the refrigerator and move it to your kitchen. Heat pumps extract heat from outside and move it indoors. In both cases, fluids move the heat around by flowing through heat exchangers. At various points the fluids are compressed or expanded, which absorbs or releases heat.

In the Ilios water heater, the heat pump moves heat from outdoors to the water being heated in the customer's building. The heat pump water heater serves as a boiler, producing hot water for drinking and washing or for space heating, swimming pools, or other building loads. Energy cost savings to the customer depend on the climate. Heat pumps in general (whether gas or electric) perform best in moderate weather conditions.

In a conventional electric heat pump, the compressor is driven by an electric motor. In the Ilios design, a natural gas-fueled engine drives the compressor. This means that the heat being captured from outdoors is supplemented by the engine's waste heat, which increases the efficiency of the process. According to scientific studies, gas engine heat pumps can deliver efficiencies of up to 146%. As of the date of this prospectus, we have sold one Ilios water heater and have five in production.

Ultra Low-Emissions Technology

All of our CHP products are available with the Ultra low-emissions technology. This breakthrough technology was developed in 2009 and 2010 as part of a research effort funded by the California Energy Commission and Southern California Gas Company. The objective was to bring our emission control systems into compliance with California's standards, which are the most stringent in the United States.

We were able to meet or exceed the standards with an emission control system that is cost-effective, robust, and reliable. The Ultra low-emissions technology keeps our CHP systems compliant with air quality regulations over the long term. Given the proprietary nature of this work, we filed patents that are pending in the U.S. and Europe. We shipped the first commercial CHP units equipped with Ultra low-emissions technology to a California utility in 2011.

We conducted three validation programs for this technology:

1. Third-party laboratory verification. The AVL California Technology Center, a long-standing research and technology partner with the international automotive industry, confirmed our results in their state-of-the-art dynamometer test cell, which was outfitted with sophisticated emissions measurement equipment.
2. Verifying longevity and reliability in the field. We did so by equipping one of our TECOGEN 75-kW units, already operating at a customer location in Southern California, with the Ultra low-emissions technology and a device to monitor emissions continuously. To date, the Ultra low-emissions system has operated successfully for more than 13,000 hours (1½ years) and has consistently complied with California's emission standards. This field test is ongoing.
3. Additional independent tests. During the field test, two companies licensed in California to test emissions each verified our results at different times. The results from one of these tests (obtained in August 2011) enabled us to qualify for New Jersey's fast-track permitting. Virtually every state nationwide requires some kind of permit related to

local air quality, but New Jersey allows an exemption for systems such as ours that demonstrate superior emissions performance. This certification was granted in November 2011, and since then we have sold Ultra low-emissions systems to several customers.

Contribution to Revenue

The following table summarizes net revenue by product line and services for the years ended December 31, 2011 and 2010:

	December 31, 2011	December 31, 2010
Products:		
Cogeneration	$2,737,161	$4,977,595
Chiller	1,831,952	566,010
Total Product Revenue	4,569,113	5,543,605
Services	6,496,097	5,767,624
Total Revenue	$11,065,210	$11,311,229

The following table summarizes net revenue by product line and services for the nine months ended September 30, 2012 and 2011:

	September 30, 2012 (unaudited)	September 30, 2011 (unaudited)
Products:		
Cogeneration	$2,687,769	$1,889,436
Chiller	1,503,670	1,831,952
Total Product Revenue	4,191,439	3,721,388
Services	5,498,545	4,992,840
Total Revenue	$9,689,984	$8,714,228

Product Reliability

Our product lines have a long history of reliable operation. Since 1995, we have had a remote monitoring system in place that connects to hundreds of units daily and reports their “availability,” which is the amount of time a unit is running or is ready to run (% of hours). Figure 8 shows cumulative data for a fleet of 365 units. More than 80% of them operate above 90% availability, with the average being 93.5%. By comparison, the average availability for all U.S. fossil-fueled power plants was 87.5% during 2006-2010, according to a report by the North American Electric Reliability Corporation.

Figure 8 - Tecogen Product Reliability
Source: Tecogen Inc.

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Product Service

We provide long-term maintenance contracts, parts sales, and turnkey installation through a network of eight well-established field service centers in California, the Midwest, and the Northeast. These centers are staffed by full-time Tecogen technicians, working from local leased facilities. The facilities provide offices and warehouse space for inventory.

Our service managers, supervisors, and technicians work exclusively on our products. Because we manufacture our own equipment, our service technicians bring hands-on experience and competence to their jobs. They are trained at our manufacturing facility in Waltham, Massachusetts.

R&D Capabilities

Our research and development tradition and ongoing programs have allowed us to cultivate deep engineering expertise and maintain continuity over several decades. We have strong core technical knowledge that is critical to product support and enhancements. Our TecoDrive engine, cogeneration and chiller products, InVerde, and most recently the InVerde Ultra and Ilios heat pump water heater were all created and optimized with both public and private funding support.

At this time, we have two funded research contracts. The first is a $1 million program with the California Energy Commission, awarded in 2009, to develop a small CHP engine (about 35 kW) that uses advanced automotive technology. The engine achieves a nearly 20% fuel efficiency gain over our current TecoDrive technology. Once an endurance test is completed in 2012, we expect to introduce this engine into the Ilios heat pump water heater and possibly into a small InVerde unit. The second contract, awarded in 2012, is with the U.S. Department of Energy's Lawrence Berkeley National Laboratory for microgrid development work related to the InVerde.

Distribution Methods

Our products are sold directly to end-users by our sales team and by established sales agents and representatives. Various agreements are in place with distributors and outside sales representatives, who are compensated by commissions, including American DG Energy and EuroSite Power which are affiliated companies, for certain territories and product lines. For example, we have sales representatives for the chiller market in the New York City/New Jersey territory, but we do not have a sales representative for our cogeneration products in this territory. Sales through our in-house team or sales that are not covered by a representative's territory carry no commission or only a fractional one.

In New England, our affiliate, American DG Energy, has exclusive sales representation rights to our cogeneration products only (not including chillers). In other words, when Tecogen sells its cogeneration products in New England, Tecogen pays a commission to American DG Energy. American DG Energy also has exclusive rights to our Ultra low-emissions technology if it is applied to engines from other CHP manufacturers in projects developed by American DG Energy. This means that American DG Energy could purchase CHP products from suppliers other than us and license that supplier to incorporate our Ultra low-emissions technology as long as the CHP system is owned and operated American DG Energy.

Summary of our Products' Advantages

- Our CHP products provide an efficient on-site solution to power generation as the market seeks cost savings and clean alternatives to centralized grid power.
-

Our CHP products are all standard, modular units that come pre-packaged from the factory to simplify installation and grid connection. The systems are supported in the field by a nationwide network of experienced professional staff. Standardized CHP units, as opposed to custom-designed systems, achieve lower cost, better quality control, higher reliability, and easier service. Emission controls are integrated, and complete system warranty and maintenance are available.

- Our Ultra low-emissions technology eliminates the air quality concerns associated with engines. Our units comply with the most rigorous air quality regulations, including California's.
- Our cogeneration systems and chillers use standard, well-proven equipment made by reputable, well-established manufacturers. These components include rugged automotive engines, certified inverters, commercial generators, and conventional compressors. Certain key components are proprietary and have patent protection. Most notably, all control software is either proprietary (and copyright protected) or under an exclusive license agreement. Suppliers of the InVerde's inverter and generator hold certain related patent protection.

TECOGEN INC.

- All of our CHP products can be designed for installation of multiple units at a single site, depending on the customer's particular needs. This enhances the ability of our products to meet the building's varying demand for electricity, heat, and/or air conditioning throughout the day and from season to season. Also, multiple units operate more efficiently throughout the range of a customer's high and low energy requirements.
- Our InVerde products are opening new market opportunities and expanding our reach to customers beyond our traditional market segments. The InVerde's black-start feature addresses a crucial demand from customers concerned about utility blackouts and brownouts, natural disasters, security threats, and antiquated grid infrastructure. The InVerde also provides premium-quality power, which is required by operators of computer server farms and precision instrumentation, for example.
- The InVerde overcomes barriers related to grid interconnection, since the product is UL-certified as utility-safe. In microgrids, InVerde units can help prevent brownouts by maximizing their power output when utilities approach peak capacity. Unlike standby diesel generators, the InVerde can operate without hourly limits because its emissions are so low, and it can serve as a stable anchor in hybrid microgrids that incorporate solar power.
- Our extensive use of standardized components lets us manufacture CHP products at competitive prices, even at relatively low production volumes. Proven, well-understood hardware increases the reliability and durability of the equipment and reduces the cost of servicing in the field. We are also able to minimize spare parts inventories and simplify training requirements.
- The Ilios heat pump water heater roughly doubles the efficiency of conventional heat pump systems. The Ilios heat pump targets a large international market that is characterized by heavy, year-round use. This will increase fuel savings and maximize return on investment for the customer. Also, such applications are mostly central heating and cooling systems, rather than units distributed throughout the building, so it is easier to integrate new equipment. The heat pump water heater product competes only against other gas-fueled water heaters, which could expand our market beyond areas with high electric rates, and regulatory issues should be minimal. As of the date of this prospectus, we have sold one Ilios water heater and have five in production.

Competitive Position and Business Conditions

Our products fall into the broad market category of distributed generation – systems that produce electric power on-site to mitigate the drawbacks of traditional central power and the low efficiency of conventional heating processes. Renewable power sources, such as wind and solar do not improve heating inefficiencies as CHP systems do, so they do not compete with our products. That is, CHP utilization is based on the redirection of fuel from an onsite boiler to an engine (or other device) for the production of electricity; the waste heat from the engine meets the heating load of the site with only a small incremental fuel consumption increase, but with the benefit of a significant amount of electricity production. As the boiler output cannot be displaced by renewable electricity production – the output of which is far more valuable displacing utility electric power, than used for water heating – the CHP opportunity remains available even in sites fully exploited relative to their renewable potential.

Cogeneration Systems

The ICF report breaks down the CHP market by technology as provided in Figure 9 below. We believe the California data applies to the domestic and international CHP market as a whole.

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Figure 9 — Technology Size and Market Position
Source: ICF International, Combined Heat and Power Market Assessment (2010)
(Data from 2004)

Our CHP products use automotive reciprocating engines originally designed for gasoline fuel and modified to run on natural gas. Diesel-fueled reciprocating engines will remain prominent in the CHP market, but only in larger, custom-designed systems (a megawatt or more), so these products do not compete with ours.

In smaller CHP sizes, competitors have duplicated our older design, coupling an automotive engine to a single-speed generator and adding controls and heat recovery. To be competitive with our designs, however, they would have to acquire comparable experience in the equipment and technology, installation contracting, maintenance and operation, economic evaluation of candidate sites, project financing, and energy sales, as well as the ability to cover broad regions. They would also have to meet the price of our products, which is low because we use standardized components.

We believe that no other company has developed a product that competes with our inverter-based InVerde, which offers UL-certified grid connection, outage capability, and variable-speed operation. We anticipate that an inverter-based product with at least some of these features will be introduced by others, but we believe that they will face serious challenges in duplicating the InVerde. Product development time and costs would be significant, and we expect that our patents and license for microgrid software will keep others from offering certain important functions.

If our patent application relating to the Ultra low-emissions technology is approved, it will make the development of alternative technologies difficult. If this is the case, we could retain a strong competitive advantage for all our products in markets where severe emissions limits are imposed or where very clean power is favored, such as New Jersey, California, and Massachusetts.

Newer technologies such as fuel cells and microturbines pose limited competition to our CHP products. Reciprocating engines enjoy an economic advantage, and our Ultra low-emissions products are a lower cost, more efficient CHP alternative, with approximately equal emissions.

Besides their expense, fuel cells cannot recover enough heat to serve building loads effectively, and microturbines also recover less heat than our products. Microturbines also have to pressurize their own gas fuel, reducing their electrical output. Most manufacturers of microturbines have refocused on other markets. We believe that Capstone Turbine Corporation is the only microturbine manufacturer with a commercial presence in CHP.

In the growing microgrid segment, neither fuel cells nor microturbines can respond to changing energy loads when the system is disconnected from the utility grid. Table 3 summarizes the technologies competing in the small CHP market, and Figure 10 reveals the modest impact of microturbines and fuel cells in California’s CHP space.

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Table 3- Comparison of CHP Technologies to Tecogen's InVerde 100
Source: ICF International, Combined Heat and Power Market Assessment (2010) and Tecogen Inc.

	Microturbine* 50-500 kW	Fuel Cell* 50-500 kW	Generic Engine* 100 kW	Tecogen INV-100** 100 kW
Installed Costs, $/kW	2,739	6,310	2,210	N/A
Heat Rate, Btu/kWh	13,542	9,475	12,000	12,630
Electric Efficiency, %	25.2 %	36.0 %	28.4 %	27.0 %
Thermal Output, Btu/kWh	6,277	2,923	6,100	6,700
Overall Efficiency, %	72 %	67 %	79 %	80.0 %
O&M Costs, $/kWh	0.022	0.038	0.020	N/A
NOx [ppm @ 15% O2)	3.41	1.15	3.39	0.62
NOx Emissions, lbs/MWh	0.17	0.04	0.15	0.03
NOx Emissions, lbs/MWh w/CHP Credit	0.06	N/A	0.05	0.01

*ICF International Combined Heat and Power Market Assessment (2010).
**Tecogen emissions obtained from actual source test data by a third-party air quality testing company in California.

Figure 10 – Share of Installed CHP by Prime Mover in California
Source: ICF International Combined Heat and Power Market Assessment (2010) - (Data from 2008)

Engine Driven Chillers (TECOCHILL)

According to the Energy Solutions Center (a non-profit consortium), three companies make gas-engine-driven chillers that compete with our products: Trane, a division of Ingersoll-Rand plc, York, a division of Johnson Controls, Inc. and Alturdyne. However, these competitors have been largely inactive in this market in recent years. Natural gas can also fuel absorption chillers, which use fluids to transfer heat without an engine drive. Absorption chillers are manufactured by eight companies, but these competitors also have been largely inactive in this market.

Today's low natural gas prices in the U.S. improve the economics of gas-fueled chillers, so more competition could emerge. However, engine chillers will continue to have an efficiency advantage over absorption machines. Chiller performance is measured in terms of cooling energy output per unit of fuel input. This industry standard is called the coefficient of performance, or COP. Absorption chillers achieve COPs of about 1.2 (see, for example, The Chartered Institution of Building Services Engineers' Datasheet 07, Absorption Cooling, February 2012). Our TECOCHILL products reach efficiencies well above that level (COPs ranging from 1.6 to 2.6).

TECOGEN INC.

Ilios Engine-Driven Heat Pump

Although a few companies manufacture gas-engine heat pumps, their products are not directly comparable to the Ilios. The Ilios water heater and other heat pump products compete in both the high-efficiency water heating market and the CHP market. In a typical building, the Ilios heat pump would be added on to an existing heating/water heating system, but would be operated as many hours as possible. The conventional boiler would be left in place, but would serve mainly as a backup when the heat pump's engine is down for maintenance or when the heat pump cannot meet the building's peak heating load.

The best customers for the Ilios heat pump water heater would be very similar to those for traditional CHP – heavy consumers of hot water and process heat. In areas where low electric rates make CHP not economical, the Ilios heat pump could be a financially attractive alternative, because its economics depend only on natural gas rates. In some areas with high electric rates, the Ilios option could have advantages over CHP — for example, where it is hard to connect to the utility grid or where the building's need for electricity is too low for CHP to work economically. As of the date of this prospectus, we have sold one Ilios water heater and have five in production.

Intellectual Property

We currently hold several patents for our technologies. In addition, our control software is protected by under an exclusive license agreement. We consider our patents and license to be important in the present operation of our business. The expiration, termination or invalidity of one or more of these patents may have a material adverse effect on our business. Our earliest patent was issued in 2006 and expires on 2022. Most of our patents expire between 2022 and 2025.

We believe that no other company has developed a product that competes with our inverter-based InVerde. We anticipate that an inverter-based product with at least some of these features will be introduced by others, but we believe that they will face serious challenges in duplicating the InVerde. Product development time and costs would be significant, and we expect that our patents and license for microgrid software will keep others from offering certain important functions.

We have recently filed for patents in the U.S. and Europe for our Ultra low-emissions technology to keep its use exclusive to us. The outcome of the patent office application review is important because this technology will apply to all of our gas engine-driven products and may have licensing application to other natural gas engines. There is no assurance, however, that the Ultra low-emissions patent applications will be approved.

Government Regulation and Its Effect on Our Business

Several kinds of government regulations affect our current and future business, such as:

- Product safety certifications and interconnection requirements;
- Air pollution regulations, which govern the emissions allowed in engine exhaust;
- State and federal incentives for CHP technology; and
- Electric utility pricing and related regulations.

Regulations that control air quality and greenhouse gases might increasingly favor our low-emission products. Regulations related to utility rates and interconnection, which are burdensome today, could evolve to embrace CHP because of its efficiency benefits.

Product Safety Certifications and Interconnection Requirements

Our products must comply with various local building codes and must undergo inspection by local authorities. Our products are also certified by a third party to conform to specific standards. These certifications require continuous verification by a company that monitors our processes and design every three months. Our InVerde product is also certified to Europe's standard CE mark (European Conformity), which is mandatory for products imported into the European Union for commercial sale.

Our cogeneration CHP products are also certified to a particular group of standards specific to the distributed power industry, which are used in the utility interconnection permitting process. These unique certifications were developed by various manufacturers, utilities, and government regulators to standardize the process of getting the utility's permission to jointly power a facility.

TECOGEN INC.

In essence, manufacturers of standard products are allowed to submit a sample unit to be “type-tested” by a Nationally Recognized Testing Laboratory. This test proves that the product adheres to safety requirements and that its design is fail-safe. The product then becomes eligible for a fast-track interconnection, after passing simple site-specific screens. Under state-mandated regulations, such as California Rule 21 and Massachusetts Interconnection Tariff 09-03, most utilities must accept the fast-track process, which includes the certification.

Simplified utility interconnection is important to CHP projects, so our interconnect certification, Underwriters Laboratory Standard 1741, or UL Certification, is a significant competitive advantage. Obtaining the UL Certification was a major reason for us to develop the inverter-based CHP product. As with our other product certifications, we plan to maintain the certification through routine processes when modest design changes occur. When complete recertification is required, such as when a new revision to the standard is applicable or when the design undergoes a major upgrade, the company will follow the normal procedures for first-time certification (third party design review and test verification). The company does not anticipate any changes to the standard that would be preclude recertification, as the underlying content is carefully administered by balanced committees (representing utilities, inverter suppliers, and academia). In addition, the standard and its utilization as the criteria for systems to qualify for simplified interconnection programs, is important for the solar PV industry. The company believes that this importance to the solar industry will help assure the long-term relevance in interconnection of distributed generation devices.

Air Pollution Regulations

Stationary natural gas engines are subject to strict emissions regulations that are part of a complex hierarchy of regional, state, and federal regulations. The EPA establishes technology-specific standards that are based on cost-benefit analysis for emission control strategies. These standards, termed BACT (best available control technology), are imposed in regions that fail to meet federal clean air standards. Local regulators can and do restrict engine emissions to lower levels.

In fact, regional standards in our key markets have become sufficiently strict that the technical limits of controlling pollution from natural gas engines were exceeded. Our development of the Ultra low-emissions technology responded to the extremely strict limits imposed in Southern California, a bellwether for local regulations elsewhere. We expect to get a CHP unit permitted in Southern California by year-end 2012. California offers a generous rebate to engine CHP systems ($500/kW, or $50,000 for the 100-kW InVerde). However, the system’s exhaust cannot contain NOx in excess of 3 parts per million (ppm). We expect our CHP unit to be permitted in Southern California to have an exhaust system with NOx of 2 ppm or less.

On the East Coast, important CHP territories are also moving toward limits below federal BACT levels. Effective in 2012, Massachusetts, Rhode Island, and Connecticut require 3.6 ppm NOx and about 56 ppm CO, which is on par with California’s BACT standard. New Jersey also emulates California’s BACT, but allows the project to side-step the air permit process if the CHP device is “emissions certified” through third-party testing to 10 ppm NOx and 10 ppm CO. Our Ultra low-emissions technology has qualified for New Jersey’s “clean” certification, as noted earlier. In New York, clean power is encouraged through state grants that exclude products, or reduce the grant amount, unless low emissions are demonstrated.

Air emissions regulations also affect our air conditioning and Ilios heat pump products, though the effects are muted. TECOCHILL rebates are not common, and none has been tied to a specific emissions level. The heat pump’s small size often exempts it from regulations, and the market for heat pump products could lie in lightly regulated regions (those with low electric rates). Nevertheless, the Ultra low-emissions technology can be applied to these products if

required to meet regulatory standards.

State and Federal Incentives

On August 30, 2012, the White House released an Executive Order to accelerate investments in industrial energy efficiency, including CHP. The goal of the Executive Order is to supply 40 gigawatts of energy by 2020 from greater efficiency such as CHP systems. The DOE, Commerce, and Agriculture, and the Environmental Protection Agency, in coordination with the National Economic Council, the Domestic Policy Council, the Council on Environmental Quality, and the Office of Science and Technology Policy, shall coordinate policies to encourage investment in industrial efficiency in order to reduce costs for industrial users, improve U.S. competitiveness, create jobs, and reduce harmful air pollution. With this Executive Order, it is expected that barriers to CHP development will be removed with effective programs, policies, and financing opportunities resulting in $40 - $80 billion in new capital investment in CHP. This initiative by the U.S. government may boost CHP awareness and stimulate market activity.

In addition, some states offer incentives to CHP systems. As mentioned above, California rebates a significant portion of the CHP project cost, while incentives of similar value exist in New Jersey, New York, Connecticut, Maine, and Massachusetts, albeit with different structures and terms. Massachusetts has an additional CHP incentive in the form of an annual rebate proportional to the carbon savings versus conventional technology.

Our products are also eligible for the bonus depreciation included in the 2009 American Recovery and Reinvestment Act. Also, the 2008 Troubled Asset Relief bill provides a 10% investment tax credit for CHP in our size range, which applies to the total project cost. Our TECOCHILL and heat pump products also qualify for the credit when heat recovery achieves a minimum 60% efficiency.

Electric Utility Pricing and Related Regulations

Electricity prices, rate structures, and tariffs are another form of government incentive or disincentive. Utility pricing is administered through state agencies, typically public utility commissions, through formal proceedings involving the public, utilities, and various affected parties. Often, direct legislative mandates apply to specific issues. How these rules are structured and interpreted has a significant impact on the economic viability of CHP. These rules have hurt the CHP industry in the past, but we have designed our products to undermine their impact.

Demand Charges. Many electric utilities structure their commercial rates such that part of the customer's bill is fixed charges such as meter fees, and part is peak demand charges, which are a much larger line-item based on the building's maximum short-term usage (typically 15 minutes). Fixed charges, usually small, are not addressed by CHP technology. Avoidance of peak demand charges requires a CHP system to always operate at extremely high efficiency, which is difficult to achieve in practice.

Our CHP products, being small and modular, are often installed as multiple units. This protects the customer to some degree from incurring peak demand charges at the full system rating. A single large generator has a good chance of going down briefly at some point during the monthly billing period. The customer would then have to buy more electricity to make up for it, possibly incurring a large demand charge. With a modular, multi-unit CHP system, all the units would have to fail simultaneously to incur an equivalent charge.

Our TECOCHILLs are highly effective in eliminating not only summertime electricity usage, but also peak demand charges. The chiller's operation is confined to the cooling season, allowing maintenance to be scheduled for other times. Outages during the cooling season can be managed to minimize their impact.

Avoided-Cost Penalties. In some regions, utilities have argued that CHP customers, by reducing their electric usage, have avoided paying their fair share of the costs associated with grid infrastructure. To correct this perceived inequity, some utilities have successfully petitioned their state commissions to impose a "departing load charge." Utilities have also been allowed to add a "standby" surcharge to compensate for the cost of utility power being available when the CHP system is down.

These types of charges are not prevalent in East Coast states, but both standby and departing load charges are well-established in California. Although our CHP products are affected, our chillers and heat pumps are not.

Technology-Specific Net Metering. Interconnection issues are safety-related and should be product-neutral, but technology bias is common. In many states, CHP is excluded from net metering while other technologies are eligible. Under net metering, utilities must pay on-site generators for excess electricity that's fed into the grid. Net metering makes it easier to manage the operation of a CHP system or other generator.

Other Utility-Related Regulations. Another category of utility regulation that might affect our business is Renewable Portfolio Standards, or RPS. Under this type of regulation, utilities must gradually increase the share of their power generation that comes from renewable sources. Among states with RPS mandates, 14 include CHP as an eligible technology. Together, these states account for more than half of the electricity sales in the United States. RPS-type mechanisms have been adopted in several other countries, including Britain, Italy, Poland, Sweden, Belgium, and Chile.

Overall, RPS appears to be a positive policy for Tecogen and CHP. Program structures, if fair and balanced, encourage less fossil fuel use by offering financial incentives to improve efficiency. Electric power generated from renewable sources would tend to increase overall electric rates and improve CHP investment returns. Since these programs are in their early stages, their impact is yet to be determined.

A national carbon “cap and trade” program is not anticipated in the foreseeable future. Cap and trade programs seek to reduce carbon emissions by putting a price on them. Of possible impact to Tecogen is the cap and trade bill moving forward in the California legislature. The program’s details are still being reviewed and negotiated by various government and advocacy groups.

Employees

As of the date of this prospectus, we employed 61 full-time employees and 5 part-time employees. We believe that our relationship with our employees is satisfactory. None of our employees are represented by a collective bargaining agreement; however, a few of our New Jersey and New York City service employees have been in contact with a labor union, and we are currently negotiating with this labor union.

Properties

Our headquarters are located in Waltham, Massachusetts, and consist of 24,000 square feet of office and storage space that is shared with American DG Energy and other tenants. The lease expires on March 31, 2014. We believe that our facilities are appropriate and adequate for our current needs.

Legal Proceedings

From time to time, we may become party to litigation or other legal proceedings that we consider to be a part of the ordinary course of our business. We are not currently involved in legal proceedings that could reasonably be expected to have a material adverse effect on our business, prospects, financial condition or results of operations. We may become involved in material legal proceedings in the future.

TECOGEN INC.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

No established public trading market exists for our Common Stock and the Company's Common Stock has never been quoted on any market or exchange. Except for this Offering, there is no Common Stock that is being, or has been proposed to be, publicly offered. As of the date of this prospectus, there were 54,417,854 shares of Common Stock issued and outstanding, held by 110 stockholders of record.

Market of and Dividends on the Registrant's Common Equity and Related Stockholder Matters.

Market Information

Our Common Stock is not currently traded on any stock exchange or electronic quotation system. We expect that our Common Stock will be traded on the OTC Bulletin Board, a national or international securities exchange following the effectiveness of this registration statement and compliance with the procedures of the OTC Bulletin Board, a national or international securities exchange.

Holders

As of the date of this prospectus, there were 110 holders of record of our Common Stock. See "Security Ownership of Certain Beneficial Owners and Management" for information on the holders of our Common Stock. Also see "Description of Securities" for a description of our outstanding and issued capital stock.

Rule 144

In general, pursuant to Rule 144, under the Securities Act, as currently in effect, once we have been subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act for 90 days, a person (or persons whose shares are aggregated) who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for a least six months (including certain periods of consecutive ownership of preceding non-affiliated holders) would be entitled to sell those shares, subject only to the availability of current public information about us. Under Rule 144, a person who is not deemed to have been one of our affiliates at any time during the 3 months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least one year is entitled to sell the shares without complying with the public information, manner of sale, volume limitation or notice provisions of Rule 144.

In general, under Rule 144 as currently in effect, once we have been subject to the Exchange Act reporting requirements for 90 days, our affiliates or persons selling shares on behalf of our affiliates who own shares that were acquired from us or an affiliate of ours at least six months prior to the proposed sale are entitled to sell within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of shares of our Common Stock then outstanding, which will equal approximately 544,179 shares of our Common Stock estimated as of the date of this prospectus; or
- The average weekly trading volume of our Common Stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale, or if no such notice is required, the date of receipt of the order to execute the transaction by a broker or the execution of the transaction directly with a market maker.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Outstanding Common Stock

Under the unlimited resale provisions of Rule 144, there are 21,253,859 shares of our Common Stock eligible for resale under Rule 144 without any additional holding period .

Stock Options

Rule 701 provides that the shares of Common Stock acquired upon the exercise of currently outstanding options or other rights granted under our equity plans may be resold by persons, other than affiliates, beginning 90 days after the date of

TECOGEN INC.

the effectiveness of this registration statement, restricted only by the manner of sale provisions of Rule 144, and by affiliates in accordance with Rule 144 without compliance with its one-year minimum holding period.

As of September 30, 2012, we had 4,431,000 options outstanding under our Stock Plan at a weighted average exercise price of $0.49. As of such date, 2,680,250 of those options were exercisable.

We intend to file one or more registration statements on Form S-8 under the Securities Act following the effectiveness of this registration statement to register all shares of our Common Stock which have been issued or are issuable upon exercise of outstanding stock options or other rights granted under our Stock Plan. These registration statements are expected to become effective upon filing. Shares of Common Stock covered by these registration statements will thereupon be eligible for sale in the public market, subject in certain cases to vesting of such shares.

Dividends

To date, we have not declared or paid any dividends on our outstanding shares. We currently do not anticipate paying any cash dividends in the foreseeable future on our Common Stock. Although we intend to retain our earnings to finance our operations and future growth, our Board of Directors will have discretion to declare and pay dividends in the future. Payment of dividends in the future will depend upon our earnings, capital requirements and other factors, which our Board of Directors may deem relevant.

TECOGEN INC.

SELECTED FINANCIAL DATA

The summary consolidated statements of operations data for each of the years ended December 31, 2011 and 2010 have been derived from our audited consolidated financial statements that are included elsewhere in this prospectus. The summary consolidated balance sheet data as of September 30, 2012 and 2011 and the summary consolidated statements of operations data for each of the nine months ended September 30, 2012 and 2011 have been derived from our unaudited condensed consolidated financial statements that are included elsewhere in this prospectus. You should read this information together with the consolidated financial statements and related notes and other information under "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. Operating results for the nine months ended September 30, 2012 are not necessarily indicative of the results that may be expected for the year ended December 31, 2012.

			Nine Months Ended September 30,	
Consolidated Statement of Operations Data:	December 31, 2011	2010	2012 (unaudited)	2011 (unaudited)
Revenues	$11,065,210	$11,311,229	$9,689,984	$8,714,228
Cost of sales	6,179,098	6,597,205	5,703,507	4,818,318
Gross profit	4,886,112	4,714,024	3,986,477	3,895,910
Operating expenses				
General and administrative	5,986,762	4,973,794	4,851,398	4,495,533
Selling	782,252	290,505	915,842	381,617
	6,769,014	5,264,299	5,767,240	4,877,150
Loss from operations	(1,882,902)	(550,275)	(1,780,763)	(981,240)
Other income (expense)				
Interest and other income	38,402	23,574	38,380	25,262
Interest expense	(40,294)	(37,280)	(53,406)	(22,492)
	(1,892)	(13,706)	(15,026)	2,770
Loss before income taxes	(1,884,794)	(563,981)	(1,795,789)	(978,470)
Provision for state income taxes	—	—	—	—
Consolidated net loss	(1,884,794)	(563,981)	(1,795,789)	(978,470)
Less: Loss attributable to the noncontrolling interest	310,293	208,673	285,898	192,359
Net loss attributable to Tecogen Inc.	$(1,574,501)	$(355,308)	$(1,509,891)	$(786,111)
Net loss per share - basic and diluted	$(0.03)	$(0.01)	$(0.03)	$(0.02)
Weighted average shares outstanding - basic and diluted	48,211,652	45,882,631	52,395,435	47,721,641

Consolidated Balance Sheet Data:	December 31, 2011	2010	September 30, 2012 (unaudited)	2011 (unaudited)
Cash and cash equivalents	$3,018,566	$1,828,173	$684,896	$1,211,287
Restricted short-term investments	683,428	85,000	181,580	501,577
Working capital	4,935,145	2,485,926	4,118,095	2,667,330
Total assets	8,745,492	5,876,422	8,515,762	6,441,401
Total liabilities	3,522,328	2,884,743	3,769,459	3,355,500
Stockholders' equity	$5,223,164	$2,991,679	$4,746,303	$2,585,901

47

TECOGEN INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THIS DISCUSSION CONTAINS FORWARD-LOOKING STATEMENTS THAT RELATE TO FUTURE EVENTS OR OUR FUTURE FINANCIAL PERFORMANCE. THESE STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE OUR ACTUAL RESULTS, LEVELS OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, LEVELS OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY THESE FORWARD-LOOKING STATEMENTS. THESE RISKS AND OTHER FACTORS INCLUDE, AMONG OTHERS, THOSE LISTED UNDER “SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS” AND “RISK FACTORS” AND THOSE INCLUDED ELSEWHERE IN THIS REGISTRATION STATEMENT.

During the last two fiscal years there has been a slowdown in the economy, a decline in the availability of financing from the capital markets, and a widening of credit spreads which has, or may in the future, adversely affect us to varying degrees. Such conditions may impact our ability to meet obligations to our suppliers and other third parties. These market conditions could also adversely affect the amount of revenue we report, require us to increase our allowances for losses, result in impairment charges and valuation allowances that decrease our equity, increase our loss and reduce our cash flows from operations. In addition, these conditions or events could impair our credit rating and our ability to raise additional capital.

Overview

Tecogen designs, manufactures and sells industrial and commercial cogeneration systems that produce combinations of electricity, hot water, and air conditioning using automotive engines that have been specially adapted to run on natural gas. Cogeneration systems are efficient because in addition to supplying mechanical energy to power electric generators or compressors – displacing utility supplied electricity – they provide opportunity for the facility to incorporate the engine’s waste heat into onsite processes such as space and potable water heating. We produce standardized, modular, small-scale products, with a limited number of product configurations that are adaptable to multiple applications. We refer to these combined heat and power products as CHP (electricity plus heat) and MCHP (mechanical power plus heat).

Our products are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. Various agreements are in place with distributors and sales representatives, including American DG Energy and EuroSite Power which are affiliated companies. Our existing customers include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations. We have an installed base of more than 2,100 units. Many of these have been operating for almost 25 years.

In 2009 we created a majority-owned subsidiary Ilios to develop and distribute a line of ultra-high-efficiency heating products, including a high efficiency water heater. These products provide twice the efficiency of conventional commercial and industrial boilers (based upon management estimates) utilizing advanced thermodynamic principles. As of the date of this prospectus, we own a 65.0% interest in Ilios.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We expect this trend to continue until such time that we can sell a sufficient number of systems and achieve a cost structure to become profitable. We may not have adequate cash resources to reach the point of profitability, and we may never become

profitable. Even if we do achieve profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

Although we may, from time to time, have one or a few customers who may represent more than 10% of our product revenue for a given year, we are not dependent on the recurrence of such revenue from those customers. Our product revenue is such that customers may make a large purchase once and may not ever make such a purchase again. Our equipment is built to last 20 or more years, therefore, we do not build our product revenue model depending on recurring transactions from the same customer. Our service revenue may lend itself to recurring revenue from a single customer; however, we currently do not have any service revenue customers who make up more than 10% of our total revenues on an annual basis. American DG Energy has been considered a major customer in certain years, as disclosed in the accompanying financial statements; however, we do not consider our business as “dependent” upon its recurrence.

For the last two fiscal years, more than half of our revenue was generated from long-term maintenance contracts, or service contracts, which provide us with a somewhat predictable revenue stream, especially during the summer months. We have had a slight surge of activity from May through September as our “chiller season” is in full swing. Our service revenue has grown from year to year since 2005, with our New York City/New Jersey, New England and to some extent California

territories experiencing the majority of the growth. This growth is consistent with the sale of new units into those territories. Our service margins are generally predictable as we service hundreds of long-term contracts with relatively low dollar but high volume sales. Fluctuations at the job level are to be expected however, due to the number of jobs, gross margin generally evens out on the aggregate.

Our product revenue is derived from the sale of the various cogeneration modules, such as the InVerde 100, the CM-75 and the CM-60, and the three chiller models, such as the smaller ST, the larger DT and the RT (roof-top) units. The sales cycle for each module varies widely, whereby it can be as short as a month to as long as a year or more. The length of the sales cycle is generally dependent upon on the number of decision makers in our customer's facility as well as the size of the project. Furthermore, since our products and their installation are costly they are considered a major capital improvement and customers may be slow in making their buy decision. Our products sales are high dollar value, low volume transactions. Therefore our product revenue can be difficult to predict and the expected margin, which is based on the various models we offer, also varies therefore it is difficult to forecast revenues with accuracy and significant fluctuations are to be expected.

Our cogeneration and chiller modules are built to order and revenue is recognized upon shipment. The lead time to build and deliver a unit depends on its customized configuration and is approximately 12 to 16 weeks from time of purchase order. As revenue is recognized upon shipment, our work-in-process is an important factor in understanding our financial condition in any given quarter.

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board, or FASB, issued updated accounting guidance related to fair value measurements and disclosures that result in common fair value measurements and disclosures between United States generally accepted accounting principles, or GAAP, and International Financial Reporting Standards. This guidance includes amendments that clarify the application of existing fair value measurement requirements, in addition to other amendments that change principles or requirements for measuring fair value and for disclosing information about fair value measurements. This guidance is effective during interim and annual periods beginning after December 15, 2011. The adoption of this guidance did not have a material effect on our consolidated financial statements.

Critical Accounting Policies

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Generally, sales of cogeneration and chiller units and parts are recognized when shipped and services are recognized over the service period. Payments received in advance of services being performed are recorded as deferred revenue.

Infrequently, we recognize revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the buyer, the buyer has made a written fixed commitment to purchase the finished goods, the buyer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by the Company. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms are granted.

For those arrangements that include multiple deliverables, we first determines whether each service or deliverable meets the separation criteria of FASB ASC 605-25, Revenue Recognition—Multiple-Element Arrangements. In general, a deliverable (or a group of deliverables) meets the separation criteria if the deliverable has stand-alone value to the customer and if the arrangement includes a general right of return related to the delivered item and delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Each deliverable that meets the separation criteria is considered a separate “unit of accounting”. We allocate the total arrangement consideration to each unit of accounting using the relative fair value method. The amount of arrangement consideration that is allocated to a delivered unit of accounting is limited to the amount that is not contingent upon the delivery of another unit of accounting.

When vendor-specific objective evidence or third-party evidence is not available, adopting the relative fair value method of allocation permits us to recognize revenue on specific elements as completed based on the estimated selling price. We generally use internal pricing lists that determine sales prices to external customers in determining its best estimate of the selling price of the various deliverables in multiple-element arrangements. Changes in judgments made in estimating the selling price of the various deliverables could significantly affect the timing or amount of revenue recognition. We enter into sales arrangements with customers to sell our cogeneration and chiller units and related service contracts and occasionally

TECOGEN INC.

installation services. Based on the fact that we sell each deliverable to other customers on a stand-alone basis, we have determined that each deliverable has a stand-alone value. Additionally, there are no rights of return relative to the delivered items; therefore, each deliverable is considered a separate unit of accounting.

After the arrangement consideration has been allocated to each unit of accounting, we apply the appropriate revenue recognition method for each unit of accounting based on the nature of the arrangement and the services included in each unit of accounting. Cogeneration and chiller units are recognized when shipped and services are recognized over the term of the applicable agreement, as provided when on a time and materials basis or upon completion and acceptance when on a completed contract basis.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management's evaluation of outstanding accounts receivable at the end of the period. Bad debts are written off against the allowance when identified.

Inventory

Raw materials, work in process, and finished goods inventories are stated at the lower of cost, as determined by the average cost method, or net realizable value. The Company periodically reviews inventory quantities on hand for excess and/or obsolete inventory based primarily on historical usage, as well as based on estimated forecast of product demand. Any reserves that result from this review are charged to cost of sales. As of September 30, 2012 and December 31, 2011, there was a reserve against inventory in the amount of $364,600 and $358,800, respectively.

Intangible Assets

Intangible assets subject to amortization include costs incurred by the Company to acquire product certifications and certain patent costs. These costs are amortized on a straight-line basis over the estimated economic life of the intangible asset, which range from seven to ten years. We review intangible assets for impairment when the circumstances warrant.

Research and Development Costs/Grants

Internal research and development expenditures are expensed as incurred. Proceeds from certain grants and contracts with governmental agencies and their contractors to conduct research and development for new CHP technologies or to improve or enhance existing technology is recorded as an offset to the related research and development expenses. These grants and contracts are paid on a cost reimbursement basis provided in the agreed upon budget, with 10% retainage held to the end of the contract period. For the nine months ended September 30, 2012 and 2011, amounts received were approximately $101,400 and $184,200, respectively, which offset the Company's total research and development expenditures for each of the respective periods. As of September 30, 2012 and December 31, 2011, the retainage receivable was $124,350 and $90,735, respectively.

Stock-Based Compensation

Stock based compensation cost is measured at the grant date based on the estimated fair value of the award and is recognized as an expense in the consolidated statements of operations over the requisite service period. The fair value of stock options granted is estimated using the Black-Scholes option pricing valuation model. We recognize

compensation on a straight-line basis for each separately vesting portion of the option award. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. The determination of the fair value of share-based payment awards is affected by our stock price. Since we are not publicly traded, we considered the sales price of the Common Stock in private placements to unrelated third parties as a measure of the fair value of its Common Stock. The average expected life is estimated using the simplified method for “plain vanilla” options. The simplified method determines the expected life in years based on the vesting period and contractual terms as set forth when the award is made. We use the simplified method for awards of stock-based compensation since it does not have the necessary historical exercise and forfeiture data to determine an expected life for stock options. The risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant. When options are exercised we normally issue new shares (see “Note 4-Stock-based compensation”.)

TECOGEN INC.

Loss per Common Share

We compute basic loss per share by dividing net loss for the period by the weighted-average number of shares of Common Stock outstanding during the period. We compute its diluted earnings per common share using the treasury stock method. For purposes of calculating diluted earnings per share, we consider its shares issuable in connection with the convertible debentures, stock options and warrants to be dilutive Common Stock equivalents when the exercise/conversion price is less than the average market price of our Common Stock for the period.

Segment Information

The Company reports segment data based on the management approach. The management approach designates the internal reporting that is used by management for making operating and investment decisions and evaluating performance as the source of the Company's reportable segments. The Company uses one measurement of profitability and does not disaggregate its business for internal reporting. The Company has determined that it operates in one business segment which manufactures and supports highly efficient CHP products based on engines fueled by natural gas.

The following table summarizes net revenue by product line and services for the nine months ended September 30, 2012 and 2011:

	September 30, 2012 (unaudited)	September 30, 2011 (unaudited)
Products:		
Cogeneration	$2,687,769	$1,889,436
Chiller	1,503,670	1,831,952
Total Product Revenue	4,191,439	3,721,388
Services	5,498,545	4,992,840
Total Revenue	$9,689,984	$8,714,228

Income Taxes

We use the asset and liability method of accounting for income taxes. The current or deferred tax consequences of transactions are measured by applying the provisions of enacted tax laws to determine the amount of taxes payable currently or in future years. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities and expected future tax consequences of events that have been included in the financial statements or tax returns using enacted tax rates in effect for the years in which the differences are expected to reverse. Under this method, a valuation allowance is used to offset deferred taxes if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Management evaluates the recoverability of deferred taxes and the adequacy of the valuation allowance annually.

The Company has adopted the provisions of the accounting standards relative to accounting for uncertainties in tax positions. These provisions provide guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. The Company elected to recognize interest and penalties related to income tax matters as a component of income tax expense in the statements of operations. There was no impact on the financial statements as a result of this guidance.

Fair Value of Financial Instruments

Our financial instruments are cash and cash equivalents, certificates of deposit, accounts receivable, accounts payable, capital lease obligations and notes due from related party convertible debentures. The recorded values of cash and cash equivalents, accounts receivable and accounts payable approximate their fair values based on their short-term nature. At September 30, 2012, the current value on the consolidated balance sheet of the debentures and capital lease obligations approximates fair value as the terms approximate those available for similar instruments. Certificates of deposit classified as short-term investments are recorded at fair value.

TECOGEN INC.

Emerging Growth Company

Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. However, we are choosing to "opt out" of any extended transition period, and as a result we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

Results of Operations

Nine Months Ended September 30, 2012 Compared to Nine Months Ended September 30, 2011

Revenues

Revenues for the nine months ended September 30, 2012 were $9,689,984 compared to $8,714,228 for the same period in 2011, an increase of $975,756, or 11.2%. The increase in total revenue was due to increases in both product sales and service revenues in the first three quarters of 2012. Product revenue for the first nine months of 2012 was $4,191,439, compared to $3,721,388, for the same period in 2011, an increase of $470,051 or 12.6%. Shipments of chiller modules during the first nine months of 2012 accounted for 35.9% of product revenues. For the same period in 2011, chiller modules represented 49.2% of product revenues. Our product mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales. As a result, such fluctuation is expected.

Service revenue for the first nine months of 2012 was $5,498,545, compared to $4,992,840, for the same period in 2011, an increase of $505,705, or 10.1%. Our service operation grows along with sales of cogeneration and chiller systems since the majority of our product sales are accompanied by a service contract or time and materials agreement. As a result our "fleet" of units being serviced by our service department naturally grows with product sales.

Cost of Sales

Cost of sales for the first nine months of 2012 was $5,703,507, compared to $4,818,318, for the same period in 2011, an increase of $885,189, or 18.4%. Our gross profit margin for the first nine months of 2012 was 41.1% compared to 44.7% for the same period in 2011. The decrease in overall gross margin is attributable to the sale of lower margin cogeneration units sold to an affiliated company.

Contract Research and Development

Contract research and development income, which is classified as an offset to applicable expenses, for the first nine months of 2012 and 2011 was $101,400 and $184,200, respectively. The majority of this decrease is due to the conclusion and wrap up of a research and development contract which ended on June 30, 2011.

Operating Expenses

Operating expenses increased in the first nine months of 2012 to $5,767,240 compared to $4,877,150 for the same period in 2011, an increase of $890,090 or 18.3%. The increase was due to a combination of expense increases such as salaries, outside labor and other payroll related expenses of approximately $610,000, due to the addition of several exempt and non-exempt employees, general increase in liability, workers compensation and other insurance policies

of approximately $55,000, audit and other professional fees of $75,000 and attendance at trade shows and the related travel expenses of approximately $110,000 and various other expenses.

Selling expenses within this category increased in the first nine months of 2012 to $915,842 compared to $381,617 for the same period in 2011, an increase of $534,225 due to the Company's efforts in creating a stronger sales and marketing team which began during 2011. This effort included hiring new personnel for both sales and marketing and hiring a public relations firm. In addition to the above, during the nine months ended September 30 2012 the Company invested approximately $155,000 in trade shows and a traveling “road show” where three of the Company's products were showcased on an enclosed trailer which traveled up and down the west coast. During the same period in 2011 the Company incurred approximately $31,000 in trade show expenses.

TECOGEN INC.

Loss from Operations

Loss from operations for the first nine months 2012 was $1,780,763 compared to $981,240 for the same period in 2011. The increase in the loss of $799,523 was due to the increase in operating expenses discussed above.

Other Income (Expense), Net

Other expense, net, for the first nine months of 2012 was $15,026 compared to other income, net of $2,770 for the same period in 2011. Other income (expense) includes interest income and other income of $38,380, net of interest expense on notes payable of $53,406 for the first nine months of 2012. For the same period in 2011, interest income was $25,262 and interest expense was $22,492. The increase in interest income of $13,118 is the result of short-term investments held for the majority of the first nine months of 2012 that did not exist for the most of the first nine months of 2011. The increase in interest expense of $30,914 was due to $750,000 of demand notes payable issued during the third quarter of 2011.

Provision for Income Taxes

The Company did not record any benefit or provision for income taxes for the first nine months of 2012 and 2011, respectively. As of September 30, 2012 and 2011, the income tax benefits generated from the Company’s net losses have been fully reserved.

Noncontrolling Interest

The noncontrolling interest share in the losses of Ilios was $285,898 for the first nine months of 2012 compared to $192,359 for the same period in 2011. The increase was due to additional payroll costs of approximately $140,000 that Ilios incurred in 2012, associated with the hiring of its Chief Operating Officer in June of 2011. Additional expenses included increased stock compensation expense of approximately $20,000 and trade shows and travel related expenses of approximately $20,000. Noncontrolling interest ownership percentage as of September 30, 2012 and 2011 was 37.6% and 35%, respectively.

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

Revenues

Revenues in 2011 were $11,065,210 compared to $11,311,229 in 2010, a decrease of $246,019 or 2.2%. The decrease is due to a combination of an overall decrease in product sales together with an increase in service revenue. Product revenue in 2011 was $4,569,113, compared to $5,543,605 in 2010, a decrease of $974,492or 17.6%. This decrease from the year ended December 31, 2010 to 2011 was the aggregate of a decrease in cogeneration sales of $2,240,434 net of an increase in chiller sales of $1,265,942.

Our product mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales. As a result, such fluctuation is expected. Additionally, during the year ended December 31, 2010 we recognized revenue of approximately $1.4 million from one multi-unit cogeneration project. We did not experience a sale with similar revenue recognition in 2011. Shipments of chiller modules during 2011 accounted for 40.1% of product revenues which represented an increase of $1,265,942. For the same period in 2010, chiller modules represented only 10.2% due to the $1.2 million sale of cogeneration modules. In addition, work in process as of December 31, 2011 and 2010 was $119,640 and $4,774, respectively. At December 31, 2011, there was a cogeneration unit substantially completed but did not ship until the following quarter. In accordance with our revenue

recognition policy, the revenue for this unit was not recognized as of December 31, 2011.

Service revenue in 2011 was $6,496,097 compared to $5,767,624, in 2010, an increase of $728,473, or 12.6%. This increase is due to the growth in modules serviced under contract as well as the performance of several large consulting/installation projects during the year. In 2010 there were no consulting/turnkey projects performed. Tecogen offered “turnkey” installations to its customers up until 2006 and these Tecogen installed locations have been historically our best sites in terms of run hours and energy generation. In 2011, our service operation went back to the installation business whereby Tecogen service personnel installs our equipment rather than only selling and servicing the modules. We are also offering consulting services whereby Tecogen engineers will support the installation effort.

TECOGEN INC.

Cost of Sales

Cost of sales in 2011 was $6,179,098 compared to $6,597,205 in 2010, a decrease of $418,107, or 6.3%. Our gross profit margin was 44.2% in 2011, compared to 41.7% in 2010, an increase of 2.5%. The improvement in gross margin is attributable to sale of more chillers, which carry a higher margin, in the product mix versus sales of cogeneration devices.

Operating Expenses

Operating expenses were $6,769,014 in 2011, compared to $5,264,299 in 2010, an increase of $1,504,715, or 28.6%. The increase was due to a combination of non-cash compensation expense related to the issuance of restricted stock and option awards to our employees (which increased $247,288), the costs associated with the overhead, development, production and sale of our subsidiary’s water heating product (approximately $952,000) as well as the addition of personnel to support the sales efforts of the service and installation operations (approximately $279,000).

Selling expenses for the years ended December 31, 2011 and 2010 were $782,252 and $290,505, respectively, an increase of $491,747. Approximately $200,000 of this increase is due to an increase in commission costs in 2011 since the Company experienced more commissionable sales during this period. The balance was due to the Company's efforts in creating a stronger sales and marketing team which began during 2011. This effort included hiring new personnel for both sales and marketing and hiring a public relations firm.

Loss from Operations

Loss from operations for the year ended December 31, 2011 was $1,882,902 compared to $550,275 for the year ended December 31, 2010, an increase of $1,332,627. This increase in loss from operations was due to a combination of non-cash compensation expense related to the issuance of restricted stock and option awards to our employees (which increased $247,288), the costs associated with the overhead, development, production and sale of our subsidiary’s water heating product (approximately $952,000) as well as the addition of personnel to support the sales efforts of the service and installation operations (approximately $279,000).

Contract Research and Development

Contract research and development income, which is classified as an offset to applicable expenses, for the years ended December 31, 2011 and 2010 was $239,158 and $917,148, respectively. This decrease is due to the small engine development contract with the California Energy Commission, which included significant subcontract research work in 2010. This income offset cost of sales of $210,597 and $753,129, respectively and operating expenses of $13,148 and $10,861, respectively for the years ended December 31, 2011 and 2010. Total expenses offset by contract research and development grants for the year ended December 31, 2011 were $223,745, providing a net profit of $15,413. Total expenses offset by contract research and development grants for the year ended December 31, 2010 were $763,990, providing a net profit of $153,158.

Other Income (Expense), Net

Other expense, net, for 2011 was $1,892 compared to $13,706 for the same period in 2010. Other expense, net includes interest income on cash balances and short-term investments and notes receivable from stockholder of $38,402 net of interest expense of $40,294 for 2011. For the same period in 2010, interest income was $23,574 and interest expense was $37,280. The increase in interest income is the result the interest earned on notes receivable from stockholder which existed for twelve months during 2011 and six months during 2010.

Provision for Income Taxes

We did not record any benefit or provision for income taxes for the year ended December 31, 2011 and 2010, respectively. As of December 31, 2011 and 2010, the income tax benefits generated from the Company's net losses have been fully reserved.

Noncontrolling Interest

The noncontrolling interest share in the losses in Ilios was $310,293 in 2011 compared to $208,673 in 2010. The increase was due to additional payroll costs incurred by Ilios, our majority owned subsidiary, in 2011 as its Chief Operating Officer was hired in June of 2011. This increase in payroll costs was somewhat offset by the reduction in the noncontrolling interest ownership percentage as it decreased to 32.59% in 2011 from 37% in 2010.

TECOGEN INC.

Liquidity and Capital Resources

Consolidated working capital at September 30, 2012 was $4,118,095, compared to $4,935,145 at December 31, 2011, a decrease of $817,050 or 16.6%. Included in working capital were cash and cash equivalents of $684,896 and short-term investments of $181,580 at September 30, 2012, compared to $3,018,566 in cash and cash equivalents and $683,428 in short-term investments at December 31, 2011.

Cash used in operating activities was $3,554,463 for the nine months ended September 30, 2012 compared to $1,566,159 at September 30, 2011. Our accounts receivable balance increased to $1,937,667 at September 30, 2012 compared to $1,399,232 at December 31, 2011, using $538,435 of cash due to the timing of billing, shipments and collections. Our inventory increased to $4,047,062 as of September 30, 2012 compared to $2,568,986 as of December 31, 2011, using $1,483,876 of cash to purchase inventory to build modules in backlog. Amounts due to us from related parties increased to $441,464 as of September 30, 2012 from $299,739 at December 31, 2011, using $141,725 from services performed.

Accounts payable increased to $905,640 as of September 30, 2012, from $812,214 at December 31, 2011 providing $93,426 in cash to purchase inventory. Deferred revenue increased to $873,475 as of September 30, 2012 from $509,283 as of December 31, 2011 providing $329,771.

During the first nine months of 2012, our investing activities provided $240,793 of cash and included sales of short term investments $506,345, purchases of property and equipment of $172,587 and expenditures of $92,965 related to intangible assets. Our consolidated financing activities provided $980,000 of cash during the first nine months of 2012 from the sale the company’s common stock and the sale of Ilios common stock to accredited investors.

At September 30, 2012 our commitments included various leases for office and warehouse facilities of $864,807. The source of funds to fulfill these commitments will be provided either from cash and short term investment balances, operations or through debt or equity financing.

We believe that our existing resources, including cash and cash equivalents and future cash flows from operations, are sufficient to meet the working capital requirements of our existing business until September 30, 2013. Beyond September 30, 2013, as we continue to grow our business our cash requirements may increase. We may need to raise additional capital through a debt financing or an equity offering to meet our operating and capital needs for future growth.

Our ability to continue to access capital could be impacted by various factors including general market conditions and the continuing slowdown in the economy, interest rates, the perception of our potential future earnings and cash distributions, any unwillingness on the part of lenders to make loans to us and any deterioration in the financial position of lenders that might make them unable to meet their obligations to us. If these conditions continue and we cannot raise funds through a public or private debt financing, or an equity offering, our ability to grow our business may be negatively affected and we may need to suspend and significantly reduce our operating costs until market conditions improve.

Seasonality

We expect that the majority of our heating systems sales will be in the winter and the majority of our chilling systems sales will be in the summer. Our cogeneration and chiller system sales are not generally affected by the seasons, although customer goals will be to have chillers installed and running in the spring. Our service team does experience

higher demand in the warmer months when cooling is required. These units are generally shut down in the winter and started up again in the spring. This “busy season” for the service team generally runs from May through the end of September.

Off Balance Sheet Arrangements

The Company currently has no material off balance sheet arrangements and has no plans to enter into any such arrangements.

TECOGEN INC.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON
ACCOUNTING AND FINANCIAL DISCLOSURE

On April 13, 2011, Caturano and Company, Inc. (formerly Caturano and Company, P.C.), or Caturano, resigned as the Company's independent registered public accounting firm as a result of the July 20, 2010, acquisition by McGladrey LLP (formerly McGladrey & Pullen, LLP), or McGladrey, of certain of Caturano's assets. On April 13, 2011, the Company's board of directors appointed McGladrey as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2010.

Caturano's audit reports on the Company's financial statements for the fiscal years ended December 31, 2009 and December 31, 2008 did not contain any adverse opinion or disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. During the Company's fiscal years ended December 31, 2009 and December 31, 2008 and through the date of Caturano's resignation, there were no disagreements between the Company and Caturano on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to Caturano's satisfaction, would have caused Caturano to make reference thereto in connection with its audit reports, and no reportable events as defined in Item 304(a)(1)(v) of Regulation S-K.

Prior to the engagement of McGladrey, we did not consult with such firm regarding the application of accounting principles to a specific completed or contemplated transaction, or any matter that was either the subject of a disagreement or a reportable event. We also did not consult with McGladrey regarding the type of audit opinion that might be rendered on our financial statements and no oral or written report was provided by McGladrey.

TECOGEN INC.

MANAGEMENT AND GOVERNANCE

Directors and Executive Officers.

The following table lists the current members of our board of directors and our executive officers. The address for our directors and officers is c/o Tecogen Inc., 45 First Avenue, Waltham, Massachusetts 02451.

Name	Age	Position(s)
Angelina M. Galiteva	46	Chairperson of the Board and Director
John N. Hatsopoulos	78	Chief Executive Officer and Director
Robert A. Panora	58	Chief Operating Officer and President
Bonnie J. Brown	49	Chief Financial Officer, Treasurer and Secretary
George N. Hatsopoulos	86	Director
Ahmed F. Ghoniem	61	Director
Charles T. Maxwell	81	Director
Joseph E. Aoun	59	Director

Angelina M. Galiteva, age 46, has been our Chairperson of the Board since 2005. She is founder and Chair of the Board for the Renewables 100 Policy Institute, a non-profit entity dedicated to the global advancements of renewable energy solutions since 2008. Ms. Galiteva is also Chairperson at the World Council for Renewable Energy (WCRE) which focuses on the development of legislative and policy initiatives to facilitate the introduction and growth of renewable energy technologies since 2003. Ms. Galiteva is the governor's appointee to the California Independent System Operator (CA ISO), providing direction and oversight for the California ISO which operates the California electricity grid. Also, Ms. Galiteva is a principal at New Energy Options, Inc., a company focusing on advancing the integration of sustainable energy solutions since 2006. Ms. Galiteva holds a Master's degree in Environmental and Energy Law, a law degree from Pace University School of Law, and a bachelor's degree from Sofia University in Bulgaria.

Our board of directors has determined that Ms. Galiteva's prior experience in the energy field qualify her to be a member of the board of directors in light of the Company's business and structure.

John N. Hatsopoulos, age 78, has been the Chief Executive Officer of the Company since the organization of the Company in 2000. He has also been the Chief Executive Officer of American DG Energy Inc., (NYSE MKT: ADGE), a publicly traded company in the On-Site Utility business since 2000, and the Chairman of EuroSite Power Inc., a subsidiary of American DG Energy Inc. since 2009. Mr. Hatsopoulos is a co-founder of Thermo Electron Corporation, which is now Thermo Fisher Scientific (NYSE: TMO), and the retired President and Vice Chairman of the Board of Directors of that company. He is a member of the Board of Directors of Ilios Inc., GlenRose Instruments Inc., Agenus Inc. (NASDAQ: AGEN), American CareSource Holdings, Inc. (NASDAQ: ANCI) and TEI Biosciences Inc., and is a former Member of the Corporation of Northeastern University. The Company, American DG Energy Inc., EuroSite Power Inc., and GlenRose Instruments Inc., are affiliated companies by virtue of common ownership. Mr. Hatsopoulos graduated from Athens College in Greece, and holds a bachelor's degree in history and mathematics from Northeastern University, as well as honorary doctorates in business administration from Boston College and Northeastern University.

Mr. Hatsopoulos is the Company's Chief Executive Officer and is also the Chief Executive Officer of American DG Energy and the Chairman of GlenRose Instruments. On average, Mr. Hatsopoulos spends approximately 20% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

Our board of directors has determined that Mr. Hatsopoulos' prior experience as co-founder, president and Chief Financial Officer of Thermo Electron Corporation, where he demonstrated leadership capability and gained extensive expertise involving complex financial matters, and his extensive knowledge of complex financial and operational issues qualify him to be a member of the board of directors in light of the Company's business and structure.

Robert A. Panora, age 58, has been our Chief Operating Officer and President since the organization of the Company in 2000. He had been General Manager of Tecogen's Product Group since 1990 and Manager of Product Development, Engineering Manager, and Operations Manager of the Company since 1984. Over his 27-year tenure with Tecogen, Mr. Panora has been responsible for sales and marketing, engineering, service, and manufacturing. Mr. Panora contributed to the development of Tecogen's first product, the CM-60 cogeneration system, and was Program Manager for the cogeneration and

chiller projects that followed. Mr. Panora has had considerable influence on many aspects of Tecogen's business, from building the employee team, to conceptualizing product designs and authoring many of the original business documents, sales tools, and product literature pieces. Mr. Panora has a bachelor's and master's degrees in Chemical Engineering from Tufts University.

Bonnie J. Brown, age 49, has been our Chief Financial Officer since 2007, our Secretary since 2010 and our Treasurer as of January 1, 2013. Ms. Brown joined the Company in 2005 as Controller. She has also been the Chief Financial Officer of Ilios Inc. since its inception in 2009. Prior to joining Tecogen, Ms. Brown was a partner at Sullivan Bille PC, a regional accounting firm, for 15 years where she provided financial, accounting, audit, tax, and business consulting services for mid-sized companies. Ms. Brown has also worked at Enterprise Bank and Trust (NASDAQ:EBTC) as project manager for special assignments including branch acquisitions and information systems transitions in the trust department eventually serving as Internal Audit Director, establishing an in-house audit function. She has also provided independent contractor services for a wide variety of publicly traded and closely held companies, including consulting, internal control and Sarbanes-Oxley compliance services. Ms. Brown is a CPA and holds a B.S. in Accountancy from Bentley College and an M.S. in Computer Information Systems from Boston University.

George N. Hatsopoulos, age 86, has been a member of our Board since the organization of the Company in 2000. He is the founder and Chief Executive Officer of Pharos, LLC, an organization devoted to the creation of leading edge business ventures and he is a member of the Board of Directors of American DG Energy Inc., an affiliated company by virtue of common ownership. He is the founder and chairman emeritus of Thermo Electron Corporation and served as Chairman and Chief Executive Officer since its founding in 1956 until his retirement from those positions in 1999. Dr. Hatsopoulos has served on the board of the Federal Reserve Bank of Boston, including a term as chairman. He was a member of the Securities and Exchange Commission Advisory Committee on Capital Formation and Regulatory Process, the Advisory Committee of the U.S. Export-Import Bank, and the boards of various corporations and institutions. Dr. Hatsopoulos is a fellow of the American Academy of Arts and Sciences, the American Society of Mechanical Engineers and other scientific and technical organizations. He is the recipient of numerous honors and awards in engineering, science, industry and academics, has authored over 60 articles in professional journals, and is the principal author of textbooks on thermodynamics and thermionic energy conversion. Dr. Hatsopoulos has been a faculty member and senior lecturer at Massachusetts Institute of Technology and continues his association with MIT as a Life Member of the Corporation. Dr. Hatsopoulos holds bachelors, masters and doctorate degrees from MIT, all in mechanical engineering.

Our board of directors has determined that Dr. Hatsopoulos' prior experience as founder, chairman and Chief Executive Officer of Thermo Electron Corporation, where he demonstrated leadership capability and gained extensive expertise involving complex financial matters, and his extensive knowledge of complex financial and operational issues qualify him to be a member of the board of directors in light of the Company's business and structure.

Ahmed H. Ghoniem, age 61, has been a member of our Board since 2008. He is the Ronald C. Crane Professor of Mechanical Engineering at MIT. He is also the director of the Center for 21st Century Energy, and the head of Energy Science and Engineering at MIT, where he plays a leadership role in many energy-related activities, initiatives and programs. Mr. Ghoniem joined MIT as an assistant professor in 1983. He is an associate fellow of the American Institute of Aeronautics and Astronautics, and Fellow of American Society of Mechanical Engineers. Recently, he was granted the KAUST Investigator Award. He is a member of the Board of Directors of EuroSite Power Inc., and Ilios Inc., which are affiliated companies by virtue of common ownership. Mr. Ghoniem holds a Ph.D. in Mechanical Engineering from the University of California, Berkeley, and an M.S. and B.S. in Mechanical Engineering from Cairo University.

Our Board of Directors has determined that Dr. Ghoniem's prior experience as a Professor of Mechanical Engineering at MIT and his prior experience in the energy sector qualify him to be a member of our Board of Directors in light of our business and structure.

Charles T. Maxwell, age 81, has been a member of our Board since 2001. He is a widely recognized expert in the energy sector, with over 40 years of experience with major oil companies and investment banking firms. He is currently Senior Energy Analyst with Weeden & Co. of Greenwich, Connecticut, since 1999, where he develops strategic data and forecasts on oil, gas and power markets. Mr. Maxwell is a member of the Board of Directors of American DG Energy Inc., an affiliated company by virtue of common ownership. Since the early 1980s, he has been an active member of an Oxford-based organization comprised of present or past OPEC-county oil ministers and other oil industry executives from 30 countries who meet twice annually to analyze trends in global energy markets. He is a member of the board of directors of Chesapeake Energy Corp. (NYSE: CHK). Mr. Maxwell holds a bachelor's degree in political science from Princeton University and holds a B.A. from Oxford University as a Marshall Scholar in Middle East literature and history.

TECOGEN INC.

Our board of directors has determined that Mr. Maxwell's prior experience in the energy sector and his extensive experience as a director of public companies qualifies him to be a member of the board of directors in light of the Company's business and structure.

Joseph E. Aoun, age 59, has been a member of our Board since 2011. He is President of Northeastern University, a preeminent global, experiential, research university since 2006. President Aoun is recognized as a leader in higher education policy and serves on the board of directors of the American Council on Education as well as the Boston Private Industry Council, Boston World Partnerships, Jobs for Mass, and the New England Council. He is a member of the Executive Committee of the Greater Boston Chamber of Commerce, a member of the Massachusetts Business Roundtable and Massachusetts Math & Science Initiative, and serves on the Leadership Council for the Mass Life Sciences Collaborative and as co-chair of the City to City Boston initiative. President Aoun is the recipient of numerous honors and awards and is an internationally known scholar in linguistics. President Aoun holds a master's degree in Oriental Languages and Literature from Saint Joseph University, Beirut, Lebanon, Diploma of Advanced Study General and Theoretical Linguistics, University of Paris VIII, Paris, France, and a Ph.D. Linguistics and Philosophy from MIT.

Our Board of Directors has determined that Dr. Aoun's prior experience as the President of Northeastern University and his prior experience in the energy sector qualify him to be a member of our Board of Directors in light of our business and structure.

Each executive officer is elected or appointed by, and serves at the discretion of, our Board of Directors. The elected officers of the Company will hold office until their successors are duly elected and qualified, or until their earlier resignation or removal.

Family Relationships

There are no other family relationships among members of our Board of Directors and executive officers other than George N. Hatsopoulos and John N. Hatsopoulos who are brothers.

Board Composition

The number of directors of the Company is established by the Board of Directors in accordance with our bylaws. The exact number of directors is currently set at six (6) by resolution of the Board of Directors. The directors are elected to serve for one (1) year terms, with the term of directors expiring each year at the annual meeting of stockholders; provided further, that the term of each director shall continue until the election and qualification of a successor and be subject to such director's earlier death, resignation or removal.

Our certificate of incorporation and bylaws provide that the authorized number of directors may be changed only by resolution of the Board of Directors, and also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our Board of Directors, including a vacancy resulting from an enlargement of our Board of Directors, may be filled only by vote of a majority of our directors then in office.

We have no formal policy regarding board diversity. Our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business and understanding of the competitive landscape.

59

TECOGEN INC.

Board Committees

Our Board of Directors directs the management of our business and affairs and conducts its business through meetings of the Board of Directors and our committees: the Audit Committee, the Compensation Committee and the Nominating and Governance Committee.

The members of the Audit Committee are Ms. Galiteva and Mr. Maxwell. The members of the Compensation Committee are Dr. Aoun, Ms. Galiteva and Dr. Ghoniem. The members of our Nominating and Governance Committee are Dr. Aoun, Dr. Ghoniem and Mr. Maxwell. All committee members have been determined to be independent by our Board of Directors in accordance with the NYSE MKT rules. The Board of Directors has also determined that Mr. Maxwell qualifies as an audit committee financial expert. In addition, from time to time, other committees may be established under the direction of the Board of Directors when necessary to address specific issues.

The functions of the Audit Committee include reviewing and supervising the financial controls of the Company, appointing, compensating and overseeing the work of the independent auditors, reviewing the books and accounts of the Company, meeting with the officers of the Company regarding the Company's financial controls, acting upon recommendations of the independent auditors and taking such further actions as the Audit Committee deems necessary to complete an audit of the books and accounts of the Company. The charter of the Audit Committee will be available on the Company’s website at www.tecogen.com and is included as Exhibit No. 99.1 hereto.

The Compensation Committee's functions include reviewing with management cash and other compensation policies for employees, making recommendations to the Board of Directors regarding compensation matters and determining compensation for the Chief Executive Officer. Our Chief Executive Officer has been instrumental in the design and recommendation to the compensation committee of compensation plans and awards for our directors and executive officers including our President, Chief Operating Officer and Chief Financial Officer. All compensation decisions for the Chief Executive Officer and all other executive officers are reviewed and approved by the Compensation Committee, subject to ratification by the Board of Directors. The charter of the Compensation Committee will be available on the Company’s website at www.tecogen.com and is included as Exhibit No. 99.2 hereto.

The Nominating and Governance Committee functions are to identify persons qualified to serve as members of the Board of Directors, to recommend to the Board of Directors persons to be nominated by the board for election as directors at the annual meeting of stockholders and persons to be elected by the board to fill any vacancies, and recommend to the Board the Directors persons to be appointed to each of its committees. In addition, the Nominating and Governance Committee is responsible for developing and recommending to the Board of Directors a set of corporate governance guidelines applicable to the Company (as well as reviewing and reassessing the adequacy of such guidelines as it deems appropriate from time to time) and overseeing the annual self-evaluation of the Board of Directors. The charter of the Nominating and Governance Committee is available on the Company’s website at www.tecogen.com and is included as Exhibit No. 99.3 hereto.

Director Compensation

Each director who is not also one of our employees will receive a fee of $500 per day for service on those days that our Board of Directors and or each of the Audit, Compensation or Nominating and Governance Committees hold meetings, or otherwise conduct business. Non-employee directors also will be eligible to receive stock or options awards under our 2011 Stock Incentive Plan, as amended, or the Stock Plan. We reimburse all of our non-employee directors for reasonable travel and other expenses incurred in attending Board of Directors and committee meetings. Any director who is also one of our employees receives no additional compensation for serving as a director. Our

non-employee directors did not receive any compensation in cash prior to or during 2010 because prior to filing this registration statement the compensation of directors was only in stock awards.

Board Leadership Structure

We separate the roles of Chief Executive Officer and Chairman in recognition of the differences between the two roles. Our Chief Executive Officer is responsible for setting the strategic direction for the Company and the overall leadership and performance of the Company. Our Chairman provides guidance to the Chief Executive Officer, sets the agenda for Board of Director meetings, presides over meetings of the full Board of Directors and leads all executive meetings of the independent directors. We are a small company with a small management team, and we feel the separation of these roles enhances high-level attention to our business.

TECOGEN INC.

Our Board of Directors Role in Risk Oversight

Our Board of Directors oversees our risk management processes directly and through its committees. Our management is responsible for risk management on a day-to-day basis. The Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to risk management in the areas of financial reporting, internal controls and compliance with legal and regulatory requirements, and discusses policies with respect to risk assessment and risk management, including guidelines and policies to govern the process by which the Company's exposure to risk is handled. The Compensation Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs. The Nominating and Governance Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors, and corporate governance.

Code of Business Conduct and Ethics

The Company has adopted a code of business conduct and ethics that applies to the Company's directors, officers and employees. The Company's code of business conduct and ethics is intended to promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; full, fair, accurate, timely and understandable disclosure in reports and documents that the Company files with, or submits to, the SEC and in other public communications made by the Company; compliance with applicable governmental laws, rules and regulations; prompt internal reporting of violations of the code of business conduct and ethics to an appropriate person or persons identified in the code of business conduct and ethics; and accountability for adherence to the code of business conduct and ethics. The Company's code of business conduct and ethics is available on the Company's website at www.tecogen.com and is included as Exhibit No. 14.1 hereto.

TECOGEN INC.

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

Executive Compensation.

The Compensation Committee and Board of Directors construct policies and guidelines regarding executive compensation. The major components of executive compensation will be base salary, annual incentive bonuses, equity incentive awards and customary employee benefits. Among the factors likely to be relevant are:

- the executive officer's skills and experience;
- the particular importance of the executive officer's position to us;
- the executive officer's individual performance;
- the executive officer's growth in his or her position; and
- base salaries for comparable positions within our Company and at other companies.

Our Compensation Committee performs evaluations of our executive officers' compensation at least annually and may solicit the input of a compensation consulting firm and peer group benchmarking data in making any adjustments believed to be appropriate.

The following table sets forth information with respect to the compensation of our executive officers as of December 31, 2012:

Summary Compensation Table

Name and principal position	Year	Salary ($)	Bonus ($)	Stock awards ($)	Option awards ($)(1)	All other compensation ($)	Total ($)
John N. Hatsopoulos	2012	1	—	—	—	—	1
Chief Executive Officer	2011	1	—	—	—	—	1
(Principal Executive Officer)	2010	1	—	—	—	—	1
Robert A. Panora (2)(3)	2012	163,770	—	—	—	1,032	164,802
Chief Operating Officer and President	2011	163,770	—	—	123,408	1,032	288,210
	2010	163,770	—	—	—	1,032	164,802
Bonnie J. Brown (4)(5)	2012	156,000	—	—	—	360	156,360
Chief Financial Officer and Secretary	2011	156,000	—	—	—	360	156,360
(Principal Financial Officer)	2010	156,000	—	—	24,446	360	180,806
Anthony S. Loumidis (6) (7)	2012	25,091	—	—	—	—	25,091
Vice President and Treasurer	2011	12,994	10,000	—	37,022	—	60,016
	2010	—	—	—	—	—	—

(1) The amounts in the “Stock Option Awards” column reflect the aggregate grant date fair value of the awards computed in accordance with FASB ASC Topic 718. The assumptions used by us with respect to the valuation of stock and option awards are set forth in Note 10 – Stockholders’ equity to our financial statements included elsewhere in this registration statement.

(2) Includes stock option award to purchase 500,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 15, 2011, with 125,000 of the shares vesting on February 15, 2012 and then an additional 125,000 shares on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

(3) Includes group life insurance of $1,032 for 2011 and 2010, respectively.

TECOGEN INC.

(4) Includes stock option award to purchase 100,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 18, 2010, with 25,000 of the shares vesting on February 18, 2011 and then an additional 25,000 shares on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

(5) Includes group life insurance of $360 for 2011 and 2010.

(6) Includes stock option award to purchase 150,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 15, 2011, with 25,000 of the shares vesting on February 15, 2012 and then an additional 25,000 shares on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

(7) Mr. Loumidis resigned as Vice President and Treasurer of the Company effective December 31, 2012.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information with respect to outstanding equity awards held by our executive officers as of December 31, 2012:

	Option awards				Stock awards	
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested ($)(1)
John N. Hatsopoulos	—	—	—	—	—	—
Robert A. Panora (2)(3)	—	500,000	0.65	2/14/2021	553,400	442,720
Bonnie J. Brown (4)(5)	100,000	—	0.30	2/13/2015	50,000	40,000
Bonnie J. Brown (6)	150,000	50,000	0.50	3/11/2019	—	—
Bonnie J. Brown (7)	50,000	50,000	0.65	2/18/2020	—	—
Anthony S. Loumidis (8)(9)	20,000	—	0.30	2/24/2014	30,000	24,000
Anthony S. Loumidis (10)	100,000	—	0.30	9/29/2015	—	—
Anthony S. Loumidis (11)	75,000	—	0.30	2/13/2015	—	—
Anthony S. Loumidis (12)	37,500	112,500	0.65	2/14/2021	—	—

(1) Market value of shares of stock that have not vested is computed on the last private placement price of the Company's Common Stock on November 30, 2011, which was $0.80 per share.

(2) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Panora's continued employment and subject to acceleration of vesting upon a change in control.

(3) Includes 553,400 shares of restricted Common Stock at a purchase price of $.001 per share granted on December 4, 2006, with 100% of the shares vesting one year after the Company's initial public offering, subject to acceleration of vesting upon a change in control prior to a termination event.

(4) Includes stock option award granted on February 13, 2008, with 25% of the shares vesting on February 13, 2009 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's continued employment and subject to acceleration of vesting upon a change in control.

(5) Includes 50,000 shares of restricted Common Stock at a purchase price of $.001 per share granted on December 13, 2006, with 100% of the shares vesting one year after the Company's initial public offering, subject to acceleration of vesting upon a change in control prior to a termination event.

(6) Includes stock option award granted on March 11, 2009, with 25% of the shares vesting on March 11, 2010 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's

continued employment and subject to acceleration of vesting upon a change in control.

(7) Includes stock option award granted on February 28, 2010, with 25% of the shares vesting on February 28, 2011 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's continued employment and subject to acceleration of vesting upon a change in control.

(8) Includes stock option award granted on February 24, 2004, with 25% of the shares vesting on February 24, 2005 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Loumidis continued employment and subject to acceleration of vesting upon a change in control.

(9) Includes 30,000 shares of restricted Common Stock at a purchase price of $.001 per share granted on December 13, 2006, with 100% of the shares vesting one year after the Company's initial public offering, subject to acceleration of vesting upon a change in control prior to a termination event.

TECOGEN INC.

(10) Includes stock option award granted on September 29, 2005, with 25% of the shares vesting on September 29, 2006 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to continued employment of Mr. Loumidis and subject to acceleration of vesting upon a change in control.

(11) Includes stock option award granted on February 13, 2008, with 25% of the shares vesting on February 13, 2009 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to continued employment of Mr. Loumidis and subject to acceleration of vesting upon a change in control.

(12) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to continued employment of Mr. Loumidis and subject to acceleration of vesting upon a change in control.

Director Compensation

Each director who is not also one of our employees will receive a fee of $500 per day for service on those days that our Board of Directors and or each of the Audit, Compensation or Nominating and Governance Committees hold meetings, or otherwise conduct business. Non-employee directors also will be eligible to receive stock or options awards under our equity incentive plan. We reimburse all of our non-employee directors for reasonable travel and other expenses incurred in attending Board and committee meetings. Any director who is also one of our employees receives no additional compensation for serving as a director.

Our non-employee directors did not receive any compensation in cash prior to or during 2010 because prior to filing this registration statement the compensation of directors was only in stock awards. The following table sets forth information with respect to the compensation of our directors as of December 31, 2012 and 2011:

Director Compensation

Name		Fees earned or paid in cash ($)	Stock awards ($)	Option awards ($)(1)	All other compensation ($)	Total ($)
Angelina M. Galiteva	2012	1,000	—	—	—	1,000
Angelina M. Galiteva (2)	2011	500	—	24,682	—	25,182
John N. Hatsopoulos	2012	—	—	—	—	—
John N. Hatsopoulos	2011	—	—	—	—	—
George N. Hatsopoulos	2012	—	—	—	—	—
George N. Hatsopoulos	2011	—	—	—	—	—
Ahmed F. Ghoniem	2012	1,000	—	—	—	1,000
Ahmed F. Ghoniem (3)	2011	—	—	24,682	—	24,682
Charles T. Maxwell	2012	1,000	—	—	—	1,000
Charles T. Maxwell (4)	2011	500	—	24,682	—	25,182
Joseph E. Aoun	2012	1,000	—	—	—	1,000
Joseph E. Aoun	2011	—	—	—	—	—

(1) The amounts in the "Stock Option Awards" column reflect the aggregate grant date fair value of the awards computed in accordance with FASB ASC Topic 718. The assumptions used by us with respect to the valuation of stock and option awards are set forth in Note 10 – Stockholders' equity to our financial statements included elsewhere in this registration statement.

(2) Includes stock option award to purchase 100,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

(3) Includes stock option award to purchase 100,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

(4) Includes stock option award to purchase 100,000 shares of Common Stock at a purchase price of $0.65 per share granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the

TECOGEN INC.

shares vesting on each of the subsequent three anniversaries, subject to acceleration of vesting upon a change in control.

Outstanding Equity Awards at Fiscal Year-End Table

The following table summarizes the outstanding equity awards held by each director as of December 31, 2012:

	Option awards				Stock awards	
Name	Number of securities underlying unexercised options (#)exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested ($)(1)
Angelina M. Galiteva [2][3]	100,000	—	0.03	10/20/2013	100,000	80,000
Angelina M. Galiteva [4]	25,000	75,000	0.65	2/14/2021	—	—
John N. Hatsopoulos	—	—	—	—	—	—
George N. Hatsopoulos	—	—	—	—	—	—
Ahmed F. Ghoniem [5][6]	25,000	75,000	0.65	2/14/2021	100,000	80,000
Charles T. Maxwell [7][8]	25,000	75,000	0.65	2/14/2021	100,000	80,000
Joseph E. Aoun	—	—	—	—	—	—

(1) Market value of shares of Common Stock that have not vested is computed by the Company's most recent private placement of Common Stock on November 30, 2011, which was $0.80 per share.

(2) Includes stock option award granted on October 20, 2003, with 100% of the shares vesting on the date of the option grant.

(3) Includes 100,000 shares of restricted Common Stock at a purchase price of $.001 per share granted on December 13, 2006, with 100% of the shares vesting one year after the Company's initial public offering.

(4) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Ms. Galiteva serves as a director or consultant to the Company.

(5) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Ghoniem serves as a director or consultant to the Company.

(6) Includes 100,000 shares of restricted Common Stock at a purchase price of $.001 per share granted on October 1, 2008, with 100% of the shares vesting 180 days after the Company's initial public offering.

(7) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Maxwell serves as a director or consultant to the Company.

(8) Includes 100,000 shares of restricted Common Stock at a purchase price of $.001 per share granted on October 1, 2008, with 100% of the shares vesting 180 days after the Company's initial public offering.

There have been no other stock awards granted to date and none of such options have been exercised.

2011 Stock Option and Incentive Plan

The Company's Stock Plan provides for the grant of stock-based awards to employees, officers and directors of, and consultants or advisors to, the Company and its subsidiaries. The Stock Plan is included as Exhibit 10.4 hereto.

Under the Stock Plan, the Company may grant stock options, restricted stock and other stock-based awards. As of December 31, 2011, a total of 7,355,000 shares of Common Stock may be issued upon the exercise of options or other awards granted under the Stock Plan.

The Stock Plan is administered by the Board of Directors and the Compensation Committee. Subject to the provisions of the Stock Plan, the Board of Directors and the Compensation Committee each has the authority to select the persons, to whom awards are granted and determine the terms of each award, including the number of shares of Common Stock subject to the award. Payment of the exercise price of an award may be made in cash, in a “cashless exercise” through a broker, or if the applicable stock option agreement permits, shares of Common Stock or by any other method approved by the Board of

TECOGEN INC.

Directors or Compensation Committee. Unless otherwise permitted by the Company, awards are not assignable or transferable except by will or the laws of descent and distribution.

Upon the consummation of an acquisition of the business of the Company, by merger or otherwise, the Board of Directors shall, as to outstanding awards (on the same basis or on different bases as the Board of Directors shall specify), make appropriate provision for the continuation of such awards by the Company or the assumption of such awards by the surviving or acquiring entity and by substituting on an equitable basis for the shares then subject to such awards either (a) the consideration payable with respect to the outstanding shares of Common Stock in connection with the acquisition, (b) shares of stock of the surviving or acquiring corporation or (c) such other securities or other consideration as the Board of Directors deems appropriate, the fair market value of which (as determined by the Board of Directors in its sole discretion) shall not materially differ from the fair market value of the shares of Common Stock subject to such awards immediately preceding the acquisition. In addition to or in lieu of the foregoing, with respect to outstanding stock options, the Board of Directors may, on the same basis or on different bases as the Board of Directors shall specify, upon written notice to the affected optionees, provide that one or more options then outstanding must be exercised, in whole or in part, within a specified number of days of the date of such notice, at the end of which period such options shall terminate, or provide that one or more options then outstanding, in whole or in part, shall be terminated in exchange for a cash payment equal to the excess of the fair market value (as determined by the Board of Directors in its sole discretion) for the shares subject to such Options over the exercise price thereof. Unless otherwise determined by the Board of Directors (on the same basis or on different bases as the Board of Directors shall specify), any repurchase rights or other rights of the Company that relate to a stock option or other award shall continue to apply to consideration, including cash, that has been substituted, assumed or amended for a stock option or other award pursuant to these provisions. The Company may hold in escrow all or any portion of any such consideration in order to effectuate any continuing restrictions.

The Board of Directors may at any time provide that any stock options shall become immediately exercisable in full or in part, that any restricted stock awards shall be free of some or all restrictions, or that any other stock-based awards may become exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

The Board of Directors or Compensation Committee may, in its sole discretion, amend, modify or terminate any award granted or made under the Stock Plan, so long as such amendment, modification or termination would not materially and adversely affect the participant.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2011, regarding Common Stock that may be issued under the Company’s equity compensation plans.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in second column)
Equity compensation plans approved by security holders	4,431,000	$ 0.49	595,732
Equity compensation plans not approved by security holders	—	—	—
Total	4,431,000	$ 0.49	595,732

In February 2011, our management conducted an assessment of the risks associated with our compensation policies and practices. This process included a review of our compensation programs, a discussion of the types of practices that could be reasonably likely to create material risks, and an analysis of the potential effects on the Company on related risks as a whole.

Although we reviewed all of our compensation programs, we paid particular attention to programs involving incentive-based payouts and programs that involve our executive officers. During the course of our assessment, we consulted with the Compensation Committee of our Board of Directors.

We believe that our compensation programs are designed to create appropriate incentives without encouraging excessive risk taking by our employees. In this regard, our compensation structure contains various features intended to mitigate risk. For example:

TECOGEN INC.

- None of our executive officers receives any performance-based compensation or incentive payments.
- A portion of the compensation package for our sales-based employees consists of commissions for units sold and installed, which package is designed to link an appropriate portion of compensation to long-term performance, while providing a balanced compensation model overall.
- The Compensation Committee oversees our compensation policies and practices and is responsible for reviewing and approving executive compensation, annual incentive compensation plans applicable to sales employees and other compensation plans.

Our Compensation Committee, in its evaluation, determined that it does not believe that the Company employs any compensation plans or practices that create incentives for employees to deliver short-term profits at the expense of generating systematic risks for the Company. Based on this and the assessment described above, we have concluded that the risks associated with our compensation policies and practices are not reasonably likely to have material adverse effect on the Company.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our Board of Directors or its Compensation Committee. None of the current members of the Compensation Committee of our Board of Directors has ever been one of our employees.

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

None of our executive officers has an employment contract or change-in-control arrangement, other than stock and option awards that contain certain change-in-control provisions such as accelerated vesting due to acquisition. In the event an acquisition that is not a private transaction occurs while the optionee maintains a business relationship with the Company and the option has not fully vested, the option will become exercisable for 100% of the then number of shares as to which it has not vested and such vesting to occur immediately prior to the closing of the acquisition.

The stock and option awards that would vest for each named executive if a change-in-control were to occur are disclosed under our Outstanding Equity Awards at Fiscal Year-End Table. Specifically, as of December 31, 2011, Robert A. Panora, our Chief Operating Officer and President, had 500,000 stock options and 533,400 shares of restricted stock that had not vested, Bonnie J. Brown, our Chief Financial Officer, had 200,000 stock options and 50,000 shares of restricted stock that had not vested and Anthony S. Loumidis, our former Vice President and Treasurer, had 168,750 stock options and 30,000 shares of restricted stock that had not vested.

Our stock and option awards contain certain change-in-control provisions. Descriptions of those provisions are set forth below:

Stock Awards Change-in-Control Definition

Change-in-Control shall mean (a) the acquisition in a transaction or series of transactions by any person (such term to include anyone deemed a person under Section 13(d)(3) of the Exchange Act), other than the Company or any of its subsidiaries, or any employee benefit plan or related trust of the Company or any of its subsidiaries, of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of fifty percent (50%) or more of the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors; provided a Change-in-Control shall not occur solely as the result of an initial public offering or

(b) the sale or other disposition of all or substantially all of the assets of the Company in one transaction or series of related transactions.

Option Awards Change-in-Control Definition

Accelerated vesting due to acquisition. In the event an acquisition that is not a private transaction occurs while the optionee maintains a business relationship with the Company and this option has not fully vested, this option shall become exercisable for 100% of the then number of shares as to which it has not vested, such vesting to occur immediately prior to the closing of the acquisition.

TECOGEN INC.

Definitions. The following definitions shall apply to certain terms used in this Section:

Acquisition means (i) the sale of the Company by merger in which the stockholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); or (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Board. Business relationship means service to the Company or its successor in the capacity of an employee, officer, director or consultant.

Private transaction means any acquisition where the consideration received or retained by the holders of the then outstanding capital stock of the Company does not consist of (i) cash or cash equivalent consideration, (ii) securities which are registered under the Securities Act, or any successor statute and/or (iii) securities for which the Company or any other issuer thereof has agreed, including pursuant to a demand, to file a registration statement within ninety (90) days of completion of the transaction for resale to the public pursuant to the Securities Act.

Director Independence

The Company’s policy is that a majority of our Board of Directors shall be “independent” in accordance with NYSE MKT rules (even though the Company is not currently subject to those requirements) including, in the judgment of the Board of Directors, the requirement that such directors have no material relationship with the Company (either directly or as a partner, stockholder or officer of an organization that has a relationship with the Company). The Board of Directors has adopted the following standards to assist it in determining whether a director has a material relationship with the Company. Under these standards, a director will not be considered to have a material relationship with the Company if he or she is not:

(a) a director who is, or during the past three years was, employed by the company, other than prior employment as an interim executive officer (provided the interim employment did not last longer than one year);

(b) a director who accepted or has an immediate family member who accepted any compensation from the company in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than the following:

(i) compensation for board or board committee service;

(ii) compensation paid to an immediate family member who is an employee (other than an executive officer) of the company;

(iii) compensation received for former service as an interim executive officer (provided the interim employment did not last longer than one year); or

(iv) benefits under a tax-qualified retirement plan, or non-discretionary compensation;

(c) a director who is an immediate family member of an individual who is, or at any time during the past three years was, employed by the company as an executive officer;

(d) a director who is, or has an immediate family member who is, a partner in, or a controlling shareholder or an executive officer of, any organization to which the company made, or from which the company received, payments (other than those arising solely from investments in the company's securities or payments under non-discretionary charitable contribution matching programs) that exceed 5% of the organization's consolidated gross revenues for that year, or $200,000, whichever is more, in any of the most recent three fiscal years;

(e) a director who is, or has an immediate family member who is, employed as an executive officer of another entity where at any time during the most recent three fiscal years any of the issuer's executive officers serve on the compensation committee of such other entity; or

(f)

a director who is, or has an immediate family member who is, a current partner of the company's outside auditor, or was a partner or employee of the company's outside auditor who worked on the company's audit at any time during any of the past three years.

Ownership of a significant amount of the Company’s stock, by itself, does not constitute a material relationship. For relationships not covered by these standards, the determination of whether a material relationship exists shall be made by the other members of the Board of Directors who are independent (as defined above).

TECOGEN INC.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of February 11, 2013 , certain information with respect to the beneficial ownership of the Company's Common Stock by (1) any person including any “group” as set forth in Section 13(d)(3) of the Exchange Act, known by us to be the beneficial owner of more than 5% of our Common Stock, (2) each director, (3) each of our executive officers and (4) all of our current directors and executive officers as a group. The percentages in the following table are based on 54,417,854 shares of Common Stock issued and outstanding as of February 11, 2013 .

Name and address of beneficial owner [1]	Amount and Nature of Beneficial Ownership	Percent of Class	
5% Stockholders:			
John N. Hatsopoulos (2)	14,875,350	27.3	%
George N. Hatsopoulos (3)	14,206,077	26.0	%
RBC Cees Nominees Limited (4)	3,616,418	6.6	%
Joseph J. Ritchie (5)	3,586,449	6.6	%
Directors and Officers:			
John N. Hatsopoulos (2)	14,875,350	27.3	%
George N. Hatsopoulos (3)	14,206,077	26.0	%
Robert A. Panora (6)	778,400	1.4	%
Bonnie J. Brown (7)	350,000	0.6	%
Charles T. Maxwell (8)	325,000	0.6	%
Angelina M. Galiteva (9)	225,000	0.4	%
Ahmed F. Ghoniem (10)	125,000	0.2	%
Joseph E. Aoun	—	—	%
All executive officers and directors as a group (8 persons)	30,884,827	56.6	%

(1) The address of the directors and officers listed in the table above is: c/o Tecogen Inc., 45 First Avenue, Waltham, Massachusetts 02451.

(2) Includes:(a) 8,540,838 shares of Common Stock held by J&P Enterprises LLC for the benefit of: (1) John N. Hatsopoulos and (2) Patricia L. Hatsopoulos. John N. Hatsopoulos is the Executive Member of J&P Enterprises LLC and has voting and investment power; (b) 2,375,077 shares of Common Stock held by John N. Hatsopoulos and his wife, Patricia L. Hatsopoulos, as joint tenants with rights of survivorship, each of whom share voting and investment power; and (c) 3,959,435 shares of Common Stock held by The John N. Hatsopoulos Family Trust 2007 for the benefit of: (1) Patricia L. Hatsopoulos, (2) Alexander J. Hatsopoulos, and (3) Nia Marie Hatsopoulos, for which Dr. George N. Hatsopoulos and Ms. Patricia L. Hatsopoulos are the trustees.

(3) Includes: (a) 5,968,504 shares of Common Stock, directly held by Dr. George N. Hatsopoulos; (b) 7,934,350 shares of Common Stock; held by Dr. Hatsopoulos and his wife, Daphne Hatsopoulos, as joint tenants, each of whom share voting and investment power; and (c) 303,223 shares of Common Stock issuable upon conversion of $90,967 principal amount of 6% convertible debentures. This amount does not include 2,272,391 shares held in the 1994 Hatsopoulos Family Trust for the benefit of Dr. and Mrs. Hatsopoulos’ adult children, for whom Ms. Daphne Hatsopoulos and Mr. Gordon Erhlich are the trustees. Dr. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.

(4) Includes 3,616,418 shares of Common Stock purchased in August 2010 and November 2011 held by RBC cees Nominees Ltd. The address of RBC cees Nominees Ltd. is 19-21 Broad Street, St. Hellier, Jersey JE1 3PB,

Channel Islands.

(5) Includes 3,586,449 shares of Common Stock, directly held by Mr. Ritchie. The address of Mr. Ritchie is 2100 Enterprise Avenue, Geneva, IL 60134.

(6) Includes: (a) 653,400 shares of Common Stock, directly held by Mr. Panora, and (b) options to purchase 125,000 shares of Common Stock exercisable within 60 days of the date of this prospectus.

TECOGEN INC.

(7) Includes: (a) 50,000 shares of Common Stock, and (b) options to purchase 300,000 shares of Common Stock exercisable within 60 days of the date of this prospectus.

(8) Includes: (a) 300,000 shares of Common Stock, directly held by Mr. Maxwell, and (b) options to purchase 25,000 shares of Common Stock exercisable within 60 days of the date of this prospectus.

(9) Includes: (a) 100,000 shares of Common Stock, and (b) options to purchase 125,000 shares of Common Stock exercisable within 60 days of the date of this prospectus.

(10) Includes: (a) 100,000 shares of Common Stock, and (b) options to purchase 25,000 shares of Common Stock exercisable within 60 days of the date of this prospectus.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company has five affiliated companies: (a) American DG Energy, a publicly traded company that distributes, owns and operates on-site energy systems that produce electricity, hot water, heat and cooling in the United States, (b) EuroSite Power, a publicly registered company that distributes, owns and operates on-site energy systems that produce electricity, hot water, heat and cooling in the United Kingdom and Europe, (c) GlenRose Instruments, a company that provides radiological services, operates a radiochemistry laboratory network and provides radiological characterization and analysis, hazardous, radioactive and mixed waste management, facility, environmental, safety, and industrial hygiene health management, (d) Pharos, a private company that offers investment services in the healthcare sector, and (e) Levitronix a worldwide leader in magnetically levitated bearingless motor technology, specializing in supplying medical blood pumps to the medical community and ultra-pure fluid handling devices for microelectronics, life science and industrial applications.

These companies are affiliates because several of the major stockholders of those companies, have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix. The business of GlenRose Instruments, Pharos and Levitronix is not related to the business of the Company.

American DG Energy, EuroSite Power, GlenRose Instruments, Pharos and Levitronix are affiliated companies by virtue of common ownership. The common stockholders include:

- John N. Hatsopoulos, the Company’s Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 11.5% of the company’s common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 6.8% of the company’s common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of the company’s common stock.
- Dr. George N. Hatsopoulos, who is John N. Hatsopoulos’ brother, and is also: (a) a director of American DG Energy and holds 14% of the company’s common stock; (b) an investor in Ilios and holds 3.1% of the company’s common stock; (c) an investor of GlenRose Instruments and holds 15.7% of the company’s common stock; (d) founder and investor of Pharos and holds 24.4% of the company’s common stock; and (e) an investor of Levitronix and holds 21.4% of the company’s common stock.

Additionally, the following related persons had or may have a direct or indirect material interest in our transactions with our affiliated companies:

- Barry J. Sanders, who is: (a) the President and Chief Operating Officer of American DG Energy, (b) the Chief Executive Officer and a director of EuroSite Power and (c) the Chairman of Ilios.
- Anthony S. Loumidis, the Company’s former Vice President and Treasurer who is: (a) the Chief Financial Officer Secretary and Treasurer of American DG Energy, (b) the Chief Financial Officer Secretary and Treasurer of EuroSite

Power, (c) the Chief Financial Officer Secretary and Treasurer of GlenRose Instruments and (d) the Treasurer of Ilios.

American DG Energy has sales representation rights to the Company's products and services in New England. Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2011 and 2010 amounted to $713,267 and $1,658,471, respectively and revenue for the nine months ended September 30, 2012 and 2011 amounted to $1,596,420 and $334,227, respectively .

TECOGEN INC.

On October 20, 2009, American DG Energy, in the ordinary course of its business, signed a Sales Representative Agreement with Ilios to promote, sell and service the Ilios high-efficiency heating products, such as the high efficiency water heater, in the marketing territory of the New England States, including Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine. The marketing territory also includes all of the nations in the European Union. American DG Energy also has non-exclusive rights to distribute the Ilios heat pump in the remaining parts of the United States and the world using the On-Site Utility business model. The initial term of this Agreement is for five years, after which it may be renewed for successive one-year terms upon mutual written agreement. American DG Energy has not yet sold any products under this Agreement and, therefore, no amounts have been required to be paid.

On September 24, 2001, the Company entered into subscription agreements with investors for the sale of convertible debentures. The primary investors were George N. Hatsopoulos, who subscribed for $200,000 of the debentures, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, who subscribed for a total amount of $100,000 of the debentures. The debentures accrue interest at a rate of 6% per annum and are due on September 24, 2007. The debentures are convertible, at the option of George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, into shares of Common Stock at a conversion price of $0.30 per share.

On September 24, 2007, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children agreed to extend the debenture term to September 24, 2011. On May 11, 2009, George N. Hatsopoulos converted a portion of the principal in the amount of $109,033 of the debentures and accrued interest in the amount of $90,967 into 400,000 shares of Common Stock in the Company's newly formed subsidiary, Ilios, at $0.50 per share. Also, on May 11, 2009, John N. Hatsopoulos converted principal amount of $427,432 in demand notes payable and accrued interest in the amount of $72,567 into 1,000,000 shares of Ilios Common Stock at $0.50 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, Joseph J. Ritchie elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 148,111 shares of Common Stock at a conversion price of $0.30 per share. On September 24, 2011, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, agreed to extend their term to September 24, 2013 and requested that accrued interest in the amount of $72,959 be converted into the Company's Common Stock at $0.50 per share (which was the average price of the Company's stock from September 24, 2001 to September 24, 2011).

On September 10, 2008 the Company entered into a demand note agreement with John N. Hatsopoulos, in the principal amount of $250,000 at an annual interest rate of 5%. On September 7, 2011 the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $750,000 at an annual interest rate of 6%. Unpaid principal and interest on the demand notes is due upon demand.

Additional disclosure on the Company's debt is set forth in Note 7 – Demand notes payable and convertible debentures – related party to our financial statements included in our registration statement.

John N. Hatsopoulos' salary is $1.00 per year. On average, Mr. Hatsopoulos spends approximately 20% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

On January 1, 2006, the Company signed a Facilities and Support Services Agreement with American DG Energy for a period of one year, renewable annually by mutual agreement. That agreement was amended on July 1, 2012. Under

this agreement, the Company provides American DG Energy with certain office and business support services and also provides pricing based on a volume discount depending on the level of American DG Energy purchases of cogeneration and chiller products. For certain sites, American DG Energy hires the Company to service its chiller and cogeneration products. The Company also provides office space and certain utilities to American DG Energy based on a monthly rate set in the beginning of each year. The monthly rate from January 1, 2012, through December 31, 2012 is $5,053. Also, under this agreement, American DG Energy has sales representation rights to the Company's products and services in New England. This agreement is included as Exhibit No. 10.6 hereto, portions of which are omitted and filed separately on a confidential basis.

The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements. For the years ended December 31, 2011 and 2010, the Company received $28,908 and $27,080 from American DG Energy, respectively, and $156,688 and $169,386, from Levitronix LLC and Alexandros Partners LLC. In addition, for the years ended December 31, 2011 and 2010, the Company received $95,513 and $39,232 from American DG Energy, respectively, and $129,187 and $102,818, from Levitronix LLC and Alexandros Partners LLC, to offset common operating expenses incurred in the administration and maintenance of its corporate office and warehouse facility.

TECOGEN INC.

Alexandros Partners LLC is a financial advisory firm providing consulting services to early stage entrepreneurial ventures. John N. Hatsopoulos, the Company's CEO, was a Managing Partner of Alexandros Partners LLC from September 2000 until his resignation on December 31, 2011. Also, Anthony S. Loumidis, the Company's former Vice President and Treasurer, was the President of Alexandros Partners LLC from September 2000 until his resignation on December 31, 2011. As of December 31, 2011, John N. Hatsopoulos and Anthony S. Loumidis do not hold any position nor are they owners of Alexandros Partners LLC.

Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2011 and 2010 amounted to $713,267 and $1,658,471, respectively, and revenue for the period ending September 30, 2012 amounted to $1,596,420. In addition, Tecogen pays certain operating expenses, including benefits and insurance, on behalf of American DG Energy. Tecogen was reimbursed for these costs. As of December 31, 2011 and 2010, the total amount due from American DG Energy was $299,739 and $98,230, respectively, and as of September 30, 2012 amounted to $441,464.

EuroSite Power purchases the majority of its energy equipment from American DG Energy, its parent. American DG Energy owns 82.8% of the Common Stock of EuroSite Power. American DG Energy purchases the majority of its energy systems from the Company.

For additional disclosure related to our related parties and related party transactions see Note 7 - Related party transactions to our financial statements included in our registration statement.

Policies and Procedures for Related Person Transactions

Our Board of Directors will adopt a written related person transaction policy to set forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, the amount involved exceeds $120,000, and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness, and employment by us of a related person.

Any related person transaction proposed to be entered into by us will be required to be reported to our Chief Financial Officer and will be reviewed and approved by the Audit Committee in accordance with the terms of the policy, prior to effectiveness or consummation of the transaction, whenever practicable. If our Chief Financial Officer determines that advance approval of a related person transaction is not practicable under the circumstances, the Audit Committee will review and, in its discretion, may ratify the related person transaction at the next meeting of the audit committee, or at the next meeting following the date that the related person transaction comes to the attention of our Chief Financial Officer. Our Chief Financial Officer, however, may present a related person transaction arising in the time period between meetings of the Audit Committee to the chair of the Audit Committee, who will review and may approve the related person transaction, subject to ratification by the Audit Committee at the next meeting of the Audit Committee.

In addition, any related person transaction previously approved by the Audit Committee or otherwise already existing that is ongoing in nature will be reviewed by the Audit Committee annually to ensure that such related person transaction has been conducted in accordance with the previous approval granted by the Audit Committee, if any, and that all required disclosures regarding the related person transaction are made.

Transactions involving compensation of executive officers will be reviewed and approved by the Compensation Committee in the manner specified in the charter of the Compensation Committee.

A related person transaction reviewed under this policy will be considered approved or ratified if it is authorized by the Audit Committee in accordance with the standards set forth in our related person transaction policy after full disclosure of the related person's interests in the transaction. As appropriate for the circumstances, the Audit Committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of business;

TECOGEN INC.

- whether the transaction with the related person is proposed to be, or was, entered into on terms no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to stockholders in light of the circumstances of the particular transaction.

The Audit Committee will review all relevant information available to it about the related person transaction. The audit committee may approve or ratify the related person transaction only if the audit committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. The audit committee may, in its sole discretion, impose conditions as it deems appropriate on us or the related person in connection with approval of the related person transaction.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of Common Stock being offered by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our Common Stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

We are subject to the reporting and information requirements of the Exchange Act and, as a result, we will intend to file periodic and current reports, proxy statements and other information with the SEC. You may read and copy any reports, statements, or other information we file at the SEC's Public Reference Room at 100 F. Street, N.E., Washington D.C. 20549, on official business days during the hours of 10:00 am to 3:00 pm. You can request copies of these documents, upon payment of a duplicating fee by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to the public on the SEC's Internet site at http\\www.sec.gov.

TECOGEN INC.

FINANCIAL STATEMENTS

The Financial Statements included below are stated in U.S. dollars and are prepared in accordance with U.S. Generally Accepted Accounting Principles. The following table summarizes the relevant financial data for our business and should be read with our financial statements, which are included in this registration statement.

Unaudited Interim Financial Statements

Condensed Consolidated Balance Sheets as of September 30, 2012 and December 31, 2011	F-2
Condensed Consolidated Statements of Operations for the nine months ended September 30, 2012 and 2011	F-3
Condensed Consolidated Statements of Stockholders' Equity for the nine months ended September 30, 2012	F-4
Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2012 and 2011	F-5
Consolidated Notes to Financial Statements	F-6
Audited Financial Statements	
Report of Independent Registered Public Accounting Firm McGladrey and Pullen, LLP	F-15
Consolidated Balance Sheets as of December 31, 2011 and 2010	F-16
Consolidated Statements of Operations for the years ending December 31, 2011 and 2010	F-17
Consolidated Statements of Changes in Stockholders’ Equity for the years ending December 31, 2011 and 2010	F-18
Consolidated Statements of Cash Flows for the years ending December 31, 2011 and 2010	F-19
Consolidated Notes to Financial Statements	F-20

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, or are inapplicable, and therefore have been omitted.

Unaudited Interim Financial Statements

TECOGEN INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
As of September 30, 2012 and December 31, 2011
(unaudited)

	September 30, 2012 (unaudited)	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$684,896	$3,018,566
Restricted short-term investments	181,580	683,428
Accounts receivable, net	1,937,667	1,399,232
Inventory, net	4,047,062	2,568,986
Due from related party	441,464	299,739
Prepaid and other current assets	445,467	112,716
Total current assets	7,738,136	8,082,667
Property, plant and equipment, net	432,215	385,779
Intangible assets, net	309,986	241,621
Other assets	35,425	35,425
TOTAL ASSETS	$8,515,762	$8,745,492
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Demand notes payable, related party	$1,037,500	$1,037,500
Current portion of convertible debentures, related party	90,967	—
Accounts payable	905,640	812,214
Accrued expenses	604,091	727,463
Deferred revenue	873,475	509,283
Interest payable, related party	108,368	61,062
Total current liabilities	3,620,041	3,147,522
Long-term liabilities:		
Deferred revenue, net of current portion	149,418	183,839
Convertible debentures, related party	—	190,967
Total liabilities	3,769,459	3,522,328
Commitments and contingencies (Note 5)	—	—
Stockholders' equity:		
Tecogen Inc. stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 54,934,842 and 53,993,882 issued and outstanding at September 30, 2012 and December 31, 2011, respectively	54,935	53,994
Additional paid-in capital	16,575,435	15,486,775
Receivable from shareholder	(345,000)	(345,000)
Accumulated deficit	(11,632,657)	(10,122,766)
Total Tecogen Inc. stockholders' equity	4,652,713	5,073,003

Noncontrolling interest	93,590	150,161
Total stockholders' equity	4,746,303	5,223,164
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$8,515,762	$8,745,492

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

TECOGEN INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
For the Nine Months Ended September 30, 2012 and 2011
(unaudited)

	Nine Months Ended	
	September 30, 2012 (unaudited)	September 30, 2011 (unaudited)
Revenues		
Products	$4,191,439	$3,721,388
Services	5,498,545	4,992,840
	9,689,984	8,714,228
Cost of sales		
Products	2,803,296	2,349,945
Services	2,900,211	2,468,373
	5,703,507	4,818,318
Gross profit	3,986,477	3,895,910
Operating expenses		
General and administrative	4,851,398	4,495,533
Selling	915,842	381,617
	5,767,240	4,877,150
Loss from operations	(1,780,763)	(981,240)
Other income (expense)		
Interest and other income	38,380	25,262
Interest expense	(53,406)	(22,492)
	(15,026)	2,770
Loss before income taxes	(1,795,789)	(978,470)
Provision for income taxes	—	—
Consolidated net loss	(1,795,789)	(978,470)
Less: Loss attributable to the noncontrolling interest	285,898	192,359
Net loss attributable to Tecogen Inc.	(1,509,891)	(786,111)
Net loss per share - basic and diluted	$(0.03)	$(0.02)
Weighted average shares outstanding - basic and diluted	52,395,435	47,721,641

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

TECOGEN INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Nine Months Ended September 30, 2012
(unaudited)

	Tecogen Inc. Common Stock 0.001 Par Value	Additional Paid-In Capital	Shareholder Receivable	Accumulated Deficit	Noncontrolling Interest	Total
Balance at December 31, 2011	$53,994	$15,486,775	$(345,000)	$(10,122,766)	$150,161	$5,223,164
Sale of subsidiary common stock		289,605			210,395	500,000
Sale of common stock	600	479,400	—	—	—	480,000
Conversion of notes payable to common stock	333	99,667	—	—	—	100,000
Conversion of accrued interest on related party convertible notes to common stock	8	6,092	—	—	—	6,100
Stock based compensation expense	—	213,896	—	—	18,932	232,828
Net loss	—	—	—	(1,509,891)	(285,898)	(1,795,789)
Balance at September 30, 2012	$54,935	$16,575,435	$(345,000)	$(11,632,657)	$93,590	$4,746,303

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

TECOGEN INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Nine Months Ended September 30, 2012 and 2011
(unaudited)

	Nine Months Ended	
	September 30, 2012 (unaudited)	September 30, 2011 (unaudited)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(1,795,789)	$(978,470)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	150,751	115,487
Provision for losses on accounts receivable	—	6,658
Provision for inventory reserve	5,800	—
Stock-based compensation	232,828	326,036
Non-cash interest expense	6,100	—
Changes in operating assets and liabilities		
(Increase) decrease in:		
Restricted short-term investments	(4,497)	—
Accounts receivable	(538,435)	(56,119)
Inventory	(1,483,876)	(834,302)
Due from related party	(141,725)	57,248
Prepaid and other current assets	(332,751)	3,587
Increase (decrease) in:		
Accounts payable	93,426	(79,377)
Accrued expenses	(123,372)	(74,629)
Deferred revenue	329,771	(1,811)
Interest payable, related party	47,306	(50,467)
Net cash used in operating activities	(3,554,463)	(1,566,159)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(172,587)	(55,966)
Purchases of intangible assets	(92,965)	(1,881)
Purchases of short-term investments	—	(501,577)
Sale of short-term investments	506,345	85,000
Net cash provided by (used in) provided by investing activities	240,793	(474,424)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of demand notes payable	—	750,000
Proceeds from sale of common stock, net of costs	—	673,244
Proceeds from issuance of restricted stock	480,000	453
Proceeds from sale of subsidiary common stock	500,000	—
Net cash provided by financing activities	980,000	1,423,697
Net decrease in cash and cash equivalents	(2,333,670)	(616,886)
Cash and cash equivalents, beginning of the period	3,018,566	1,828,173
Cash and cash equivalents, end of the period	$684,896	$1,211,287

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

TECOGEN INC.

Notes to Interim Unaudited Condensed Consolidated Financial Statements for the nine months ended September 30, 2012

Note 1 – Description of business and summary of significant accounting policies:

Description of business

Tecogen Inc. (the "Company") (a Delaware Corporation) was organized on November 15, 2000, and acquired the assets and liabilities of the Tecogen Products division of Thermo Power Corporation. The Company produces commercial and industrial, natural-gas-fueled engine-driven, combined heat and power (CHP) products that reduce energy costs, decrease greenhouse gas emissions and alleviate congestion on the national power grid. The Company's products supply electric power or mechanical power for cooling, while heat from the engine is recovered and purposefully used at a facility. The majority of the Company's customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast.

Basis of Presentation

The unaudited condensed consolidated financial statements, or the Unaudited Financial Statements, presented herein have been prepared by the Company, without audit, and, in the opinion of management, reflect all adjustments (consisting of normal recurring adjustments) necessary for a fair statement of the interim periods presented. The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP, for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission, or the SEC, for reporting in this registration statement on Form S-1, or registration statement. Accordingly, certain information and footnote disclosures required for complete financial statements are not included herein. It is suggested that the Unaudited Financial Statements be read in conjunction with the consolidated financial statements and notes included elsewhere in this registration statement. The Company's operating results for the nine month period ended September 30, 2012 may not be indicative of the results expected for any succeeding interim periods or for the entire year ending December 31, 2012.

The Company follows the presentation requirements for noncontrolling interests required by ASC 810 Consolidation. Under ASC 810, earnings or losses attributed to the noncontrolling interests are reported as part of the consolidated earnings and not a separate component of income or expense. Noncontrolling interests in the net assets and operations of Ilios Inc., or Ilios, are reflected in the caption "Noncontrolling interest" in the accompanying consolidated financial statements. All intercompany transactions have been eliminated.

On May 4, 2009 the Company invested $8,400 in exchange for 8,400,000 shares of a newly established corporation Ilios. The investment gave the Company a controlling financial interest in Ilios whose business focus will be on advanced heating systems for commercial and industrial applications. On May 11, 2009 the Company sold 1,400,000 shares in Ilios at $0.50 per share to two of its existing stockholders in exchange for demand notes payable, convertible debentures and accrued interest (see "Note 7 – Related party"). On July 24, 2009 Ilios raised approximately $1,400,000 in a private placement with accredited investors. During the year ended December 31, 2011, the Company purchased an additional 1,500,000 shares of Ilios common stock at $0.50 per share. On January 19, 2012, an accredited investor purchased 1,000,000 shares of Ilios common stock at $0.50 per share. As of September 30, 2012 the Company owns a 62.45% interest in Ilios and has consolidated Ilios into its financial statements.

The accompanying consolidated financial statements include the accounts of the Company and its 62.45% owned subsidiary Ilios, whose business focus will be on advanced heating systems for commercial and industrial

applications.

The Company’s operations are comprised of one business segment. Our business is to manufacture and support highly efficient CHP products based on engines fueled by natural gas.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

TECOGEN INC.

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Generally, sales of cogeneration and chiller units and parts are recognized when shipped and services are recognized over the term of the service period. Payments received in advance of services being performed are recorded as deferred revenue.

Infrequently, the Company recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the buyer, the buyer has made a written fixed commitment to purchase the finished goods, the buyer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by the Company. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms are granted. For the periods ended September 30, 2012 and 2011, respectively, there were no bill and hold transactions.

For those arrangements that include multiple deliverables, the Company first determines whether each service or deliverable meets the separation criteria of FASB ASC 605-25, Revenue Recognition—Multiple-Element Arrangements. In general, a deliverable (or a group of deliverables) meets the separation criteria if the deliverable has stand-alone value to the customer and if the arrangement includes a general right of return related to the delivered item and delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Each deliverable that meets the separation criteria is considered a separate “unit of accounting”. The Company allocates the total arrangement consideration to each unit of accounting using the relative fair value method. The amount of arrangement consideration that is allocated to a delivered unit of accounting is limited to the amount that is not contingent upon the delivery of another unit of accounting.

When vendor-specific objective evidence or third-party evidence is not available, adopting the relative fair value method of allocation permits the Company to recognize revenue on specific elements as completed based on the estimated selling price. The Company generally uses internal pricing lists that determine sales prices to external customers in determining its best estimate of the selling price of the various deliverables in multiple-element arrangements. Changes in judgments made in estimating the selling price of the various deliverables could significantly affect the timing or amount of revenue recognition. The Company enters into sales arrangements with customers to sell its cogeneration and chiller units and related service contracts. Based on the fact that the Company sells each deliverable to other customers on a stand-alone basis, the Company has determined that each deliverable has a stand-alone value. Additionally, there are no rights of return relative to the delivered items; therefore, each deliverable is considered a separate unit of accounting.

After the arrangement consideration has been allocated to each unit of accounting, the Company applies the appropriate revenue recognition method for each unit of accounting based on the nature of the arrangement and the services included in each unit of accounting. Cogeneration and chiller units are recognized when shipped and services are recognized over the term of the applicable agreement or as provided when on a time and materials basis.

Presentation of Sales Taxes

The Company reports revenues net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions.

Shipping and Handling Costs

The Company classifies freight billed to customers as sales revenue and the related freight costs as cost of sales.

Advertising Costs

The Company expenses the costs of advertising as incurred. For the nine months ended September 30, 2012 and 2011, advertising expense was approximately $133,000 and $49,000, respectively.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. The Company has cash balances in certain financial institutions in amounts which occasionally exceed current federal deposit insurance limits. The financial stability of these institutions is continually reviewed by senior management. The Company believes it is not exposed to any significant credit risk on cash and cash equivalents.

TECOGEN INC.

Concentration of Credit Risk

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist of highly liquid cash equivalents and trade receivables. The Company's cash equivalents are placed with certain financial institutions and issuers. As of September 30, 2012, the Company had a balance of $216,622 in cash and cash equivalents and short term investments that exceeded the Federal Deposit Insurance Corporation limit of $250,000.

Short-Term Investments

Short-term investments consist of certificates of deposit with maturities of greater than three months but less than one year. Certificates of deposits are recorded at fair value.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management's evaluation of outstanding accounts receivable at the end of the period. Bad debts are written off against the allowance when identified. Allowance for doubtful accounts was $96,800 as of September 30, 2012 and December 31, 2011.

Inventory

Raw materials, work in process, and finished goods inventories are stated at the lower of cost, as determined by the average cost method, or net realizable value. The Company periodically reviews inventory quantities on hand for excess and/or obsolete inventory based primarily on historical usage, as well as based on estimated forecast of product demand. Any reserves that result from this review are charged to cost of sales. As of September 30, 2012 and December 31, 2011, there was a reserve against inventory in the amount of $364,600 and $358,800, respectively.

Property, Plant and Equipment and Depreciation and Amortization

Property, plant and equipment are recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the asset, which range from three to seven years. Leasehold improvements are amortized using the straight-line method over the lesser of the estimated useful lives of the assets or the term of the related leases. Expenditures for maintenance and repairs are expensed currently, while renewals and betterments that materially extend the life of an asset are capitalized.

Intangible Assets

Intangible assets subject to amortization include costs incurred by the Company to acquire product certifications and certain patent costs. These costs are amortized on a straight-line basis over the estimated economic life of the intangible asset, which range from seven to ten years. The Company reviews intangible assets for impairment when the circumstances warrant.

Research and Development Costs/Grants

Internal research and development expenditures are expensed as incurred. Proceeds from certain grants and contracts with governmental agencies and their contractors to conduct research and development for new CHP technologies or to improve or enhance existing technology is recorded as an offset to the related research and development expenses.

These grants and contracts are paid on a cost reimbursement basis provided in the agreed upon budget, with 10% retainage held to the end of the contract period. For the nine months ended September 30, 2012 and 2011, amounts received were approximately $101,400 and $184,200, respectively, which offset the Company's total research and development expenditures for each of the respective periods. As of September 30, 2012 and December 31, 2011, the retainage receivable was $124,350 and $90,735, respectively.

Stock-Based Compensation

Stock based compensation cost is measured at the grant date based on the estimated fair value of the award and is recognized as an expense in the consolidated statements of operations over the requisite service period. The fair value of stock options granted is estimated using the Black-Scholes option pricing valuation model. The Company recognizes compensation on a straight-line basis for each separately vesting portion of the option award. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. The determination of the fair value of share-based payment awards is affected by the Company's stock price. Since the Company is not publicly traded, the Company considered the sales

TECOGEN INC.

price of the Common Stock in private placements to unrelated third parties as a measure of the fair value of its Common Stock. The average expected life is estimated using the simplified method for “plain vanilla” options. The simplified method determines the expected life in years based on the vesting period and contractual terms as set forth when the award is made. The Company uses the simplified method for awards of stock-based compensation since it does not have the necessary historical exercise and forfeiture data to determine an expected life for stock options. The risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant. When options are exercised the Company normally issues new shares (see “Note 4 – Stock-based compensation”.)

Loss per Common Share

The Company computes basic loss per share by dividing net loss for the period by the weighted-average number of shares of Common Stock outstanding during the period. The Company computes its diluted earnings per common share using the treasury stock method. For purposes of calculating diluted earnings per share, the Company considers its shares issuable in connection with the convertible debentures, stock options and warrants to be dilutive Common Stock equivalents when the exercise/conversion price is less than the average market price of our Common Stock for the period.

Other Comprehensive Net Loss

The comprehensive net loss for the nine months ended September 30, 2012 and 2011 does not differ from the reported loss.

Segment Information

The Company reports segment data based on the management approach. The management approach designates the internal reporting that is used by management for making operating and investment decisions and evaluating performance as the source of the Company's reportable segments. The Company uses one measurement of profitability and does not disaggregate its business for internal reporting. The Company has determined that it operates in one business segment which manufactures and supports highly efficient CHP products based on engines fueled by natural gas.

The following table summarizes net revenue by product line and services for the nine months ended September 30, 2012 and 2011:

	2012	2011
Products:		
Cogeneration	$2,687,769	$1,889,436
Chiller	1,503,670	1,831,952
Total Product Revenue	4,191,439	3,721,388
Services	5,498,545	4,992,840
	$9,689,984	$8,714,228

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. The current or deferred tax consequences of transactions are measured by applying the provisions of enacted tax laws to determine the amount of

taxes payable currently or in future years. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities and expected future tax consequences of events that have been included in the financial statements or tax returns using enacted tax rates in effect for the years in which the differences are expected to reverse. Under this method, a valuation allowance is used to offset deferred taxes if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Management evaluates the recoverability of deferred taxes and the adequacy of the valuation allowance annually.

TECOGEN INC.

The Company has adopted the provisions of the accounting standards relative to accounting for uncertainties in tax positions. These provisions provide guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. The Company elected to recognize interest and penalties related to income tax matters as a component of income tax expense in the statements of operations. There was no impact on the financial statements as a result of this guidance.

Note 2 – Loss per common share:

Basic and diluted earnings per share for the nine months ended September 30, 2012 and 2011, respectively, were as follows:

	2012	2011
Loss available to stockholders	$(1,509,891)	$(786,111)
Weighted average shares outstanding - Basic and diluted	52,395,435	47,721,641
Basic and diluted loss per share	$(0.03)	$(0.02)
Anti-dilutive shares underlying stock options outstanding	4,431,000	4,401,000
Anti-dilutive convertible debentures	303,223	636,557

Note 3 – Demand notes payable and convertible debentures – related party:

Demand notes payable to related parties consist of various demand notes outstanding to stockholders totaling $1,037,500 at September 30, 2012 and December 31, 2011. The primary lenders are John N. Hatsopoulos, the Company’s Chief Executive Officer, who holds $1,000,000 of the demand notes as of September 30, 2012 and 2011. The demand notes accrue interest annually at rates ranging from 5% to 6%. Unpaid principal and interest on the demand notes is due upon demand by the lender.

On September 24, 2001, the Company entered into subscription agreements with three investors for the sale of convertible debentures in the aggregate principal amount of $330,000. The primary investors were George N. Hatsopoulos, a member of the board of directors, who subscribed for $200,000 of the debentures and John N. Hatsopoulos, the Company’s Chief Executive Officer, who subscribed for $100,000 of the debentures. The debentures accrue interest at a rate of 6% per annum and were originally due six years from issuance date. The debentures are convertible, at the option of the holder, into a number of shares of Common Stock as determined by dividing the original principal amount plus accrued and unpaid interest by a conversion price of $0.30.

On September 24, 2007, the holders of the debentures agreed to extend their term to September 24, 2011. On May 11, 2009, George N. Hatsopoulos converted a portion of the principal in the amount of $109,033 of the debentures and accrued interest in the amount of $90,967 into 400,000 shares of Common Stock in the Company’s newly formed subsidiary, Ilios, at $0.50 per share. Also, on May 11, 2009, John N. Hatsopoulos converted principal amount of $427,432 in demand notes payable and accrued interest in the amount of $72,567 into 1,000,000 shares of Ilios Common Stock at $0.50 per share. The difference between the Company’s purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On May 11, 2009 the Company sold 1,400,000 shares in Ilios at $0.50 per share to George Hatsopoulos and John Hatsopoulos in exchange for the extinguishment of $427,432 in demand notes payable, $109,033 in convertible debentures and $163,535 in accrued interest. The difference between the Company’s purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, a holder of the Company’s convertible debentures elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 148,111 shares of Common

Stock at a conversion price of $0.30 per share. On September 24, 2011, the remaining holders of the debentures agreed to extend their term to September 24, 2013, and requested that accrued interest in the amount of $72,959 be converted into the Company’s Common Stock at $0.50 per share (which was the average price of the Company’s Common Stock from September 24, 2001 to September 24, 2011).

On September 30, 2012, certain holders of the debentures converted the principal amount of $100,000 and accrued interest in the amount of $6,100 into 340,960 shares of the Company's Common Stock. At September 30, 2012 and December 31, 2011, there were 303,223 and 636,557 shares of Common Stock issuable upon conversion of the Company’s

TECOGEN INC.

outstanding convertible debentures, respectively. At September 30, 2012 and December 31, 2011, the principal amount of the Company's convertible debentures was $90,967 and $190,967, respectively.

On June 3, 2010, the Company issued a promissory note to an investor in the amount of $345,000. The note was due in full on June 3, 2012, and bears interest at the Bank Prime Rate plus three percent. Accrued interest is paid on a quarterly basis. The note is secured by 1,150,000 shares of the Company's Common Stock. On June 3, 2012, the Company amended the maturity date on that note to October 15, 2012. As of December 12, 2012 this investor paid $105,000 and sold 400,000 shares of Company stock to the Company at $0.60 per share which paid off the principal balance of the note. The Company retired the 400,000 shares.

Note 4 – Stock-based compensation:

In 2006, the Company adopted the 2006 Stock Option and Incentive Plan, or Plan, under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the Company. On October 1, 2008, the board unanimously amended the Plan, to increase the reserved shares of Common Stock issuable under the Plan from 4,000,000 to 5,000,000, or the Amended Plan. On February 18, 2010, the board amended the Amended Plan, to increase the reserved shares of Common Stock issuable from 5,000,000 to 7,000,000, and on November 10, 2011, the board further amended the Amended Plan by increasing the reserved shares of Common Stock issuable from 7,000,000 to 7,355,000.

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Amended Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan cannot be less than the fair market value of the underlying shares on the date of the grant. The number of shares remaining available for future issuance under the Amended Plan as of September 30, 2012 was 595,732.

Stock option activity for the nine months ended September 30, 2012 was as follows :

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2011	4,381,000	0.03-$0.70	$0.48	5.53 years	$1,387,150
Granted	50,000	—	0.80		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, September 30, 2012	4,431,000	0.03-$0.70	$0.49	4.83 years	$1,387,150
Exercisable, September 30, 2012	2,680,250		$0.38		$1,123,288
Vested and expected to vest, September 30, 2012	4,431,000		$0.49		$1,387,150

Restricted stock activity for the nine months ended September 30, 2012 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2011	1,933,268	$0.36
Granted	—	—

Vested	—	—
Forfeited	—	—
Unvested, September 30, 2012	1,933,268	$0.36

TECOGEN INC.

Stock Based Compensation - Ilios

In 2009, Ilios adopted the 2009 Stock Incentive Plan, or the Ilios Plan, under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the Company. The maximum number of shares allowable for issuance under the Plan is 2,000,000 shares of Common Stock. Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Plan cannot be less than the fair market value of the underlying shares on the date of the grant.

Stock option activity for the nine months ended September 30, 2012 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2011	525,000	$0.10-$0.50	$0.27	8.23 years	$120,000
Granted	50,000	$0.50	0.50		
Exercised	—	—			
Canceled and forfeited	—	—			
Expired	—	—			
Outstanding, September 30, 2012	575,000	$0.10-$0.50	$0.29	7.69 years	$120,000
Exercisable, September 30, 2012	56,250		$0.50		$—
Vested and expected to vest, September 30, 2012	575,000		$0.29		$120,000

Restricted stock activity for the nine months ended September 30, 2012 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2011	560,000	$0.24
Granted	—	—
Vested	—	—
Forfeited	—	—
Unvested, September 30, 2012	560,000	$0.24

Total stock-based compensation expense for the nine months ended September 30, 2012 and 2011 was $232,828 and $326,036, respectively. At September 30, 2012, the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is $279,571. This amount will be recognized over a weighted average period of 1.77 years. No tax benefit was recognized related to the stock-based compensation recorded during the periods.

Note 5 – Commitments and contingencies:

Future minimum lease payments under all non-cancelable operating leases as of September 30, 2012 consist of the following:

	2012	2013	2014	2015	Totals
Lease payments	$143,792	$546,042	$164,843	$10,130	$864,807

$143,792	$546,042	$164,843	$10,130	$864,807

For the nine months ended September 30, 2012 and 2011 rent expense was $329,021 and $291,155, respectively.

On October 26, 2011, the Company entered into an agreement with Digital Energy Corp., a customer of the Company, whereby the Company provided a letter of credit in the amount of $180,000, for the benefit of Digital Energy Corp., to satisfy a requirement of the New York Independent System Operator, Inc. A certificate of deposit for $180,000 secures the letter of credit. In exchange for providing this letter of credit, Digital Energy Corp. provided a promissory note to the Company for

TECOGEN INC.

$180,000, with interest at 6%, payable in monthly installments of interest only. Principal would only be owed if the letter of credit was drawn upon and would become due and payable on the first anniversary date of the note.

Note 6 – Noncontrolling interests

As of December 31, 2011 Tecogen owned 67.4% of Ilios. In January, 2012 an accredited investor purchased 1,000,000 shares of Ilios common stock at $0.50 per share for an aggregate amount of $500,000 which decreased Tecogen's ownership interest to 62.5%.

The table below presents the changes in equity resulting from net loss attributable to Tecogen and transfers to or from noncontrolling interests for the nine months ended September 30, 2012 and 2011.

Net loss attributable to Tecogen Inc. and
Transfers (to) from the Noncontrolling Interest
Nine months ended September 30,

	2012	2011
Net loss attributable to Tecogen Inc.	$(1,509,891)	$(786,111)
Transfers (to) from the noncontrolling interest		
Increase in Tecogen's paid-in capital upon the sale of 1,000,000 Ilios common shares	289,605	
Net transfers from noncontrolling interest	289,605	—
Change from net loss attributable to Tecogen Inc. and transfers from noncontrolling interest	$(1,220,286)	$(786,111)

Note 7 – Related party:

The Company has five affiliated companies, namely American DG Energy, EuroSite Power, GlenRose Instruments Inc., or GlenRose Instruments, Pharos LLC, or Pharos, and Levitronix Technologies LLC, or Levitronix. These companies are affiliates because several of the major stockholders of those companies, have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix. The business of GlenRose Instruments, Pharos and Levitronix is not related to the business of the Company.

The common stockholders include John N. Hatsopoulos, the Company’s Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 11.5% of the company’s common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 6.8% of the company’s common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of the company’s common stock. Dr. George N. Hatsopoulos, who is John N. Hatsopoulos’ brother, and is also: (a) a director of American DG Energy and holds 14% of the company’s common stock; (b) an investor in Ilios and holds 3.1% of the company’s common stock; (c) an investor of GlenRose Instruments and holds 15.7% of the company’s common stock; (d) founder and investor of Pharos and holds 24.4% of the company’s common stock; and (e) an investor of Levitronix and holds 21.4% of the company’s common stock.

On October 20, 2009, American DG Energy, in the ordinary course of its business, signed a Sales Representative Agreement with Ilios to promote, sell and service the Ilios high-efficiency heating products, such as the high efficiency water heater, in the marketing territory of the New England States, including Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine. The marketing territory also includes all of the nations in the European Union. The initial term of this Agreement is for five years, after which it may be renewed for successive

one-year terms upon mutual written agreement.

On September 24, 2001, the Company entered into subscription agreements with investors for the sale of convertible debentures. The primary investors were George N. Hatsopoulos, a director of the Company, who subscribed for $200,000 of the debentures, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, who subscribed for a total amount of $100,000 of the debentures. The debentures accrue interest at a rate of 6% per annum and were originally due on September 24, 2007. The debentures are convertible, at the option of the holder, into shares of Common Stock at a conversion price of $0.30 per share. On September 30, 2012, the debentures, including accrued interest, were converted into 170,480 shares of Common Stock held in the JNH 1989 Family Trust for the benefit of Nia Marie Hatsopoulos and 170,480 shares of Common Stock held in the JNH 1989 Family Trust for the benefit of Alexander J Hatsopoulos for whom Mr. and Mrs. Paris Nicolaidis are the trustees. Mr. John N. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.

TECOGEN INC.

On September 24, 2007, the holders of the debentures agreed to extend their term to September 24, 2011. On May 11, 2009, George N. Hatsopoulos converted a portion of the principal in the amount of $109,033 of the debentures and accrued interest in the amount of $90,967 into 400,000 shares of Common Stock in the Company's newly formed subsidiary, Ilios, at $0.50 per share. Also, on May 11, 2009, John N. Hatsopoulos converted principal amount of $427,432 in demand notes payable and accrued interest in the amount of $72,567 into 1,000,000 shares of Ilios Common Stock at $0.50 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, a holder of the Company's convertible debentures elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 148,111 shares of Common Stock at a conversion price of $0.30 per share. On September 24, 2011, the remaining holders of the debentures agreed to extend their term to September 24, 2013 and requested that accrued interest in the amount of $72,959 be converted into the Company's Common Stock at $0.50 per share (which was the average price of the Company's Common Stock from September 24, 2001 to September 24, 2011).

On September 10, 2008, the Company entered into a demand note agreement with John N. Hatsopoulos, the Company's Chief Executive Officer, in the principal amount of $250,000 at an annual interest rate of 5%. On September 7, 2011, the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $750,000 at an annual interest rate of 6%. Unpaid principal and interest on the demand notes is due upon demand by the lender.

John N. Hatsopoulos is the Company's Chief Executive Officer and is also the Chief Executive Officer of American DG Energy and the Chairman of GlenRose Instruments. His salary is $1.00 per year. On average, Mr. Hatsopoulos spends approximately 20% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

On January 1, 2006, the Company signed a Facilities and Support Services Agreement with American DG Energy for a period of one year, renewable annually by mutual agreement. That agreement was amended on July 1, 2012. Under this agreement, the Company provides American DG Energy with certain office and business support services and also provides pricing based on a volume discount depending on the level of American DG Energy purchases of cogeneration and chiller products. For certain sites, American DG Energy hires the Company to service its chiller and cogeneration products. The Company also provides office space and certain utilities to American DG Energy based on a monthly rate set at the beginning of each year. Also, under this agreement, American DG Energy has sales representation rights to the Company's products and services in New England.

The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements. In addition to sublease payments for the nine months ended September 30, 2012 and 2011 of $126,399 and $148,197, respectively received from American DG Energy, Levitronix LLC and Alexandros Partners LLC, the Company received $88,021 and $165,755 from these companies to offset common operating expenses incurred in the administration and maintenance of the Company's corporate office and warehouse facility.

The Company's headquarters are located in Waltham, Massachusetts and consist of 24,000 square feet of office and storage space that are shared with American DG Energy and other tenants. The lease expires on March 31, 2014. The Company believes that our facilities are appropriate and adequate for our current needs.

Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the nine months ended September 30, 2012 and 2011 amounted to $1,596,420 and $334,227, respectively. As of September 30,

2012 and December 31, 2011, the total amount due from American DG Energy was $441,464 and $299,739, respectively.

Note 8 – Fair value measurements:

The fair value topic of the FASB Accounting Standards Codification defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The accounting guidance also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

TECOGEN INC.

Level 1 — Unadjusted quoted prices in active markets for identical assets or liabilities. The Company does not have any Level 1 financial assets or liabilities. The Company currently has no Level 1 financial assets or liabilities.

Level 2 — Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full term of the asset or liability. At September 30, 2012, the Company had certificates of deposits which are categorized as Level 2 and are recorded at fair value on a recurring basis.

Level 3 — Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. The Company currently does not have any Level 3 financial assets or liabilities.

The Company determines the fair value of certificates of deposits using information provided by the issuing bank which includes discounted expected cash flow estimates using current market rates offered for deposits with similar remaining maturities.

	September 30, 2012	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Certificates of deposit	$181,580	—	$181,580	—
Total Assets	$181,580	$—	$181,580	$—

The Company's financial instruments that are not recorded at fair value on a recurring basis include cash and cash equivalents, accounts receivable, accounts payable, capital lease obligations and notes due from related party convertible debentures. The recorded values of cash and cash equivalents, accounts receivable and accounts payable approximate their fair values based on their short-term nature. At September 30, 2012, the carrying value on the consolidated balance sheet of the debentures and capital lease obligations approximates fair value based on current market rates for instruments with similar maturities adjusted for applicable credit risk, which are Level 2 inputs.

Note 9 – Subsequent events:

On June 3, 2010, the Company issued a promissory note to an investor in the amount of $345,000. The note was due in full on June 2, 2012, and bears interest at the Bank Prime Rate plus three percent. Accrued interest is paid on a quarterly basis. The note is secured by 1,150,000 shares of the Company's Common Stock. On June 3, 2012, the Company amended the maturity date on that note to October 15, 2012. As of December 12, 2012 this investor paid $105,000 and sold 400,000 shares of Company stock to the Company at $0.60 per share which paid off the principal balance of the note. The Company retired the 400,000 shares.

On November 30, 2012, the Company signed a demand note, which accrues 6% interest, to John N. Hatsopoulos, the Company's Chief Executive Officer.

On December 3, 2012, an accredited investor purchased 250,000 shares of the Company's common stock at $0.80, for a total of $200,000.

On December 5, 2012, the Company signed a letter of intent to renew its lease at 45 First Avenue in Waltham, Massachusetts for an additional 10 years.

On December 31, 2012, the Company purchased 1,000,000 shares of common stock of its subsidiary, Ilios Inc. for $0.50 per share for a total of $500,000. Tecogen now owns 65% of Ilios.

On January 9, 2013, the Company purchased the assets, both tangible and intangible, required to manufacture the permanent magnet generator (PMG) used in its InVerde product. Prior to this purchase of assets Danotek Motion Technologies, Inc manufactured our PMG.

The Company has evaluated subsequent events through the date of this registration statement and determined that no additional subsequent events occurred that would require recognition in the consolidated financial statements or disclosure in the notes thereto.

TECOGEN INC.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Tecogen Inc.

We have audited the accompanying consolidated balance sheets of Tecogen Inc. as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Tecogen Inc. as of December 31, 2011 and 2010, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ McGladrey & Pullen, LLP
McGladrey & Pullen, LLP

Boston, Massachusetts
April 27, 2012

Audited Financial Statements

TECOGEN INC.
CONSOLIDATED BALANCE SHEETS
As of December 31, 2011 and 2010

	2011	2010
ASSETS		
Current assets:		
Cash and cash equivalents	$3,018,566	$1,828,173
Short-term investments	683,428	85,000
Accounts receivable, net	1,399,232	1,788,323
Inventory, net	2,568,986	1,324,415
Due from related party	299,739	98,230
Prepaid and other current assets	112,716	85,103
Total current assets	8,082,667	5,209,244
Property, plant and equipment, net	385,779	404,888
Intangible assets, net	241,621	226,865
Other assets	35,425	35,425
TOTAL ASSETS	$8,745,492	$5,876,422
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Demand notes payable, related party	$1,037,500	$287,500
Current portion of convertible debentures, related party	—	190,967
Accounts payable	812,214	705,406
Accrued expenses	727,463	895,884
Deferred revenue	509,283	549,834
Interest payable, related party	61,062	93,727
Total current liabilities	3,147,522	2,723,318
Long-term liabilities:		
Deferred revenue, net of current portion	183,839	161,425
Convertible debentures, related party, net of current portion	190,967	—
Total liabilities	3,522,328	2,884,743
Commitments and contingencies (Note 8)	—	—
Redeemable Common stock, $0.001 par value	—	—
Stockholders' equity:		
Tecogen Inc. shareholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 53,993,882 and 48,931,046 issued and outstanding at December 31, 2011 and 2010, respectively	53,994	48,931
Additional paid-in capital	15,486,775	11,652,516
Common stock subscription	—	(53)
Receivable from shareholder	(345,000)	(345,000)
Accumulated deficit	(10,122,766)	(8,548,265)
Total Tecogen Inc. stockholders' equity	5,073,003	2,808,129
Noncontrolling interest	150,161	183,550
Total stockholders' equity	5,223,164	2,991,679

TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$8,745,492	$5,876,422

The accompanying notes are an integral part of these consolidated financial statements.

TECOGEN INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
For the Years Ended December 31, 2011 and 2010

	2011	2010
Revenues		
Products	$4,569,113	$5,543,605
Services	6,496,097	5,767,624
	11,065,210	11,311,229
Cost of sales		
Products	3,005,698	3,801,485
Services	3,173,400	2,795,720
	6,179,098	6,597,205
Gross profit	4,886,112	4,714,024
Operating expenses		
General and administrative	5,986,762	4,973,794
Selling	782,252	290,505
	6,769,014	5,264,299
Loss from operations	(1,882,902)	(550,275)
Other income (expense)		
Interest and other income	38,402	23,574
Interest expense	(40,294)	(37,280)
	(1,892)	(13,706)
Loss before income taxes	(1,884,794)	(563,981)
Consolidated net loss	(1,884,794)	(563,981)
Less: Loss attributable to the noncontrolling interest	310,293	208,673
Net loss attributable to Tecogen Inc.	$(1,574,501)	$(355,308)
Net loss per share - basic and diluted	$(0.03)	$(0.01)
Weighted average shares outstanding - basic and diluted	48,211,652	45,882,631

The accompanying notes are an integral part of these consolidated financial statements.

TECOGEN INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Years Ended December 31, 2011 and 2010

	Tecogen Inc. Common Stock 0.001 Par Value	Additional Paid-In Capital	Common Stock Subscription	Shareholder Receivable	Accumulated Deficit	Noncontrolling Interest	Total
Balance at December 31, 2009	$46,516	$10,058,287	$ —	$—	$(8,192,957)	$ 388,084	$2,299,930
Sale of common stock, net of costs	1,863	1,209,386	—	—	—	—	1,211,249
Issuance of restricted stock	77	49,871	(53)	—	—	—	49,895
Note receivable from shareholder	—	—	—	(345,000)	—	—	(345,000)
Exercise of warrants	475	142,025	—	—	—	—	142,500
Stock based compensation expense	—	192,947	—	—	—	4,139	197,086
Net loss	—	—	—	—	(355,308)	(208,673)	(563,981)
Balance at December 31, 2010	$48,931	$11,652,516	$ (53)	$(345,000)	$(8,548,265)	$ 183,550	$2,991,679
Sale of common stock, net of costs	4,717	3,606,276	—	—	—	—	3,610,993
Conversion of accrued interest on related party convertible notes to common stock	146	72,813	—	—	—	—	72,959
Issuance of restricted stock	200	—	53	—	—	—	253
Issuance of subsidiary restricted stock	—	—	—	—	—	200	200
Purchase of subsidiary common stock	—	(261,174)	—	—	—	261,174	—
Purchase of stock options	—	(12,500)	—	—	—	—	(12,500)
Stock based compensation expense	—	428,844	—	—	—	15,530	444,374
Net loss	—	—	—	—	(1,574,501)	(310,293)	(1,884,794)
Balance at December 31, 2011	$53,994	$15,486,775	$ —	$(345,000)	$(10,122,766)	$ 150,161	$5,223,164

The accompanying notes are an integral part of these consolidated financial statements.

TECOGEN INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2011 and 2010

	2011	2010
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(1,884,794)	$(563,981)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	158,286	88,656
Provision for losses on accounts receivable	20,600	6,658
Provision for inventory reserve	3,300	(66,500)
Stock-based compensation	444,374	197,086
Changes in operating assets and liabilities		
(Increase) decrease in:		
Short-term investments	(3,428)	—
Accounts receivable and unbilled revenue	368,491	331,581
Inventory	(1,247,871)	154,351
Due from related party	(201,509)	(98,230)
Prepaid assets	(27,613)	6,465
Other assets	—	(2,481)
Increase (decrease) in:		
Accounts payable	106,808	417,376
Accrued expenses	(95,462)	(22,138)
Deferred revenue	(18,137)	(76,439)
Interest payable, related party	(32,665)	(26,401)
Due to related party	—	(4,133)
Net cash (used in) provided by operating activities	(2,409,620)	341,870
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(115,186)	(195,955)
Purchases of intangible assets	(38,747)	(113,499)
Purchases of short-term investments	(680,000)	—
Sale of short-term investments	85,000	679,747
Net cash (used in) provided by investing activities	(748,933)	370,293
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments from issuance of notes receivable-stockholder	—	(345,000)
Payments made on demand notes payable, related party	—	(422,568)
Proceeds from issuance of demand notes payable, related party	750,000	—
Proceeds from sale of common stock, net of costs	3,610,993	1,211,249
Proceeds from issuance of restricted stock	453	49,895
Purchase of stock options	(12,500)	—
Proceeds from exercise of warrants	—	142,500
Net cash provided by financing activities	4,348,946	636,076
Net increase in cash and cash equivalents	1,190,393	1,348,239
Cash and cash equivalents, beginning of the year	1,828,173	479,934
Cash and cash equivalents, end of the year	$3,018,566	$1,828,173
Supplemental disclosures of cash flows information:		
Non-cash investing and financing activities:		
Conversion of accrued convertible debenture interest into common stock	$72,959	$—
Conversion of redeemable common stock to common stock	$500,000	$—
Interest paid	$—	$63,139

The accompanying notes are an integral part of these consolidated financial statements.

TECOGEN INC.

Notes to Audited Consolidated Financial Statements

Note 1 – Nature of business and operations

Tecogen Inc. (the "Company") (a Delaware Corporation) was organized on November 15, 2000, and acquired the assets and liabilities of the Tecogen Products division of Thermo Power Corporation. The Company produces commercial and industrial, natural-gas-fueled engine-driven, combined heat and power (CHP) products that reduce energy costs, decrease greenhouse gas emissions and alleviate congestion on the national power grid. Tecogen's products supply electric power or mechanical power for cooling, while heat from the engine is recovered and purposefully used at a facility. The majority of Company's customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast.

On May 4, 2009 the Company invested $8,400 in exchange for 8,400,000 shares of a newly established corporation Ilios Inc., or Ilios. The investment gave the Company a controlling financial interest in Ilios, whose business focus will be on advanced heating systems for commercial and industrial applications. On May 11, 2009 the Company sold 1,400,000 shares in Ilios at $0.50 per share to two of its existing stockholders in exchange for the extinguishment of $700,000 in demand notes payable, convertible debentures and accrued interest (see Note 7 – Demand notes payable and convertible debentures – related party). On July 24, 2009, Ilios sold 2,710,000 shares of common stock to accredited investors at $0.50 per share and raised $1,352,500. On June 3, 2011, Ilios sold 500,000 shares of common stock to Tecogen at $0.50 per share and raised $250,000 and on December 29, 2011, Ilios sold 1,000,000 shares of common stock to Tecogen at $0.50 per share and raised $500,000. As of December 31, 2011 the Company owns a 67.4% interest in Ilios and has consolidated Ilios into its financial statements.

The accompanying consolidated financial statements include the accounts of the Company and its majority owned subsidiary Ilios, whose business focus will be on advanced heating systems for commercial and industrial applications.

The Company's operations are comprised of one business segment. Our business is to manufacture and support highly efficient CHP products based on engines fueled by natural gas.

Note 2 – Summary of significant accounting policies

Principles of Consolidation and Basis of Presentation

The financial statements have been prepared in accordance with accounting standards set by the Financial Accounting Standards Board (FASB). The FASB sets generally accepted accounting principles (GAAP) to ensure financial condition, results of operations, and cash flows are consistently reported. References to GAAP issued by the FASB in these footnotes are to the FASB Accounting Standards Codification (ASC). The Company adopted the presentation requirements for noncontrolling interests required by ASC 810 Consolidation. Under ASC 810, earnings or losses attributed to the noncontrolling interests are reported as part of the consolidated earnings and not a separate component of income or expense. Noncontrolling interests in the net assets and operations of Ilios are reflected in the caption "Noncontrolling interest" in the accompanying consolidated financial statements. All intercompany transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets

and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Concentration of Credit Risk

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. The Company maintains its cash balances in bank accounts, which at times may exceed the Federal Deposit Insurance Corporation's ("FDIC") general deposit insurance limits. The amount on deposit at December 31, 2011 and 2010 which exceeded the $250,000 federally insured limit was approximately $3,200,000 and $1,167,000, respectively. The Company has not experienced any losses in such accounts and thus believes that it is not exposed to any significant credit risk on cash and cash equivalents.

The Company has one customer who represented 14.6% of revenues for the year ended December 31, 2010. There were no customers who represented more than 10% of revenues for the year ended December 31, 2011. Included in trade accounts receivable are amounts from one and two customers who represent an aggregate of 17% and 51% of the trade

accounts receivable balance as of December 31, 2011 and 2010, respectively. These customers have individual balances of 17% of trade accounts receivable at December 31, 2011 and between 24% and 27% of trade accounts receivable at December 31, 2010.

Cash and Cash Equivalents

The Company considers all highly liquid instruments with an original maturity date, at date of purchase, of three months or less to be cash and cash equivalents.

Short-Term Investments

Short-term investments consist of certificates of deposit with maturities of greater than three months but less than one year. Certificates of deposits are recorded at fair value.

On October 26, 2011, the Company entered into an agreement with Digital Energy Corp., a customer of the Company, whereby the Company provided a letter of credit in the amount of $180,000, for the benefit of Digital Energy Corp., to satisfy a requirement of the New York Independent System Operator, Inc. A certificate of deposit for$180,000 secures the letter of credit. In exchange for providing this letter of credit, Digital Energy Corp. provided a promissory note to the Company for $180,000, with interest at 6%, payable in monthly installments of interest only. Principal would only be owed if the letter of credit was drawn upon and would become due and payable on the first anniversary date of the note.

On June 13, 2011, the Southern California Gas Company entered into an agreement with the Company to invest $500,000 in the Company’s Common Stock. The agreement included certain stockholder rights and a redemption right whereby the investor may redeem the shares for cash until the earlier of, the initiation of a public offering of the Company by filing a registration statement with the SEC, or five years. A letter of credit, secured by a Certificate of Deposit, for the amount of the investment has been put in place to satisfy the contingency of the redemption right. The Certificate of Deposit is classified as a short term investment in the accompanying balance sheet. Since the Company filed a registration statement with the Securities and Exchange Commission on December 23, 2011 the redemption right is no longer valid as of the filing date.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management’s evaluation of outstanding accounts receivable at the end of the year. Bad debts are written off against the allowance when identified. At December 31, 2011 and 2010 the allowance for doubtful accounts was $96,800 and $78,300, respectively.

Inventory

Raw materials, work in process, and finished goods inventories are stated at the lower of cost, as determined by the average cost method, or net realizable value. The Company periodically reviews inventory quantities on hand for excess and/or obsolete inventory based primarily on historical usage, as well as based on estimated forecast of product demand. Any reserves that result from this review are charged to cost of sales.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the asset, which range from three to seven years. Leasehold improvements are amortized using the straight-line method over the lesser of the estimated useful lives of the assets or the term of the related leases. Expenditures for maintenance and repairs are expensed currently, while renewals and betterments that materially extend the life of an asset are capitalized.

Intangible Assets

Intangible assets subject to amortization include costs incurred by the Company to acquire product certifications and certain patent costs. These costs are amortized on a straight-line basis over the estimated economic life of the intangible asset. The Company reviews intangible assets for impairment when the circumstances warrant.

TECOGEN INC.

Loss per Common Share

The Company computes basic loss per share by dividing net loss for the period by the weighted-average number of shares of Common Stock outstanding during the period. The Company computes its diluted earnings per common share using the treasury stock method. For purposes of calculating diluted earnings per share, the Company considers its shares issuable in connection with the convertible debentures, stock options and warrants to be dilutive Common Stock equivalents when the exercise/conversion price is less than the average market price of our Common Stock for the period.

Other Comprehensive Net Loss

The comprehensive net loss for the years ended December 31, 2011 and 2010 does not differ from the reported loss.

Segment Information

The Company reports segment data based on the management approach. The management approach designates the internal reporting that is used by management for making operating and investment decisions and evaluating performance as the source of the Company's reportable segments. The Company uses one measurement of profitability and does not disaggregate its business for internal reporting. The Company has determined that it operates in one business segment which manufactures and supports highly efficient CHP products based on engines fueled by natural gas.

The following table summarizes net revenue by product line and services for the years ended December 31, 2011 and 2010:

	2011	2010
Products:		
Cogeneration	$2,737,161	$4,977,595
Chiller	1,831,952	566,010
Total Product Revenue	4,569,113	5,543,605
Services	6,496,097	5,767,624
	$11,065,210	$11,311,229

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. The current or deferred tax consequences of transactions are measured by applying the provisions of enacted tax laws to determine the amount of taxes payable currently or in future years. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities and expected future tax consequences of events that have been included in the financial statements or tax returns using enacted tax rates in effect for the years in which the differences are expected to reverse. Under this method, a valuation allowance is used to offset deferred taxes if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Management evaluates the recoverability of deferred taxes and the adequacy of the valuation allowance annually.

The Company has adopted the provisions of the accounting standards relative to accounting for uncertainties in tax positions. These provisions provide guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. The Company elected to recognize interest and penalties related to income tax

matters as a component of income tax expense in the statements of operations. There was no impact on the financial statements as a result of this guidance. See Note 15 – Income taxes.

With few exceptions, the Company is no longer subject to possible income tax examinations by federal, state or local taxing authorities for tax years before 2008.

The Company's tax returns are open to adjustment from 2001 forward, as a result of the fact that the Company has loss carryforwards from those years, which may be adjusted in the year those losses are utilized.

TECOGEN INC.

Fair Value of Financial Instruments

The Company's financial instruments are cash and cash equivalents, certificates of deposit, accounts receivable, accounts payable, capital lease obligations and notes due from related party convertible debentures. The recorded values of cash and cash equivalents, accounts receivable and accounts payable approximate their fair values based on their short-term nature. At December 31, 2011, the current value on the consolidated balance sheet of the debentures and capital lease obligations approximates fair value as the terms approximate those available for similar instruments. Certificates of deposit classified as short-term investments are recorded at fair value.

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Generally, sales of cogeneration and chiller units and parts are recognized when shipped and services are recognized over the term of the service period. Payments received in advance of services being performed are recorded as deferred revenue.

Infrequently, the Company recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the buyer, the buyer has made a written fixed commitment to purchase the finished goods, the buyer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by the Company. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms are granted. For the years ended December 31, 2011 and 2010 no revenues were recorded as bill and hold transactions.

For those arrangements that include multiple deliverables, the Company first determines whether each service or deliverable meets the separation criteria of FASB ASC 605-25, Revenue Recognition—Multiple-Element Arrangements. In general, a deliverable (or a group of deliverables) meets the separation criteria if the deliverable has stand-alone value to the customer and if the arrangement includes a general right of return related to the delivered item and delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Each deliverable that meets the separation criteria is considered a separate ‘‘unit of accounting". The Company allocates the total arrangement consideration to each unit of accounting using the relative fair value method. The amount of arrangement consideration that is allocated to a delivered unit of accounting is limited to the amount that is not contingent upon the delivery of another unit of accounting.

When vendor-specific objective evidence or third-party evidence is not available, adopting the relative fair value method of allocation permits the Company to recognize revenue on specific elements as completed based on the estimated selling price. The Company generally uses internal pricing lists that determine sales prices to external customers in determining its best estimate of the selling price of the various deliverables in multiple-element arrangements. Changes in judgments made in estimating the selling price of the various deliverables could significantly affect the timing or amount of revenue recognition. The Company enters into sales arrangements with customers to sell its cogeneration and chiller units and related service contracts and occasionally installation services. Based on the fact that the Company sells each deliverable to other customers on a stand-alone basis, the company has determined that each deliverable has a stand-alone value. Additionally, there are no rights of return relative to the delivered items; therefore, each deliverable is considered a separate unit of accounting.

After the arrangement consideration has been allocated to each unit of accounting, the Company applies the appropriate revenue recognition method for each unit of accounting based on the nature of the arrangement and the services included in each unit of accounting. Cogeneration and chiller units are recognized when shipped and services

are recognized over the term of the applicable agreement, as provided when on a time and materials basis or upon completion and acceptance when on a completed contract basis.

Presentation of Sales Taxes

The Company reports revenues net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions.

Shipping and Handling Costs

The Company classifies freight billed to customers as sales revenue and the related freight costs as cost of sales.

TECOGEN INC.

Advertising Costs

The Company expenses the costs of advertising as incurred. For the years ended December 31, 2011 and 2010, advertising expense was approximately $86,700 and $14,900, respectively.

Research and Development Costs

Internal research and development expenditures are expensed as incurred. Proceeds from certain grants and contracts with governmental agencies and their contractors to conduct research and development for new CHP technologies or to improve or enhance existing technology is recorded as an offset to the related research and development expenses. These grants and contracts are paid on a cost reimbursement basis provided in the agreed upon budget. Amounts received totaled $239,000 and $917,000 in fiscal years 2011 and 2010, respectively, which offset the Company's total R&D expenditures for each of the respective years.

Stock-Based Compensation

Stock-based compensation cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as an expense in the statements of operations over the requisite service period.

Pursuant to ASC 505-50, Equity Based Payments to Non-Employees, the fair value of restricted Common Stock and stock options issued to nonemployees is revalued at each reporting period until the ultimate measurement date, as defined by ASC 505-50. The Company records the value of the instruments at the time services are provided and the instruments vest. Accordingly, the ultimate expense is not fixed until such instruments are fully vested.

The determination of the fair value of share-based payment awards is affected by the Company's stock price. Since the Company is not publicly traded, the Company considered the sales price of the Common Stock in private placements to unrelated third parties as a measure of the fair value of its Common Stock.

The Company utilizes an estimated forfeiture rate when calculating the expense for the period. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock-based compensation expense recognized is based on awards that are ultimately expected to vest. The Company evaluates the assumptions used to value awards regularly and if factors change and different assumptions are employed, stock-based compensation expense may differ significantly from what has been recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.

Common Stock Subscriptions

Outstanding proceeds for Common Stock transactions appear as Common Stock subscriptions in the accompanying consolidated balance sheets and consolidated statements of changes in stockholders' equity until received.

Recent Accounting Pronouncements

In May 2011, the FASB issued updated accounting guidance related to fair value measurements and disclosures that result in common fair value measurements and disclosures between U.S. GAAP and International Financial Reporting Standards. This guidance includes amendments that clarify the application of existing fair value measurement requirements, in addition to other amendments that change principles or requirements for measuring fair value and for disclosing information about fair value measurements. This guidance is effective during interim and annual periods

beginning after December 15, 2011. The adoption of this guidance is not expected to have a material effect on the Company's consolidated financial statements.

In January 2010, The FASB issued ASU No. 2010-06, Improving Disclosures about Fair Value Measurements. This amends ASC 820 (formerly FAS 157-4) to require additional disclosures. The guidance requires entities to disclose transfers of assets in and out of Levels 1 and 2 of the fair value hierarchy, and the reasons for those transfers. ASU No. 2010-06 is effective January 2010. In addition, the guidance requires separate presentation of purchases and sales in the Level 3 asset reconciliation which will be effective for the year ending December 31, 2011. The adoption of the effective portions of this guidance did not have a material impact on the Company's consolidated financial statement position, results of operations or cash flows.

TECOGEN INC.

In June 2009, the FASB issued new guidance on consolidations which became effective for Tecogen, Inc. on January 1, 2010. This guidance changes the definition of a variable interest entity and changes the methodology to determine who is the primary beneficiary of, or in other words, who consolidates, a variable interest entity. The guidance replaces the quantitative-based risks and rewards calculation for determining which enterprise, if any, has a controlling financial interest in a variable interest entity with an approach focused on identifying which enterprise has the power to direct the activities of a variable interest entity that most significantly affect the entity's economic performance and (i) the obligation to absorb losses of the entity or (ii) the right to receive benefits from the entity. The adoption of this new guidance did not have an impact on the Company’s consolidated financial statement position, results of operations or cash flows.

Reclassifications

Certain prior period balances have been reclassified to conform with current period presentation.

Note 3 – Loss per common share:

Basic and diluted earnings per share for the years ended December 31, 2011 and 2010, respectively, were as follows:

	2011	2010
Loss available to stockholders	$(1,574,501)	$(355,308)
Weighted average shares outstanding - Basic and diluted	48,211,652	45,882,631
Basic and diluted loss per share	$(0.03)	$(0.01)
Anti-dilutive shares underlying stock options outstanding	4,381,000	2,480,000
Anti-dilutive convertible debentures	636,557	636,557

Note 4 – Inventory

Inventories at December 31, 2011 and 2010 consisted of the following.

	2011	2010
Gross raw materials	$2,701,496	$1,675,141
Less - reserves	(358,800)	(355,500)
Net raw materials	2,342,696	1,319,641
Work-in-process	119,640	4,774
Finished goods	106,650	—
	$2,568,986	$1,324,415

Note 5 – Intangible assets

The Company capitalized $22,036 and $62,309 of product certification costs during the years ended December 31, 2011 and 2010, respectively. Also included in intangible assets are the costs incurred by the Company to acquire certain patents. These patents, once in service, will be amortized on a straight-line basis over the estimated economic life of the associated product, which range from approximately 7-10 years. The Company capitalized $16,712 and $51,190 of patent-related costs during the years ended December 31, 2011 and 2010, respectively. Intangible assets at December 31, 2011 and 2010 consist of the following:

TECOGEN INC.

	Product Certifications	Patents	Total
Balance at December 31, 2011			
Intangible assets	$218,168	$67,902	$286,070
Less - accumulated amortization	(38,254)	(6,195)	(44,449)
	$179,914	$61,707	$241,621
Balance at December 31, 2010			
Intangible assets	$196,132	$51,190	$247,322
Less - accumulated amortization	(20,457)	—	(20,457)
	$175,675	$51,190	$226,865

Amortization expense was $23,992 and $11,309 during the years ended December 31, 2011 and 2010, respectively. Estimated amortization expense at December 31, 2011 for each of the five succeeding years is as follows:

2012	$33,628
2013	31,517
2014	31,517
2015	31,517
2016	31,517
Thereafter	81,925
	$241,621

Note 6 – Property and equipment

Property and equipment at December 31, 2011 and 2010 consisted of the following:

	Estimated Useful Life (in Years)	2011	2010
Machinery and equipment	5 - 7 years	$355,985	$268,713
Furniture and fixtures	5 years	48,157	41,487
Computer software	3 - 5 years	46,355	44,291
Leasehold improvements	*	245,441	226,261
		695,938	580,752
Less - accumulated depreciation and amortization		(310,159)	(175,864)
Net property, plant and equipment		$385,779	$404,888

* Lesser of estimated useful life of asset or lease term

Depreciation and amortization expense on property and equipment for the years ended December 31, 2011 and 2010 was $134,295 and $77,346, respectively.

Note 7 – Demand notes payable and convertible debentures – related party

Demand notes payable to related parties consist of various demand notes outstanding to stockholders totaling $1,037,500 and $287,500 at December 31, 2011 and 2010, respectively. The primary lender is John N. Hatsopoulos, the company’s Chief Executive Officer, who holds $1,000,000 and $250,000 of the demand notes as of December 31, 2011 and 2010, respectively. The demand notes accrue interest annually at rates ranging from 5% to 6%. Unpaid principal and interest on the demand notes is due upon demand by the lender.

On September 24, 2001, the Company entered into subscription agreements with three investors for the sale of convertible debentures in the aggregate principal amount of $330,000. The primary investors were George N. Hatsopoulos, a member of the board of directors, who subscribed for $200,000 of the debentures and John N. Hatsopoulos, the Company's Chief Executive Officer, who subscribed for $100,000 of the debentures. The debentures accrue interest at a rate of 6% per

TECOGEN INC.

annum and are due six years from issuance date. The debentures are convertible, at the option of the holder, into a number of shares of Common Stock as determined by dividing the original principal amount plus accrued and unpaid interest by a conversion price of $0.30. On September 24, 2011 the remaining holders of the Company's convertible debentures agreed to amend the terms of the debentures and extend the due date from September 24, 2011 to September 24, 2013.

On May 11, 2009 the Company sold 1,400,000.00 shares in Ilios at $0.50 per share to George Hatsopoulos and John Hatsopoulos in exchange for the extinguishment of $427,432 in demand notes payable, $109,033 in convertible debentures and $163,535 in accrued interest. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital. At December 31, 2011 and 2010, there were 636,557 shares of common stock issuable upon conversion of the Company's outstanding convertible debentures. At December 31, 2011 and 2010, the principal amount of the Company's convertible debentures was $190,967 which is due on September 24, 2013.

Note 8 – Commitments and contingencies

Operating Lease Obligations

The Company leases office space and warehouse facilities under various lease agreements which expire through March 2015. The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements, on a calendar year basis (see Note 13 – Related party transactions). Total rent expense for the years ended December 31, 2011 and 2010 amounted to $579,836 and $535,092, offset by $185,596 and $196,466 in rent paid by sub-lessees for a net amount of $394,240 and $338,626.

The Company leases one service vehicle under a lease agreement which expires January 2012. Vehicle rent expense amounted to $4,639 during each of the years ended December 31, 2011 and 2010.

Future minimum lease payments under all non-cancelable operating leases as of December 31, 2011 consist of the following:

Years Ending December 31,	Amount
2012	$574,676
2013	546,042
2014	164,843
2015	10,130
2016	—
2017 and thereafter	—
Total	$1,295,691

On October 26, 2011, the Company entered into an agreement with Digital Energy Corp., a customer of the Company, whereby the Company provided a letter of credit in the amount of $180,000, for the benefit of Digital Energy Corp., to satisfy a requirement of the New York Independent System Operator, Inc. A certificate of deposit for $180,000 secures the letter of credit. In exchange for providing this letter of credit, Digital Energy Corp. provided a promissory note to the Company for $180,000, with interest at 6%, payable in monthly installments of interest only. Principal would only be owed if the letter of credit was drawn upon and would become due and payable on the first anniversary date of the note.

Legal Proceedings

From time to time the Company may be involved in various claims and other legal proceedings which arise in the normal course of business. Such matters are subject to many uncertainties and outcomes that are not predictable. Based on the information available to the Company and after discussions with legal counsel, the Company does not believe any such proceedings will have a material adverse effect on the business, results of operations, financial position or liquidity.

Note 9 – Product warranty

The Company reserves an estimate of its exposure to warranty claims based on both current and historical product sales data and warranty costs incurred. The majority of the Company's products carry a one-year warranty. The Company assesses the adequacy of its recorded warranty liability annually and adjusts the amount as necessary. The warranty liability is included in accrued expenses on the accompanying consolidated balance sheets.

TECOGEN INC.

Changes in the Company's warranty reserve were as follows:	
Warranty reserve, December 31, 2009	$82,600
Warranty provision for units sold	42,847
Costs of warranty incurred	(72,447)
Warranty reserve, December 31, 2010	53,000
Warranty provision for units sold	76,637
Costs of warranty incurred	(72,637)
Warranty reserve, December 31, 2011	$57,000

Note 10 – Stockholders' equity

Common Stock

In 2011 and 2010 the Company raised additional funds through private placements of common stock to a limited number of accredited investors. In connection with the 2011 private placements the Company sold an aggregate of 4,716,919 shares of common stock at a purchase price ranging from $0.65 to $0.80 per share, resulting in net cash proceeds of $3,610,993. In connection with the 2010 private placements the Company sold an aggregate of 1,863,461 shares of common stock at a purchase price of $0.65 per share, resulting in net cash proceeds of $1,211,249.

On June 13, 2011, the Southern California Gas Company entered into an agreement with the Company to invest $500,000 in the Company's Common Stock. The agreement included certain stockholder rights and a redemption right whereby the investor may redeem the shares for cash until the earlier of, the initiation of a public offering of the Company by filing a registration statement with the SEC, or five years. A letter of credit, secured by a Certificate of Deposit, for the amount of the investment has been put in place to satisfy the contingency of the redemption right. The Certificate of Deposit is classified as a short term investment in the accompanying balance sheet. The Common Stock was classified outside of permanent equity because of the redemption right. The filing of our registration statement on Form S-1 on December 22, 2011, resulted in the expiration of the rights and preferences of the Southern California Gas Company; therefore as of the date of this prospectus we do not have any rights or preferences outstanding. As a result, we have reclassified this investment from Redeemable Common Stock, to permanent equity in the accompanying balance sheet as of December 31, 2011.

The holders of Common Stock have the right to vote their interest on a per share basis. At December 31, 2011 and 2010 there were 53,993,882 and 48,931,046 shares of Common Stock outstanding, respectively.

Receivable from Shareholder

On June 3, 2010 the Company issued a promissory note to an investor in the amount of $345,000. The note is due in full on June 3, 2012 and bears interest at the Bank Prime Rate plus three percent. Accrued interest is paid on a quarterly basis. The note is secured by 1,150,000 shares of Tecogen Common Stock.

Warrants

At January 1, 2009 the Company had 500,000 warrants outstanding. Each warrant represents the right to purchase one share of Common Stock at a price of $0.30. These warrants had been issued on April 5, 2005 in connection with a private placement of the Company's Common Stock to a limited number of accredited investors.

During the year ended December 31, 2010, investors exercised 475,000 warrants, providing gross proceeds to the Company of $142,500. During 2010, 25,000 warrants expired. As of December 31, 2011 and 2010 there were no warrants outstanding.

Stock-Based Compensation

In 2006, the Company adopted the 2006 Stock Option and Incentive Plan (the “Plan”), under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the Company. On October 1, 2008 the board unanimously amended the Plan, to increase the reserved shares of common stock issuable under the Plan from 4,000,000 to 5,000,000 (the “Amended Plan”). On February 18, 2010, the board

TECOGEN INC.

unanimously amended the Plan, to increase the reserved shares of common stock issuable under the Plan from 5,000,000 to 7,000,000 (the "Amended Plan" as of February 18, 2010). On November 10, 2011 the board unanimously amended the Plan, to increase the reserved shares of common stock issuable under the Plan from 7,000,000 to 7,355,000 (the "Amended Plan" as of November 10, 2011).

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Amended Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan cannot be less than the fair market value of the underlying shares on the date of the grant. The number of shares remaining available for future issuance under the Amended Plan as of December 31, 2011 and 2010 was 645,732 and 2,886,732, respectively.

In 2010, the company granted nonqualified options to purchase an aggregate of 100,000 shares of common stock at $0.65 per share. These options have a vesting schedule of four years and expire in five years. The fair value of the options issued in 2010 was $24,446. The weighted-average grant date fair value of stock options granted during 2010 was $0.24 per option.

In 2011, the company granted nonqualified options to purchase an aggregate of 1,921,000 shares of common stock at $0.65 per share and 125,000 shares of common stock at $0.70 per share. These options have a vesting schedule of four years and expire in tenyears. The fair value of the options issued in 2011 was $508,586. The weighted-average grant date fair value of stock options granted during 2011 was $0.25 and $0.28 per option. Stock option activity for the year ended December 31, 2011 and 2010 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2009	2,380,000	0.03-$0.50	$0.32	4.27 years	$793,500
Granted	100,000	0.65	0.65		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2010	2,480,000	0.03-$0.65	$0.30	3.30 years	$793,500
Exercisable, December 31, 2010	1,230,000		$0.28		$451,000
Vested and expected to vest, December 31, 2010	2,480,000		$0.30		$793,500
Outstanding, December 31, 2010	2,480,000	$0.03-$0.65	$0.30	3.30 years	$793,500
Granted	2,046,000	0.65-0.70	0.65		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Repurchased	(50,000)	0.25	0.25		
Expired	(95,000)	0.30-0.65	0.37		
Outstanding, December 31, 2011	4,381,000	$0.03-$0.70	$0.48	5.53 years	$1,387,150
Exercisable, December 31, 2011	1,673,750		$0.31		$815,125
Vested and expected to vest, December 31, 2011	4,381,000		$0.48		$1,387,150

The Company does not expect any forfeitures and the table above represents all stock options expected to vest. The Company uses the Black-Scholes option pricing model to determine the fair value of stock options granted. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. Expected volatility was calculated based on the average volatility of four comparable publicly traded companies. The average expected life was estimated using the simplified method for “plain vanilla” options as permitted by SEC Staff Accounting Bulletin No. 107, or SAB No. 107. The simplified method determines the expected life in years based on the vesting period and contractual terms as set forth when the award is made. The Company continues to use the simplified method for awards of stock-based compensation after January 1, 2008 as permitted by SEC Staff Accounting Bulletin No. 110, or SAB No. 110, since it does not have the necessary historical exercise data to determine an expected life for stock options. The Company uses a single weighted-average expected life to value option awards and recognizes compensation on a straight-line basis over the requisite

TECOGEN INC.

service period for each separately vesting portion of the awards. The risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant. When options are exercised the Company normally issues new shares.

In 2011, the Company purchased 50,000 options from a consultant at $0.25 per share. These options were due to expire on December 10, 2011 and would have allowed the holder to purchase shares of common stock of Tecogen for $0.03. The Company had no obligation to repurchase these shares. At December 10, 2010, the fair value of Tecogen's common stock was $0.80. Since these options were purchased at below their estimated fair value, the price paid by Tecogen of 12,500 was charged to Stockholders' equity.

The weighted average assumptions used in the Black-Scholes option pricing model for options granted in 2010 and 2010 are as follows:

	2011	2010
Stock option awards:		
Expected life	6.25 years	5 years
Risk-free interest rate	2.46%	2.46%
Expected volatility	33.8% - 35.5%	33.30%

In 2010, the Company made restricted stock grants to certain employees by permitting them to purchase an aggregate of 76,843 shares of common stock at a price of $0.001 per share. These shares vest 100% six months after an initial public offering. The related compensation expense is being recorded based on an anticipated initial public offering date.

In 2011, the Company made restricted stock grants to certain employees by permitting them to purchase an aggregate of 200,000 shares of common stock at a price of $0.001 per share. These shares vest over four years beginning six months after an initial public offering. The related compensation expense is being recorded based on an anticipated initial public offering date.

Restricted stock activity for the years ended December 31, 2011 and 2010 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2009	1,656,425	$0.31
Granted	76,843	0.65
Vested	—	—
Forfeited	—	—
Unvested, December 31, 2010	1,733,268	$0.32
Unvested, December 31, 2010	1,733,268	$0.32
Granted	200,000	0.65
Vested	—	—
Forfeited	—	—
Unvested, December 31, 2011	1,933,268	$0.36

During the years ended December 31, 2011 and 2010, the Company recognized stock-based compensation of $396,724 and $185,901, respectively, related to the issuance of stock options and restricted stock. No tax benefit was recognized related to the stock-based compensation recorded during the years. At December 31, 2011 and 2010 there

were 1,933,268 and 1,733,268 unvested shares of restricted stock outstanding, respectively. At December 31, 2011 and 2010 the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is $537,540 and $141,859, respectively. This amount will be recognized over a weighted average period of 2.12 years.

TECOGEN INC.

Stock Based Compensation - Ilios

In 2009, Ilios adopted the 2009 Stock Incentive Plan (the "2009 Plan") under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the company. The maximum number of shares allowable for issuance under the Plan is 2,000,000 shares of common stock.

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Plan cannot be less than the fair market value of the underlying shares on the date of the grant.

During the years ended December 31, 2011 and 2010 Ilios recognized stock-based compensation of $47,648 and $11,185, related to the issuance of stock options and restricted stock, respectively. No tax benefit was recognized related to the stock-based compensation recorded during the year. At December 31, 2011 and 2010 there were 560,000 and 360,000 unvested shares of restricted stock outstanding, respectively. At December 31, 2011 and 2010 the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is $122,056 and $27,839, respectively. This amount will be recognized over the weighted average period of 2.45 years.

In 2011, the company granted nonqualified options to purchase an aggregate of 225,000 shares of common stock to certain employees at $0.50 per share. These options have a vesting schedule of four years and expire in ten years. The total fair value of the options issued in 2011 was $42,065. The weighted-average grant date fair value of stock options granted during 2011 was $0.19.

Stock option activity for the year ended December 31, 2011 and 2010 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2009	300,000	$0.10	$0.10	9.34 years	$120,000
Granted	—	—	—		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2010	300,000	$0.10	$0.10	8.34 years	$120,000
Exercisable, December 31, 2010	—		$—		$—
Vested and expected to vest, December 31, 2010	300,000		$0.10		$120,000
Outstanding, December 31, 2010	300,000	$0.10	$0.10	8.34 years	$120,000
Granted	225,000	0.50	0.50		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2011	525,000	$0.10-$0.50	$0.27	8.23 years	$120,000
Exercisable, December 31, 2011	—		$—		$—
Vested and expected to vest, December 31, 2011	525,000		$0.27		$—

Ilios does not expect any forfeitures and the table above represents all stock options expected to vest. Ilios uses the Black-Scholes option pricing model to determine the fair value of stock options granted. Expected volatility was calculated based on the average volatility of comparable publicly traded companies, the expected life of the options was calculated using the “simplified method”, and the risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant. The Company uses a single weighted-average expected life to value option awards and recognizes compensation on a straight-line basis over the requisite service period for each separately vesting portion of the awards.

TECOGEN INC.

The weighted average assumptions used in the Black-Scholes option pricing model for options granted in 2011 are as follows:

Stock option awards:		
Expected life	6.25 years	
Risk-free interest rate	2.03	%
Expected volatility	34.2	%

In 2011, Ilios made restricted stock grants to a certain Ilios employee by permitting him to purchase an aggregate of 200,000 shares of common stock at a price of $0.001 per share. These shares vest 25% one hundred eighty (180) days after an initial public offering of Ilios and 25% for three years thereafter. The related compensation expense is being recorded based on an anticipated initial public offering date.

Restricted stock activity for the period ended December 31, 2011 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2009	360,000	$0.10
Granted	—	—
Vested	—	—
Forfeited	—	—
Unvested, December 31, 2010	360,000	$0.10
Unvested, December 31, 2010	360,000	$0.10
Granted	200,000	0.50
Vested	—	—
Forfeited	—	—
Unvested, December 31, 2011	560,000	$0.24

Note 11 – Noncontrolling interests

As of December 31, 2010 Tecogen owned 63.0% of Ilios. During the year ended December 31, 2011 Tecogen purchased 1,500,000 shares of Ilios common stock at $0.50 per share for an aggregate amount of $750,000 which increased Tecogen’s ownership interest to 67.4%. The table below presents the changes in equity resulting from net loss attributable to Tecogen and transfers to or from noncontrolling interests for the years ended 2011 and 2010.

Net loss attributable to Tecogen Inc. and
Transfers (to) from the Noncontrolling Interest
Years ended December 31,

	2011	2010
Net loss attributable to Tecogen Inc.	$(1,574,501)	$(355,308)
Transfers (to) from the noncontrolling interest		
Decrease in Tecogen's paid-in capital for purchase of 1,500,000 Ilios common shares	(261,174)	
Net transfers to noncontrolling interest	(261,174)	—
Change from net loss attributable to Tecogen Inc. and transfers to noncontrolling interest	$(1,835,675)	$(355,308)

Note 12 – Retirement plans

The Company has a defined contribution retirement plan (the “Plan”), which qualifies under Section 401(k) of the Internal Revenue Code (IRC). Under the Plan, employees meeting certain requirements may elect to contribute a percentage of their salary up to the maximum allowed by the IRC. The Company matches a variable amount based on participant

TECOGEN INC.

contributions up to a maximum of 4.5% of each participant's salary. The Company contributed approximately $115,120 and $111,100 to the Plan for the years ended December 31, 2011 and 2010.

Note 13 – Related party transactions

The Company has five affiliated companies, namely American DG Energy, EuroSite Power, GlenRose Instruments Inc., or GlenRose Instruments, Pharos LLC, or Pharos, and Levitronix Technologies LLC, or Levitronix. These companies are affiliates because several of the major stockholders of those companies, have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix. The business of GlenRose Instruments, Pharos and Levitronix is not related to the business of the Company.

American DG Energy, EuroSite Power, GlenRose Instruments, Pharos and Levitronix are affiliated companies by virtue of common ownership. The common stockholders include:

- John N. Hatsopoulos, the Company's Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 11.9% of the company's common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 7.3% of the company's common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of the company's common stock.

- Dr. George N. Hatsopoulos, who is John N. Hatsopoulos' brother, and is also: (a) a director of American DG Energy and holds 14.5% of the company's common stock; (b) an investor in Ilios and holds 3.3% of the company's common stock; (c) an investor of GlenRose Instruments and holds 15.7% of the company's common stock; (d) an investor of Pharos and holds 24.4% of the company's common stock; and (e) an investor of Levitronix and holds 21.4% of the company's common stock.

Additionally, the following related persons had or may have a direct or indirect material interest in our transactions with our affiliated companies:

- Barry J. Sanders, who is: (a) the President and Chief Operating Officer of American DG Energy, (b) the Chief Executive Officer and a director of EuroSite Power and (c) the Chairman of Ilios.

- Anthony S. Loumidis, the Company's Vice President and Treasurer who is: (a) the Chief Financial Officer Secretary and Treasurer of American DG Energy, (b) the Chief Financial Officer Secretary and Treasurer of EuroSite Power, (c) the Chief Financial Officer Secretary and Treasurer of GlenRose Instruments and (d) the Treasurer of Ilios.

American DG Energy has sales representation rights to the Company's products and services in New England. Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2011 and 2010 amounted to $713,267 and $1,658,471, respectively.

On October 20, 2009, American DG Energy, in the ordinary course of its business, signed a Sales Representative Agreement with Ilios to promote, sell and service the Ilios high-efficiency heating products, such as the high efficiency water heater, in the marketing territory of the New England States, including Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine. The marketing territory also includes all of the nations in the European Union. The initial term of this Agreement is for five years, after which it may be renewed for successive one-year terms upon mutual written agreement.

On September 24, 2001, the Company entered into subscription agreements with investors for the sale of convertible debentures. The primary investors were George N. Hatsopoulos, who subscribed for $200,000 of the debentures, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, who subscribed for a total amount of $100,000 of the debentures. The debentures accrue interest at a rate of 6% per annum and are due on September 24, 2007. The debentures are convertible, at the option of George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, into shares of Common Stock at a conversion price of $0.30 per share.

On September 24, 2007, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children agreed to extend the debenture term to September 24, 2011. On May 11, 2009, George N. Hatsopoulos converted a portion of the principal in the amount of $109,033 of the debentures and accrued interest in the amount of $90,967 into 400,000 shares of Common Stock in the Company's newly formed subsidiary, Ilios, at $0.50 per share. Also, on May 11, 2009, John N. Hatsopoulos converted principal amount of $427,432 in demand notes payable and accrued interest in

TECOGEN INC.

the amount of $72,567 into 1,000,000 shares of Ilios Common Stock at $0.50 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, Joseph J. Ritchie elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 148,111 shares of Common Stock at a conversion price of $0.30 per share. On September 24, 2011, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, agreed to extend their term to September 24, 2013 and requested that accrued interest in the amount of $72,959 be converted into the Company's Common Stock at $0.50 per share (which was the average price of the Company's stock from September 24, 2001 to September 24, 2011).

On September 10, 2008 the Company entered into a demand note agreement with John N. Hatsopoulos, in the principal amount of $250,000 at an annual interest rate of 5%. On September 7, 2011 the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $750,000 at an annual interest rate of 6%. Unpaid principal and interest on the demand notes is due upon demand.

For additional disclosure on the Company's debt see Note 7 – Demand notes payable and convertible debentures – related party.

John N. Hatsopoulos' salary is $1.00 per year. On average, Mr. Hatsopoulos spends approximately 20% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

The Company signed a Facilities and Support Services Agreement with American DG Energy on January 1, 2006, as amended, included as Exhibit 10.6 hereto. The term of the agreement commences as of the start of each year and certain portions of the agreement, including office space allocation, get renewed annually upon mutual written agreement.

The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements. For the years ended December 31, 2011 and 2010, the Company received $185,596 and $196,466, respectively, from American DG Energy, Levitronix LLC and Alexandros Partners LLC. In addition, for the years ended December 31, 2011 and 2010 the Company received from the same companies, $224,700 and $142,050, respectively, to offset common operating expenses incurred in the administration and maintenance of its corporate office and warehouse facility.

The Company's headquarters are located in Waltham, Massachusetts and consist of 24,000 square feet of office and storage space that are shared with American DG Energy and other tenants. The lease expires on March 31, 2014. We believe that our facilities are appropriate and adequate for our current needs.

Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2011 and 2010 amounted to $713,267 and $1,658,471, respectively. In addition, Tecogen pays certain operating expenses, including benefits and insurance, on behalf of American DG Energy. Tecogen was reimbursed for these costs. As of December 31, 2011 and 2010, the total amount due from American DG Energy was $299,739 and $98,230, respectively.

Note 14 – Fair value measurements

The Company has categorized its financial assets and liabilities, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement the instrument. The three levels of the hierarchy are defined as follows:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. We currently do not have any Level 1 financial assets or liabilities.

Level 2 - Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full-term of the asset or liability.

Level 3 - Unobservable inputs reflecting management’s own assumptions about the input used in pricing the asset or liability. We currently do not have any Level 3 financial assets or liabilities.

TECOGEN INC.

The following table presents the input level used to determine the fair values of the Company's financial instruments measured at fair value on a recurring basis for the years ended December 31, 2011 and 2010:

	December 31, 2011	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Certificates of deposit	683,428	—	683,428	—
Total Assets	$683,428	$—	$683,428	$—

	December 31, 2010	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Certificates of deposit	85,000	—	85,000	—
Total Assets	$85,000	$—	$85,000	$—

The Company determines the fair value of certificates of deposits using information provided by the issuing bank which includes discounted expected cash flow estimates using current market rates offered for deposits with similar remaining maturities.

Note 15 – Income taxes

A reconciliation of the federal statutory income tax provision to the Company's actual provision for the years ended December 31, 2011 and 2010 is as follows:

	2011	2010
Benefit at federal statutory tax rate	$648,000	$185,000
Unbenefited operating losses	(648,000)	(185,000)
Income tax provision	$—	$—

The components of net deferred tax assets recognized in the accompanying consolidated balance sheets at December 31, 2011 and 2010 are as follows:

	2011	2010
Net operating loss carryforwards	$2,896,000	$2,867,000
Accrued expenses and other	588,000	30,000
Accounts receivable	37,000	—
Inventory	139,000	—
Depreciation	184,000	13,000
	3,844,000	2,910,000
Valuation allowance	(3,844,000)	(2,910,000)
Net deferred tax asset	$—	$—

As of December 31, 2011, the company has federal loss carryforwards of approximately $72,480,000, which expire beginning in 2021 through 2031. In addition, the Company has varying amounts of state net operating losses, expiring at various dates starting in 2012 through 2031. The federal net operating losses include approximately $1,303,000

attributable to the Company’s majority owned subsidiary, which can only be used against income of that entity.

During the year, the Company made adjustments to its cumulative temporary differences. This resulted in an increase in total deferred tax assets of $609,000, with a corresponding increase in the valuation allowance. There was no overall effect of this adjustment on the Company's net deferred tax assets.

TECOGEN INC.

Management has determined that it is more likely than not that the company will not recognize the benefits of the federal and state deferred tax assets and as a result has recorded a valuation allowance against the entire net deferred tax asset. The valuation allowance has increased by $934,000 during the year ended December 31, 2011. If the company should generate sustained future taxable income, against which these tax attributes may be recognized, some portion or all of the valuation allowance would be reversed.

The Company did not record a benefit for income taxes related to its operating losses for the years ended December 31, 2011 and 2010.

The Company has analyzed its current tax return compliance positions and has determined that no uncertain tax positions have been taken that would require recognition.

Note 16 – Subsequent events

On January 19, 2012, Ilios sold 1,000,000 shares of common stock through a private placement to an accredited investor at $0.50 per share for net proceeds of $500,000. As of the date of this prospectus, Tecogen owns a 62.5% interest in Ilios.

On April 12, 2012, Tecogen raised additional funds through a private placement of common stock to an accredited investor. In connection with the private placement, Tecogen sold 250,000 shares of common stock at $0.80 per share, for net proceeds of $200,000.

The Company has evaluated subsequent events through the date of this filing and determined that no additional subsequent events occurred that would require recognition in the consolidated financial statements or disclosure in the notes thereto.

TECOGEN INC.

PART II - INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth our expenses in connection with this registration statement. All of such amounts are estimates, other than the fee payable to the Securities and Exchange Commission.

	Amount
Securities and Exchange Commission registration fee	$2,886
Legal fees and expenses	50,000
Accounting fees and expenses	34,000
Printing and miscellaneous	10,000
Total	$96,886

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. We have included such a provision in our amended and restated charter.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or she is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

Our amended and restated charter includes a provision that eliminates the personal liability of our directors for monetary damages for breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to the Company or its stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under section 174 of the Delaware General Corporation Law regarding unlawful dividends and stock purchases; or
- for any transaction from which the director derived an improper personal benefit.

Our amended and restated charter also provides that:

- we must indemnify our directors and officers to the fullest extent permitted by Delaware law;
- we may, to the extent authorized from time to time by our Board of Directors, indemnify our other employees and agents to the same extent that we indemnified our officers and directors; and
- in the event we do not assume the defense in a legal proceeding, we must advance expenses, as incurred, to our directors and executive officers in connection with a legal proceeding to the fullest extent permitted by Delaware law.

The indemnification provisions contained in our amended and restated charter and bylaws are not exclusive of any other rights to which a person may be entitled by law, agreement, vote of stockholders, or disinterested directors or otherwise.

In addition to the indemnification provided for in our restated charter and bylaws, we intend to enter into indemnification agreements with each of our directors and executive officers. Each indemnification agreement will provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as our director, officer, employee or agent, provided that he or she acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, our best interests and, with respect to any criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful. In the event that we do not assume the defense of a claim against a director or

executive officer, we are required to advance his or her expenses in connection with his or her defense, provided that he or she undertakes to repay all amounts advanced if it is ultimately determined that he or she is not entitled to be indemnified by us.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our Company pursuant to the foregoing provisions, the opinion of the SEC is that such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

In addition, we may maintain insurance on behalf of our directors and executive officers insuring them against any liability asserted against them in their capacities as directors or officers or arising out of such status.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

Set forth below is information regarding Common Stock issued, warrants issued and stock options granted by the Company during fiscal years 2009 through 2011. Also included is the consideration, if any, we received and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

Common Stock and Warrants

On June 17, 2009, the Company raised $490,000 in a private placement of 980,000 shares of common stock at a price of $0.50 per share. The private placement was done exclusively by eight accredited investors, representing 2.2% of the total shares then outstanding. Prior to this transaction the company had 45,017,631 shares of common stock outstanding. Included in those shares are 600,000 shares to T.F Richter & Co. LTD, 200,000 shares to Anthony B. Low-Beer, 100,000 shares to Armen Partners, L.P, 20,000 shares to Ernest Aloi, 20,000 shares to Anthony Bellantoni, 20,000 shares to Anthony Ajello, 15,000 shares to Henry Nalbandian, and 5,000 shares to Paul D. Riddle & Rosemarie A. Riddle. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On September 4, 2009, the Company raised $208,000 in a private placement of 320,000 shares of common stock at a price of $0.65 per share. The private placement was done exclusively by two accredited investors, representing 0.7% of the total shares then outstanding. Prior to this transaction the company had 45,997,631 shares of common stock outstanding. Included in those shares are 300,000 shares to John Paguidas & Vasiliki Paguaidas and 20,000 shares to Robert and Lucy Lasseter. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On September 30, 2009, Joseph J. Ritchie, a holder of the Company’s convertible debentures elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 148,111 shares of common stock at a conversion price of $0.30 per share. The conversion of the debenture into shares of common stock represented 0.3% of the total shares then outstanding. Prior to this transaction the company had 46,367,631 shares of common stock outstanding. Such transaction was exempt from registration under Section 3(a)(9) of the Securities Act and/or under Rule 506 of Regulation D.

On March 26, 2010, the Company raised $142,500 through the exercise of 475,000 warrants of common stock at a price of $0.30 per share. The warrant exercise was done by three accredited investors representing 1.0% of the total shares then outstanding. Prior to this transaction the company had 46,515,742 shares of common stock outstanding. Included in those shares are 225,000 shares to George N. Hatsopoulos, 225,000 shares to John N. Hatsopoulos and 25,000 shares to Ravinder K. Sakhuja. Such transactions were exempt from registration under Section 4(a)(2) of the

Securities Act and/or under Rule 506 of Regulation D.

On October 20, 2010, the Company raised $1,211,250 in a private placement of 1,863,461 shares of common stock at a price of $0.65 per share. The private placement was done exclusively by eight accredited investors, representing 4.0% of the total shares then outstanding. Prior to this transaction the company had 46,990,742 shares of common stock outstanding. Included in those shares are 769,231 shares to Nettlestone Enterprises Limited, 769,230 shares to RBC cees Nominees Limited, 150,000 shares to Stephen B. Brodeaur, 100,000 shares to Kenneth G. Eisner, 25,000 shares to Ernest Aloi and Joseph Aloi, 25,000 shares to Ernest Aloi and Catherine Aloi and 25,000 shares to Ernest Aloi and Karen Mauro. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On June 10, 2011, the Company raised $666,075 in a private placement of 1,024,731 shares of common stock at a price of $0.65 per share. The private placement was done exclusively by twelve accredited investors, representing 2.1% of the total shares then outstanding. Prior to this transaction the company had 48,931,046 shares of common stock outstanding. Included in those shares are 769,231 shares to the Southern California Gas Company, 100,000 shares to Giordano Venzi,

TECOGEN INC.

20,000 shares to Ioannis Retsos, 20,000 shares Vasileios Kakoulidis, 20,000 shares to Sandro Reginelli, 20,000 shares to Jean Skeparnias, 15,000 shares to Franco Venzi, 15,000 shares to Nicola Bianchi, 15,000 shares to Charlotte Maier, 15,000 shares to Fermin Alou, 10,000 shares to Stephano Venzi and 5,500 shares to Athanasios Kyranis. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On May 31, 2011, the Company raised $14,000 in a private placement of 20,000 shares of common stock at a price of $0.70 per share. The private placement was done by Michael Zuk, Jr. & Gayle Line Zuk JTWROS, an accredited investor representing 0.04% of the total shares then outstanding. Prior to this transaction the company had 49,955,777 shares of common stock outstanding. Such transaction was exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On September 24, 2011, holders of the Company’s convertible debentures elected to convert accrued interest of $72,959, into 145,917 shares of Common Stock at a conversion price of $0.50 per share. The conversion was done exclusively by three accredited investors, representing 0.3% of the total shares then outstanding. Prior to this transaction the company had 50,175,777 shares of common stock outstanding. Included in those shares are 25,895 shares to George N. Hatsopoulos, 60,011 shares to Paris and Aliki Nikolaidis, trustees for the John N. Hatsopoulos 1989 Family Trust f/b/o Nia Marie Hatsopoulos and 60,011 shares to Paris and Aliki Nikolaidis, trustees for the John N. Hatsopoulos 1989 Family Trust f/b/o Alexander John Hatsopoulos. Such transaction was exempt from registration under Section 3(a)(9) of the Securities Act and/or under Rule 506 of Regulation D.

On November 30, 2011, the Company raised $2,937,750 in a private placement of 3,672,188 shares of Common Stock at a price of $0.80 per share. The private placement was sold exclusively to three accredited investors representing 7.3% of the total shares then outstanding. Prior to this transaction the company had 50,321,694 shares of common stock outstanding. Included in those shares are 2,847,188 shares to RBC cees Nominees Limited, 625,000 shares to Nettlestone Enterprises Limited and 200,000 shares to Jeremy Benjamin. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On May 24, 2012, the Company raised $480,000 in a private placement of 600,000 shares of Common Stock at a price of $0.80 per share. The private placement was sold exclusively to three accredited investors representing 1.1% of the total shares then outstanding. Prior to this transaction the company had 53,993,882 shares of common stock outstanding. Included in those shares are 250,000 shares to Bruno Meier, 100,000 shares to Hans Schopper and 250,000 shares to Pictet Bank & Trust. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

On September 30, 2012, certain holders of the debentures converted the principal amount of $100,000 and accrued interest in the amount of $6,100 into 340,960 shares of the Company's Common Stock. The conversion was done by a related party representing 0.6% of the total shares then outstanding. Prior to this transaction the company had 54,593,882 shares of common stock outstanding. Included in those shares are 170,480 shares to Paris & Aliki Nikolaidis, Trustees for the John N. Hatsopoulos Family Trust for the benefit of Nia Marie Hatsopoulos and 170,480 shares to Paris & Aliki Nikolaidis, Trustees for the John N. Hatsopoulos Family Trust for the benefit of Alexander John Hatsopoulos. Such transaction was exempt from registration under Section 3(a)(9) of the Securities Act and/or under Rule 506 of Regulation D.

On December 3, 2012, the Company raised $200,000 in a private placement of 250,000 shares of Common Stock at a price of $0.80 per share. The private placement was done by Bruno Meier, an accredited investor representing 0.5% of the total shares then outstanding. Prior to this transaction the company had 54,934,842 shares of common stock outstanding. Such transaction was exempt from registration under Section 4(a)(2) of the Securities Act and/or under

Rule 506 of Regulation D.

Restricted Stock Grants

On May 4, 2009, the Company made a restricted stock grant to a consultant by granting him the right to purchase an aggregate of 50,000 shares of Common Stock at a price of $0.001 per share. Such transaction was exempt from registration under Section 4(a)(2) of the Securities Act.

On September 15, 2010, the Company made restricted stock grants to three employees by permitting them to purchase an aggregate of 76,843 shares of Common Stock at a price of $0.001 per share. Such transactions were exempt from registration under Section 4(a)(2) of the Securities Act.

TECOGEN INC.

On June 20, 2011, the Company made a restricted stock grant to an employee by granting him the right to purchase an aggregate of 200,000 shares of Common Stock at a price of $0.001 per share. Such transaction was exempt from registration under the Securities Act under Section 4(a)(2).

Stock Options

On March 11, 2009, the Company granted nonqualified options to purchase 400,000 shares of Common Stock to two employees at $0.50 per share. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

On February 18, 2010, the Company granted nonqualified options to purchase 100,000 shares of Common Stock to one employee at $0.65 per share. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

On February 15, 2011, the Company granted nonqualified options to purchase 1,921,000 shares of the Common Stock to 28 employees at $0.65 per share. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

No underwriters were involved in the foregoing sales of securities. All purchasers represented to us in connection with their purchase that they were accredited investors and made other customary investment representations. All of the foregoing securities were deemed restricted securities when granted for purposes of the Securities Act.

ITEM 16. EXHIBITS.

The exhibits to the Registration Statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

ITEM 17. UNDERTAKINGS.

(a) The undersigned registration hereby undertakes as follows:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material changes to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§ 230.430A of this chapter), shall be deemed to be part of and

included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any

TECOGEN INC.

statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

TECOGEN INC.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Waltham, Massachusetts on February 11, 2013 .

TECOGEN INC.

By: /s/ John N. Hatsopoulos
John N. Hatsopoulos
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

The undersigned officers and directors of the Company hereby constitute and appoint John N. Hatsopoulos and Bonnie J. Brown, and each of them singly, with full power of substitution, our true and lawful attorneys-in-fact and agents to take any actions to enable the Company to comply with the Securities Act, and any rules, regulations and requirements of the SEC, in connection with this registration statement on Form S-1, including the power and authority to sign for us in our names in the capacities indicated below any and all further amendments to this registration statement and any other registration statement filed pursuant to the provisions of Rule 462 under the Securities Act.

Pursuant to the requirements of the Securities Act of 1933, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

February 11, 2013

Signature	Title	Date
/s/ Angelina M. Galiteva Angelina M. Galiteva	Chairman of the Board	February 11, 2013
/s/ John N. Hatsopoulos John N. Hatsopoulos	Chief Executive Officer (Principal Executive Officer) & Director	February 11, 2013
/s/ Bonnie J. Brown Bonnie J. Brown	Chief Financial Officer (Principal Financial and Accounting Officer)	February 11, 2013
/s/ George N. Hatsopoulos George N. Hatsopoulos	Director	February 11, 2013
/s/ Charles T. Maxwell Charles T. Maxwell	Director	February 11, 2013
/s/ Ahmed F. Ghoniem Ahmed F. Ghoniem	Director	February 11, 2013

/s/ Joseph E. Aoun Joseph E. Aoun	Director	February 11, 2013

TECOGEN INC.

EXIBIT INDEX

Exhibit Number	Description
3.1	Certificate of Incorporation as currently in effect.
3.2	Certificate of Incorporation to be in effect upon effectiveness of this registration statement.
3.3	Bylaws as currently in effect.
3.4	Bylaws to be in effect upon effectiveness of this registration statement.
4.1	Specimen Common Stock Certificate of Tecogen Inc.
4.2	Form of Restricted Stock Purchase Agreement.
4.3+	Form of Stock Option Agreement.
4.4+	Indenture and Form of 6% Convertible Debenture Due 2004, dated September 24, 2001.
5.1*	Opinion of Sullivan & Worcester LLP.
10.4+	Tecogen Inc. 2006 Stock Incentive Plan, as amended on November 10, 2011.
10.5	Form of Tecogen Inc. Subscription Agreement for private placement of Common Stock.
10.6#	Facilities and Support Services Agreement between American DG Energy Inc. and Tecogen Inc., dated July 1, 2012.
10.7#	General Motors LLC, Customer Care and Aftersales Agreement, dated November 15, 2011.
10.8	Lease Agreement between Atlantic-Waltham Investment II, LLC, and Tecogen Inc., dated May 14, 2008.
10.9+	Demand Note Agreement with John N. Hatsopoulos.
10.10	Form of Sales Representative Agreement.
10.11*#	Asset Purchase Agreement with Danotek (assignment for the benefit of creditors), LLC, dated January 8, 2013.
10.12#	Exclusive License Agreement between Tecogen Inc. and the Wisconsin Alumni Research Foundation, dated February 5, 2007.
10.13*#	Grant Award Number PIR-08-022, dated July 2, 2009.
10.14#	Sales Representative Agreement between American DG Energy Inc. and Ilios Dynamics, dated October 20, 2009.
14.1	Code of Business Conduct and Ethics to be in effect upon effectiveness of this registration statement.
21.1	List of subsidiaries.
23.1*	Consent of McGladrey LLP.
24.1	Power of Attorney (included on signature page).
99.1	Audit Committee Charter.
99.2	Compensation Committee Charter.
99.3	Nominating and Governance Committee Charter.

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* Filed herewith

\# Confidential treatment has been requested for portions of this document. The confidential portions will be omitted and filed separately, on a confidential basis, with the Securities and Exchange Commission.

\+ Management contract or compensatory plan or agreement