AMERICAN
DG ENERGY

POWER TO PROFIT

2011 ANNUAL REPORT

Dear Shareholders:

We are pleased to report that American DG Energy continued to expand its installed base of energy systems during 2011. Our On-Site Utility energy solutions satisfy our customers' need to lower energy costs and achieve environmental goals without requiring capital and operating responsibilities.

The following are the major highlights in 2011:

- Our total energy production grew 17% to 71,379,748 kWh compared to 2010. Our energy revenue increased by 13.1%, even though the natural gas price, a key component in calculating our hot water revenue, was considerably lower in 2011 compared to 2010.
- Our energy gross profit margin without depreciation in 2011 was 36.1%.
- As part of our strategy to attract international accounts and large property holders with multiple buildings, we received our largest single order to supply 1,050 kW to residential buildings in New York. The value of that agreement is $27.4 million over a 15 year period. We also expanded our reach into the DoubleTree hotel group, Stevens Institute of Technology, and other customers.
- We received an order to provide an On-Site Utility energy solution via our new ultra-high-efficiency water heater (or heat pump), as we continue to expand our technology offering beyond combined heat and power systems, chillers, and boilers. We are committed to offering our customers low cost electricity, heat, hot water and cooling through highly efficient technology that we own and operate. Our heat pump technology provides us with a compelling alternative to heat water in the United States and beyond.
- We substantially expanded our sales and marketing effort by adding sales people and engineers, broadening our distribution and geographic reach, and implementing direct marketing programs to target potential customers, especially large property owners.
- We introduced EuroSite Power's On-Site Utility energy solutions in the United Kingdom (UK) and Europe. With an experienced Managing Director, the UK-based team has signed its first combined heat and power energy order in early 2012. In the UK we are able to sell carbon as well as our standard electricity, heat, hot water and cooling.
- We received $510,069 in rebates and incentives and monetized the energy efficiency credits for our New England energy systems. While our energy technology and solutions do not require subsidies to meet our project investment goals, we continue to seek these funds when available.
- We finished the year with approximately $17.8 million in cash which prepares us well for 2012.

In addition, our currently installed energy systems running at 100% capacity have the potential to produce approximately 31,420 metric tons of carbon equivalents, less than typical separate heat and power systems, resulting in emissions reductions equivalent to removing the emissions of 5,190 automobiles.

We believe 2012 will be a very exciting year for our company. As we drive to grow our core On-Site Utility energy business in North America, the United Kingdom, Europe and beyond, our strategy of attracting large, international accounts should take us to new heights.

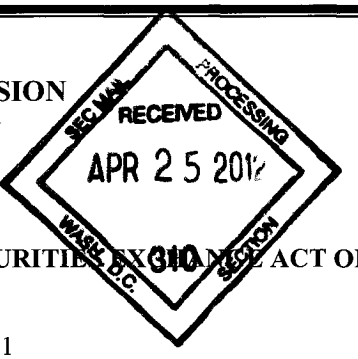
On behalf of the entire Board, management, and employees of American DG Energy and EuroSite Power, we appreciate your continued support and trust as we grow our company.

Sincerely,

John N. Hatsopoulos
Chief Executive Officer

Barry J. Sanders
President and Chief Operating Officer

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



FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2011
or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 001-34493

AMERICAN DG ENERGY INC.

(Exact name of Registrant as specified in its charter)

Delaware	04-3569304
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
45 First Avenue Waltham, Massachusetts	02451
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: (781) 622-1120
Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.001 par value	NYSE Amex

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months, (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2011, the aggregate market value of the voting shares of the registrant held by non-affiliates was approximately $43,211,500 based on a closing price per share of $1.66 on the NYSE Amex. For purposes of this calculation, an aggregate of 19,870,381 shares of common stock held directly or by affiliates of the directors and officers of the registrant have been included in the number of shares held by affiliates.

As of March 23, 2012, the registrant's shares of common stock outstanding were: 45,601,404.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by in Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K is to be incorporated herein by reference to our definitive Proxy Statement as filed with the SEC for our Annual Meeting of Shareholders to be held on May 24, 2012.

WARNING CONCERNING FORWARD-LOOKING STATEMENTS

THIS ANNUAL REPORT ON FORM 10-K CONTAINS FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995 AND OTHER FEDERAL SECURITIES LAWS. THESE FORWARD-LOOKING STATEMENTS ARE BASED ON OUR PRESENT INTENT, BELIEFS OR EXPECTATIONS, AND ARE NOT GUARANTEED TO OCCUR AND MAY NOT OCCUR. ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE CONTAINED IN OR IMPLIED BY OUR FORWARD-LOOKING STATEMENTS AS A RESULT OF VARIOUS FACTORS.

WE GENERALLY IDENTIFY FORWARD-LOOKING STATEMENTS BY TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECTS," "PLANS," "ANTICIPATES," "COULD," "INTENDS," "TARGET," "PROJECTS," "CONTEMPLATES," "BELIEVES," "ESTIMATES," "PREDICTS," "POTENTIAL" OR "CONTINUE" OR THE NEGATIVE OF THESE TERMS OR OTHER SIMILAR WORDS. THESE STATEMENTS ARE ONLY PREDICTIONS. THE OUTCOME OF THE EVENTS DESCRIBED IN THESE FORWARD-LOOKING STATEMENTS IS SUBJECT TO KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE OUR, OUR CUSTOMERS' OR OUR INDUSTRY'S ACTUAL RESULTS, LEVELS OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY THESE FORWARD-LOOKING STATEMENTS, TO DIFFER.

THIS REPORT ALSO CONTAINS MARKET DATA RELATED TO OUR BUSINESS AND INDUSTRY. THESE MARKET DATA INCLUDE PROJECTIONS THAT ARE BASED ON A NUMBER OF ASSUMPTIONS. IF THESE ASSUMPTIONS TURN OUT TO BE INCORRECT, ACTUAL RESULTS MAY DIFFER FROM THE PROJECTIONS BASED ON THESE ASSUMPTIONS. AS A RESULT, OUR MARKETS MAY NOT GROW AT THE RATES PROJECTED BY THESE DATA, OR AT ALL. THE FAILURE OF THESE MARKETS TO GROW AT THESE PROJECTED RATES MAY HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS, RESULTS OF OPERATIONS, FINANCIAL CONDITION AND THE MARKET PRICE OF OUR COMMON STOCK.

SEE "ITEM 1A. RISK FACTORS," "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS" AND "BUSINESS," AS WELL AS OTHER SECTIONS IN THIS REPORT, THAT DISCUSS SOME OF THE FACTORS THAT COULD CONTRIBUTE TO THESE DIFFERENCES. THE FORWARD-LOOKING STATEMENTS MADE IN THIS ANNUAL REPORT ON FORM 10-K RELATE ONLY TO EVENTS AS OF THE DATE OF WHICH THE STATEMENTS ARE MADE. EXCEPT AS REQUIRED BY LAW, WE UNDERTAKE NO OBLIGATION TO UPDATE OR RELEASE ANY FORWARD- LOOKING STATEMENTS AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE.

AMERICAN DG ENERGY INC.

ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2011

TABLE OF CONTENTS

PART I

Item 1. Business.

General

American DG Energy Inc., or the Company, we, our or us, distributes, owns and operates clean, on-site energy systems that produce electricity, hot water, heat and cooling. Our business model is to own the equipment that we install at customers' facilities and to sell the energy produced by these systems to the customers on a long-term contractual basis. We call this business the American DG Energy "On-Site Utility".

We offer natural gas powered cogeneration systems that are highly reliable and energy efficient. Our cogeneration systems produce electricity from an internal combustion engine driving a generator, while the heat from the engine and exhaust is recovered and typically used to produce heat and hot water for use at the site. We also distribute and operate water chiller systems for building cooling applications that operate in a similar manner, except that the engine's power drives a large air-conditioning compressor while recovering heat for hot water. Cogeneration systems reduce the amount of electricity that the customer must purchase from the local utility and produce valuable heat and hot water for the site to use as required. By simultaneously providing electricity, hot water and heat, cogeneration systems also have a significant, positive impact on the environment by reducing the carbon or CO_2 produced by offsetting the traditional energy supplied by the electric grid and conventional hot water boilers.

Distributed Generation of electricity, or DG, often referred to as cogeneration systems, or combined heat and power systems, or CHP, is an attractive option for reducing energy costs and increasing the reliability of available energy. DG has been successfully implemented by others in large industrial installations over 10 Megawatts, or MW, where the market has been growing for several years, and is increasingly being accepted in smaller size units because of technology improvements, increased energy costs and better DG economics. We believe that our target market (users of up to 1 MW) has been barely penetrated and that the reduced reliability of the utility grid, increasing cost pressures experienced by energy users, advances in new, low cost technologies and DG-favorable legislation and regulation at the state and federal level will drive our near-term growth and penetration into our target market. The Company maintains a website at www.americandg.com, but our website address included in this Annual Report is a textual reference only and the information in the website is not incorporated by reference into this Annual Report.

The Company was incorporated as a Delaware corporation on July 24, 2001 to install, own, operate and maintain complete DG systems, or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2011, we had installed energy systems, representing approximately 5,835 kilowatts, or kW, 48.0 million British thermal units, or MMBtu's, of heat and hot water and 2,820 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated. Due to the high efficiency CHP systems, the Environmental Protection Agency, or EPA, has recognized them as a means to improve the environment. We have estimated that our currently installed energy systems running at 100% capacity have the potential to produce approximately 31,420 metric tons of carbon equivalents, less than typical separate heat and power systems, resulting in emissions reductions equivalent to removing the emissions of 5,190 automobiles.

We believe that our primary near-term opportunity for DG energy and equipment sales is where commercial electricity rates exceed $0.12 per kW hour, or kWh, which is predominantly in the Northeast and California. Attractive DG economics are currently attainable in applications that include hospitals, nursing homes, multi-tenant residential housing, hotels, schools and colleges, recreational facilities, food processing plants, dairies and other light industrial facilities. Two CHP market analysis reports sponsored by the Energy Information Administration, or EIA, in 2000 detailed the prospective CHP market in the commercial and institutional sectors[1] and in the industrial sectors[2]. These data sets were used to estimate the CHP market potential in the 100 kW to 1 MW size range for the hospitality, healthcare, institutional, recreational and light industrial facilities in California, Connecticut, Massachusetts, New Hampshire, New Jersey and New York, which are states where commercial electricity rates exceed $0.12 per kWh. Based on those rates, those states define our market and comprise over 163,000 sites totaling 12.2 million kW of prospective DG capacity. This is the equivalent of an $11.7 billion annual electricity market plus a $7.3 billion heat and hot water energy market, for a combined market potential of $19 billion.

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[1] See *The Market and Technical Potential for Combined Heat and Power in the Commercial/Institutional Sector;* Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000.

[2] See *The Market and Technical Potential for Combined Heat and Power in the Industrial Sector;* Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000.

The data used to calculate the Company's market potential are derived from the reports cited above; however the calculation of the total market potential is estimated by the Company.

We believe that the largest number of potential DG users in the U.S. require less than 1 MW of electric power and less than 1,200 tons of cooling capacity. We are able to design our systems to suit a particular customer's needs because of our ability to place multiple units at a site. This approach is part of what allows our products and services to meet changing power and cooling demands throughout the day (also from season-to-season) and greatly improves efficiency through a customer's varying high and low power requirements.

American DG Energy purchases energy equipment from various suppliers. The primary type of equipment used is a natural gas-powered, reciprocating engine provided by Tecogen Inc., or Tecogen. Tecogen is a leading manufacturer of natural gas, engine-driven commercial and industrial cooling and cogeneration systems suitable for a variety of applications, including hospitals, nursing homes and schools. A CHP system simultaneously produces two types of energy – heat and electricity – from a single fuel source, often natural gas. The two key components of a CHP system are an internal combustion reciprocating engine and an electric generator. The internal combustion reciprocating engine is provided to Tecogen by General Motors. The clean natural gas fired engine spins a generator to produce electricity. The natural byproduct of the working engine is heat. The heat is captured and used to supply space heating, heating domestic hot water, laundry hot water or to provide heat for swimming pools and spas.

In July 2010, the Company established EuroSite Power Inc., or EuroSite Power, a subsidiary formed to introduce the Company's On-Site Utility solution into the European market. As of December 31, 2011 the Company owns an 82.8% interest in EuroSite Power and has consolidated EuroSite Power into its financial statements in accordance with generally accepted accounting principles, or GAAP.

As power sources that use alternative energy technologies mature to the point that they are both reliable and economical, we will consider employing them to supply energy for our customers. We regularly assess the technical, economic, and reliability issues associated with systems that use solar, micro-turbine or fuel cell technologies to generate power.

The Company and its Affiliates

Eurosite Power, GlenRose Instruments Inc., or GlenRose Instruments, Tecogen and Ilios Inc., or Ilios, are affiliated companies by virtue of common ownership. Specifically, John N. Hatsopoulos who is the Chief Executive Officer and director of the Company is: (a) the Chairman of EuroSite Power and holds 0.1% of the company's common stock, (b) the Chief Executive Officer and director of Tecogen and holds 27.6% of the company's common stock, (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, is: (a) the Chairman of American DG Energy and holds 14.7% of the company's common stock, (b) a director of Tecogen and holds 26.2% of the company's common stock, (c) an investor in Ilios and holds 2.9% of the company's common stock and (d) an investor of GlenRose Instruments and holds 15.7% of the company's common stock.

Background and Market

The delivery of energy services to commercial and residential customers in the U.S. has evolved over many decades into an inefficient and increasingly unreliable structure. Power for lighting, air conditioning, refrigeration, communications and computing demands comes almost exclusively from centralized power plants serving users through a complex grid of transmission and distribution lines and substations. Even with continuous improvements in central station generation and transmission technologies, today's power industry is only about 33% efficient[3], meaning that it discharges to the environment roughly twice as much heat as the amount of electrical energy delivered to end-users. Since coal accounts for more than half of all electric power generation, these inefficiencies are a major contributor to rising atmospheric CO_2 emissions. As countermeasures are sought to limit global warming, pressures against coal will favor the deployment of alternative energy technologies.

[3] See *Energy Information Administration, Voluntary Reporting of Greenhouse Gases*, 2004, Section 2, Reducing Emissions from Electric Power, Efficiency Projects: Definitions and Terminology, page 20, available at http://www.eia.gov/oiaf/1605/archive/vr04data/pdf/0608(04).pdf. This website address and any other website addresses included in this Annual Report on Form 10-K are included as textual references only and the information in such websites is not incorporated by reference into this Annual Report on Form 10-K.

On-site boilers and furnaces burning either natural gas or petroleum distillate fuels produce most thermal energy for space heating and hot water services. This separation of thermal and electrical energy supply services has persisted despite a general recognition that CHP can be significantly more energy efficient than central generation of electricity by itself. Except in large-scale industrial applications (e.g., paper and chemical manufacturing), cogeneration has not attained general acceptance. This was due, in part, to the long-established monopoly-like structure of the regulated utility industry. Also, the technologies previously available for small on-site cogeneration systems were incapable of delivering the reliability, cost and environmental performance necessary to displace or even substantially modify the established power industry structure.

The competitive balance began to change with the passage of the Public Utility Regulatory Policy Act of 1978, a federal statute that has opened the door to gradual deregulation of the energy market by the individual states. In 1979, the accident at Three Mile Island effectively halted the massive program of nuclear power plant construction that had been a centerpiece of the electric generating strategy among U.S. utilities for two decades. Several factors caused utilities' capital spending to fall drastically, including well publicized cost overruns at nuclear plants, an end to guaranteed financial returns on costly new facilities, and growing uncertainty over which power plant technologies to pursue. Recently, investors have become increasingly reluctant to support the risks of the long-term construction projects required for new conventional generating and distribution facilities.

Because of these factors, electricity reserve margins have declined, and the reliability of service has begun to deteriorate, particularly in regions of high economic growth. Widespread acceptance of computing and communications technologies by consumers and commercial users has further increased the demand for electricity, while also creating new requirements for very high power quality and reliability. At the same time, technological advances in emission control, microprocessors and internet technologies have sharply altered the competitive balance between centralized and DG. These fundamental shifts in economics and requirements are key to the emerging opportunity for DG equipment and services.

The Role of DG

DG, or cogeneration, is the production of two sources or two types of energy (electricity or cooling and heat) from a single energy source (natural gas). We use technology that utilizes a low-cost, mass-produced, internal combustion engine from General Motors, used primarily in light trucks and sport utility vehicles that is modified to run on natural gas. The engine spins either a standard generator to produce electricity, or a conventional compressor to produce cooling. For heating, since the working engine generates heat, we capture the byproduct heat with a heat exchanger and utilize the heat for facility applications in the form of space heating and hot water for buildings or industrial facilities. This process is very similar to an automobile, where the engine provides the motion to the automobile and the byproduct heat is used to keep the passengers warm during the winter months. For refrigeration or cooling, standard available equipment uses an electric motor to spin a conventional compressor to make cooling. We replace the electric motor with the same modified engine that runs on natural gas to spin the compressor to run a refrigeration cycle and produce cooling.

DG refers to the application of small-scale energy production systems, including electricity generators, at locations in close proximity to the end-use loads that they serve. Integrated energy systems, operating at user sites but interconnected to existing electric distribution networks, can reduce demand on the nation's utility grid, increase energy efficiency, avoid the waste inherent in long distance wire and cable transmission of electricity, reduce air pollution and greenhouse gas emissions, and protect against power outages, while, in most cases, significantly lowering utility costs for power users and building operators.

Until recently, many DG technologies have not been a feasible alternative to traditional energy sources because of economic, technological and regulatory considerations. Even now, many "alternative energy" technologies (such as solar, wind, fuel cells and micro-turbines) have not been sufficiently developed or proven to economically meet the demands of commercial users or the ability to be connected to the existing utility grid.

We supply cogeneration systems that are capable of meeting the demands of commercial users and that can be connected to the existing utility grid. Specific advantages of the Company's on-site DG of multiple energy services, compared with traditional centralized generation and distribution of electricity alone, include the following:

- Greatly increased overall energy efficiency (up to 90% versus less than 33% for the existing power grid)[4].

[4] See *Environmental and Energy Study Institute (EESI), Energy Generation and Distribution Efficiency,* available at http://www.eesi.org/generation_distribution. This website address and any other website addresses included in this Annual Report on Form 10-K are included as textual references only and the information in such websites is not incorporated by reference into this Annual Report on Form 10-K.

- Rapid adaptation to changing demand requirements (e.g., weeks, not years to add new generating capacity where and when it is needed).
- Ability to by-pass transmission line and substation bottlenecks in congested service areas.
- Avoidance of site and right-of-way issues affecting large-scale power generation and distribution projects.
- Clean operation, in the case of natural gas fired reciprocating engines using microprocessor combustion controls and low-cost exhaust catalyst technology developed for automobiles.
- Rapid economic paybacks for equipment investments, often three to five years when compared to existing utility costs and technologies.
- Relative insensitivity to fuel prices due to high overall efficiencies achieved with cogeneration of electricity and thermal energy services, including the use of waste heat to operate absorption type air conditioning systems (displacing electric-powered cooling capacity at times of peak summer demand).
- Reduced vulnerability of multiple de-centralized small-scale generating units compared to the risk of major outages from natural disasters or terrorist attacks against large central-station power plants and long distance transmission lines.
- Ability to remotely monitor, control and dispatch energy services on a real-time basis using advanced switchgear, software, microprocessor and internet modalities. Through our on-site energy products and services, energy users are able to optimize, in real time, the mix of centralized and distributed electricity-generating resources.

Also, DG systems possess significant positive environmental impact. The EPA has created a Combined Heat and Power Partnership to promote the benefits of DG systems. The Company is a member of this Partnership. The following statement is found on the EPA web site.

> *"Combined heat and power systems offer considerable environmental benefits when compared with purchased electricity and onsite-generated heat. By capturing and utilizing heat that would otherwise be wasted from the production of electricity, CHP systems require less fuel than equivalent separate heat and power systems to produce the same amount of energy. Because less fuel is combusted, greenhouse gas emissions, such as carbon dioxide (CO_2), as well as criteria air pollutants like nitrogen oxides (NO_x) and sulfur dioxide (SO_2), are reduced.*[5]"

The disadvantages of the Company's on-site DG are:

- Cogeneration is a mechanical process and our equipment is susceptible to downtime or failure.
- The base-rate of an electric utility is determined by a certain number of subscribers. DG at a significant scale will reduce the number of subscribers and therefore it may increase the base-rate for the electric utility for its customer base.
- By committing to our long-term agreements, a customer may be forfeiting the opportunity to use more efficient technology that may become available in the future.

The DG Market Opportunity

We believe that our primary near-term opportunity for DG energy and equipment sales is where commercial electricity rates exceed $0.12 per kW hour, or kWh, which is predominantly in the Northeast and California. Attractive DG economics are currently attainable in applications that include hospitals, nursing homes, multi-tenant residential housing, hotels, schools and colleges, recreational facilities, food processing plants, dairies and other light industrial facilities.

Two CHP market analysis reports sponsored by the Energy Information Administration, or EIA, in 2000 detailed the prospective CHP market in the commercial and institutional sectors[6] and in the industrial sectors[7]. These data sets were used to estimate the CHP market potential in the 100 kW to 1 MW size range for the hospitality, healthcare, institutional, recreational and light industrial facilities in California, Connecticut, Massachusetts, New Hampshire, New Jersey and New York, which are the states where commercial electricity rates exceed $0.12 per kWh. Based on those rates, those states define our market and comprise over 163,000 sites totaling 12.2 million kW of prospective DG capacity. This is the equivalent of an

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[5] See: http://epa.gov/chp/basic/environmental.html. This website address and any other website addresses included in this Annual Report on Form 10-K are included as textual references only and the information in such websites is not incorporated by reference into this Annual Report on Form 10-K.

[6] See *The Market and Technical Potential for Combined Heat and Power in the Commercial/Institutional Sector;* Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000.

[7] See *The Market and Technical Potential for Combined Heat and Power in the Industrial Sector;* Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000.

$11.7 billion annual electricity market plus a $7.3 billion heat and hot water energy market, for a combined market potential of $19 billion. The data used to calculate the Company's market potential are derived from the aforementioned reports; however the calculation of the total market potential is estimated by the Company.

Business Model

We are a DG onsite energy company that sells energy in the form of electricity, heat, hot water and air conditioning under long-term contracts with commercial, institutional and light industrial customers. We install our systems at no cost to our customers and retain ownership of the system. Because our systems operate at over 90% efficiency (versus less than 33% for the existing power grid)[8], we are able to sell the energy produced by these systems to our customers at prices below their existing cost of electricity (or air conditioning), heat and hot water. Our cogeneration systems consist of natural gas-powered internal combustion engines that drive an electrical generator to produce electricity and that capture the engine heat to produce space heating and hot water. Our energy systems also can be configured to drive a compressor that produces air conditioning and that also captures the engine heat. As of December 31, 2011, we had 83 energy systems operational.

To date, each of our installations runs in conjunction with the electric utility grid and requires standard interconnection approval from the local utility. Our customers use both our energy system and the electric utility grid for their electricity requirements. We typically supply the first 20% to 60% of the building's electricity requirements while the remaining electricity is supplied by the electric utility grid. Our customers are contractually bound to use the energy we supply.

To date, the price that we have charged our customers is set in our customer contracts at a discount to the price of the building's local electric utility. For the 20% to 60% portion of the customer's electricity that we supply, the customer realizes immediate savings on its electric bill. In addition to electricity, we sell our customers the heat and hot water at the same price they were previously paying or at a discount equivalent to their discount from us on electricity. Our air conditioning systems are also priced at a discount so that the customer realizes overall cost savings from the installation.

Since we own and operate the energy systems and since our customers have no investment in the units, our customers benefit from no capital requirements and no operating responsibilities. We operate the energy systems so our customers require no staff and have no energy system responsibilities; they are bound, however, to pay for the energy supplied by the energy systems over the term of the agreement.

Energy and Products Portfolio

We provide a full range of CHP product and energy options. Our primary energy and products are listed below:

- Energy Sales
  - Electricity
  - Thermal (Hot Water, Heat and Cooling)
- Energy Producing Products
  - Cogeneration Packages
  - Chillers
  - Natural Gas Heat Pumps
  - Complementary Energy Equipment (e.g., boilers, etc.)
  - Alternative Energy Equipment (e.g., solar, fuel cells, etc.)
- Turnkey Installation Energy Producing Products with Incentives
- Other Revenue Opportunities

Energy Sales

For customers seeking an alternative to the outright purchase of CHP equipment, we will install, maintain, finance, own and operate complete on-site CHP systems that supply, on a long-term, contractual basis, electricity and other energy services. We sell the energy to customers at a guaranteed discount rate to the rates charged by conventional utility suppliers. Customers are billed monthly. Our customers benefit from a reduction in their current energy bills without the capital costs and risks associated with owning and operating a cogeneration or chiller system. Also, by outsourcing the management and

[8] See *Environmental and Energy Study Institute (EESI), Energy Generation and Distribution Efficiency,* available at http://www.eesi.org/generation_distribution. This website address and any other website addresses included in this Annual Report on Form 10-K are included as textual references only and the information in such websites is not incorporated by reference into this Annual Report on Form 10-K.

financing of on-site energy facilities to us, they can reap the economic advantages of DG without the need for retaining specialized in-house staff with skills unrelated to their core business. Customers benefit from our On-Site Utility in a number of ways:

- Guaranteed lower price for energy
- Only pay for the energy they use
- No capital costs for equipment, engineering and installation
- No equipment operating costs for fuel and maintenance
- Immediate cash flow improvement
- Significant green impact by the reduction of carbon produced
- No staffing, operations and equipment responsibility

Our customers pay us for energy produced on site at a rate that is a certain percentage below the rate at which the utility companies provide them electrical and natural gas services. We measure the actual amount of electrical and thermal energy produced and charge our customers accordingly. We agree to install, operate, maintain and repair our energy systems at our sole cost and expense. We also agree to obtain any necessary permits or regulatory approvals at our sole expense. Our agreements are generally for a term of 15 years, renewable for two additional five years terms upon the mutual agreement of the parties.

In regions where high electricity rates prevail, such as the Northeast, monthly payments for CHP energy services can yield attractive paybacks (e.g. in some cases as quickly as 3-5 years) on our investments in On-Site Utility projects. The price of natural gas has a minor effect on the financial returns obtained from our energy service contracts because the value of hot water and other thermal services produced from the recovered heat generated by the internal combustion engine in our on-site DG system will increase in proportion to higher fuel costs. This recovered energy, which comprises up to 60% of the total heating value of fuel supplied to our CHP equipment, displaces fuel that would otherwise be burned in conventional boilers. Each of our customer sites becomes a profit center. The example below presents the energy supplied by two 75 kW cogeneration units and the economics of a typical energy service contract where we supply 80% of the site's heat and hot water and 45% of the site's electricity. Our customers range from hotels to nursing homes and apartment buildings and they usually require two energy systems or more. The savings calculations in the example are based on many variables, such as the customer's base electricity charge per kWh, the kW used at the site, the operating time of the equipment, the customer's base gas price per 1 million BTU, or British Thermal Units, the net heat recovery of our equipment, the efficiency of the customer's boiler, the electric demand savings rate and the discount to the customer, which may range from 0% to 10%. The economics of a typical energy service contact assume the customer's base electric rate per kWh at $0.14 and the customer's gas price per 1 million BTU at $12.00. The example also reflects a 2% of expected annual increase in energy costs that should occur over a 15-year period:

	Annual	Term (15 years)
American DG Energy Revenue	$284,000	$4,908,000
American DG Energy Gross Margin	$84,000	$1,456,000
Customer Savings	$32,000	$545,000

The example reflects an American DG Energy investment of $345,000 with a payback in 4 years or a 25% internal rate of return.

Energy Producing Products

We typically offer cogeneration units sized to produce 75 kW to 100 kW of electricity, water chillers sized to produce 200 to 400 tons of cooling and ultra-high-efficiency heating products, such as a high efficiency water heater.

For cogeneration, we prefer a modular design approach to allow us to group multiple units together to serve customers with considerably larger power requirements. Often, cogeneration units are conveniently dispersed within a large operation, such as a hospital or campus, serving multiple process heating systems that would otherwise be impractical to serve from a single large machine. The equipment we select often yield overall energy efficiencies in excess of 80% (from our equipment supplier's specifications). We also purchase energy equipment that incorporates mechanical work to extract heat from the environment in order to supplement the chemical energy available in the fuel, such a high efficiency water heater. The result of that equipment is a significant boost in efficiency and carbon emissions benefit relative to conventional heating systems.

Many other DG technologies are challenged by technical, economic and reliability issues associated with systems that generate power using solar, micro-turbine or fuel cell technologies, which have not yet proven to be economical for typical customer needs. When alternative energy technologies mature to the point that they are both reliable and economical, we will employ them for the best-fit applications.

Service and Installation

Where appropriate, we utilize the best local service infrastructure for the equipment we deploy. We require long-term maintenance contracts and ongoing parts sales. Our centralized remote monitoring capability allows us to keep track of our equipment in the field. Our installations are performed by local contractors with experience in energy cogeneration systems.

For the occasional customers that want to own the CHP system themselves, we offer our "turn-key" option whereby we provide equipment, systems engineering, installation, interconnect approvals, on-site labor and startup services needed to bring the complete CHP system on-line. For some customers, we are also paid a fee to operate the systems and may receive a portion of the savings generated from the equipment.

Other Funding and Revenue Opportunities

The Company is able to participate in the demand response market and receive payments due to the availability of our energy systems. Demand response programs provide payments for either the reduction of electricity usage or the increase in electricity production during periods of peak usage throughout a utility territory. We have also received grants and incentives from state organizations and natural gas companies for our installed energy systems.

Sales and Marketing

We offer cogeneration units sized to produce 75 kW to 100 kW of electricity, water chillers sized to produce 200 to 400 tons of cooling and ultra-high-efficiency heating products, such as a high efficiency water heater. Our On-Site Utility services are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. We offer standardized packages of energy, equipment and services suited to the needs of property owners and operators in healthcare, hospitality, large residential, athletic facilities and certain industrial sites. This includes national accounts and other customer groups having a common set of energy requirements at multiple locations.

Our energy offering is translated into direct financial gain for our clients, and is best appreciated by senior management. These clients recognize the gain in cash flow, the increase in net income and the preservation of capital we offer. As such, our energy sales are focused on reaching these decision makers. Additionally, we have benefited with increased sales and maintenance support through our consolidated joint ventures, American DG NY LLC, or ADGNY, and AES-NJ Cogen Co., or AES-NJ, an established developer of small cogeneration systems.

The Company is continually expanding its sales efforts by developing joint marketing initiatives with key suppliers to our target industries. Particularly important are our collaborative programs with natural gas utility companies. Since the economic viability of any CHP project is critically dependent upon effective utilization of recovered heat, the insight of the gas supplier to the customer energy profile is particularly effective in prospecting the most cost-effective DG sites in any region.

DG is enjoying growing support among state utility regulators seeking to increase the reliability of electricity supply with cost effective environmentally responsible demand-side resources. New York, New Jersey, Connecticut and Massachusetts are among the states that encourage DG through inter-connecting standards, incentives and/or supply planning. Unlike large central station power plants, DG investments can be made in small increments and with lead-times as short as just a few months.

The U.S. government has been developing and refining various funding opportunities related to its economic recovery or stimulus initiatives. While the final decision has not been determined as of the date of this Annual Report, it appears that "shovel ready" projects related to energy and the environment will hold great prominence. Also, there appears to be interest in upgrading government buildings. The Company's CHP systems would fit very well with any of these programs. Other than funding opportunities related to the economic recovery or stimulus initiatives, there does not appear to be any new government regulations that will affect the Company.

Competition

We believe that the main competition for our DG products is the established electric utility infrastructure. DG is beginning to gain acceptance in regions where energy customers are dissatisfied with the cost and reliability of traditional electricity service. These end-users, together with growing support from state legislatures and regulators, are creating a favorable climate for the growth of DG that is overcoming the objections of established utility providers. In our target markets, we compete with large utility companies such as Con Edison, Inc. and Long Island Power Authority in New York, Public Service Electric and Gas Company (PSE&G) in New Jersey, and NSTAR and National Grid USA Service Company, Inc. in Massachusetts. Those companies are much larger than us in terms of revenues, assets and resources. We aim to compete with large utility companies by selling electricity to the same commercial building customers. We sell directly to each building customer, but typically only supply 20%-60% of the electricity needs of the building. The remaining portion is supplied by the electric utility. We aim to compete with electric utilities by selling its electricity at a lower price. However, there is no assurance we will be able to provide electricity at a lower price.

Engine manufacturers sell DG units that range in size from a few kWs to many MWs in size. Those manufacturers are predominantly greater than 1 MW and include Caterpillar Inc., Cummins Power Generation Inc., and Waukesha, a subsidiary of General Electric Company. In many cases, we view these companies as potential suppliers of equipment and not as competitors. For example, we have installed a Waukesha unit at a customer site.

The alternative energy market is emerging rapidly. Many companies are developing alternative and renewable energy sources including solar power, wind power, fuel cells and micro-turbines. Some of the companies in this sector include General Electric Company, BP p.l.c, Royal Dutch Shell and SunEdison, a division of MEMC Electronic Materials, Inc.; Plug Power, Inc. and FuelCell Energy, Inc. (in the fuel cell space); and Capstone Turbine Corporation, Ingersoll Rand PLC and Elliott Turbomachinery, a division of the Elliott Group, Inc. (in the micro-turbine space). The effect of these developing technologies on our business is difficult to predict; however, when their technologies become more viable for our target markets, we may be able to adopt their technologies into our business model.

There are a number of energy service companies that offer related services. These companies include Siemens AG, Honeywell International Inc. and Johnson Controls Inc. In general, these companies seek large, diverse projects for electric demand reduction for campuses that include building lighting and controls, and electricity (in rare occasions) or cooling. Because of their overhead structures, these companies often solicit large projects and stay away from individual properties. Since we will focus on smaller projects for energy supply, we will be well suited to work in tandem with these companies when the opportunity arises.

There are also a few local emerging cogeneration developers and contractors that are attempting to offer services similar to ours. To be successful, they will need to have the proper experience in equipment and technology, installation contracting, equipment maintenance and operation, site economic evaluation, project financing and energy sales plus the capability to cover a broad region.

Material Contracts

In January 2006, the Company entered into the 2006 Facilities, Support Services and Business Agreement, or the Agreement, with Tecogen, to provide the Company with certain office and business support services for a period of one year, renewable annually by mutual agreement. The Company also shares personnel support services with Tecogen. The Company is allocated its share of the cost of the personnel support services based upon the amount of time spent by such support personnel while working on the Company's behalf. To the extent Tecogen is able to do so under its current plans and policies, Tecogen includes the Company and its employees in several of its insurance and benefit programs. The costs of these programs are charged to the Company on an actual cost basis. Under this agreement, the Company receives pricing based on a volume discount if it purchases cogeneration and chiller products from Tecogen. For certain sites, the Company hires Tecogen to service its Tecogen chiller and cogeneration products. Under the current Agreement, as amended, Tecogen provides the Company with office space and utilities at a monthly rate of $5,836.

We have sales representation rights to Tecogen's products and services. In New England, we have exclusive sales representation rights to their cogeneration products. We have granted Tecogen sales representation rights to our On-Site Utility energy service in California.

In October 2009, the Company signed a five-year exclusive distribution agreement with Ilios, a subsidiary of Tecogen that was formed in April 2009 to develop and distribute a line of ultra-high-efficiency heating products, such as a high efficiency water heater, that provide twice the efficiency of conventional boilers, based on management estimates, for commercial and industrial applications utilizing advanced thermodynamic principles. Under terms of the agreement, the Company has exclusive rights to incorporate Ilios' products in its energy systems throughout the European Union and New

England. The Company also has non-exclusive rights to distribute Ilios' products in the remaining parts of the United States and the world in cases where the Company retains ownership of the equipment for its On-Site Utility business.

Government Regulation

We are not subject to extensive government regulation. We are required to file for local construction permits (electrical, mechanical and the like) and utility interconnects, and we must make various local and state filings related to environmental emissions. The U.S. government has been developing and refining various funding opportunities related to its economic recovery or stimulus initiatives. The Company believes that its CHP systems would fit very well with any of these programs. Other than funding opportunities related to the economic recovery or stimulus initiatives, there does not appear to be any new government regulations that will affect the Company.

Employees

As of December 31, 2011, the Company employed 21 active full-time employees and 3 part-time employees. We believe that our relationship with our employees is satisfactory. None of our employees are represented by a collective bargaining agreement.

Item 1A. Risk Factors.

Our business faces many risks. The risks described below may not be the only risks we face. Additional risks that we do not yet know of, or that we currently think are immaterial, may also impair our business operations or financial results. 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 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 securities.

We have incurred losses, and these losses may continue.

We have incurred losses in each of our fiscal years since inception. Losses continued to be incurred in 2011. There is no assurance that profitability will be achieved in the near term, if at all.

Because unfavorable utility regulations make the installation of our systems more difficult or less economical, any slowdown in the utility deregulation process would be an impediment to the growth of our business.

In the past, many electric utility companies have raised opposition to DG, a critical element of our On-Site Utility business. Such resistance has generally taken the form of unrealistic standards for interconnection, and the use of targeted rate structures as disincentives to combined generation of on-site power and heating or cooling services. A DG company's ability to obtain reliable and affordable back-up power through interconnection with the grid is essential to our business model. Utility policies and regulations in most states are often not prepared to accommodate widespread on-site generation. These barriers erected by electric utility companies and unfavorable regulations, where applicable, make more difficult or uneconomic our ability to connect to the electric grid at customer sites and are an impediment to the growth of our business. Development of our business could be adversely affected by any slowdown or reversal in the utility deregulation process or by difficulties in negotiating backup power supply agreements with electric providers in the areas where we intend to do business.

Our onsite utility concept is largely unproven and may not be accepted by a sufficient number of customers.

The sale of cogeneration and cooling equipment has been successfully carried out for more than a decade. However, our On-Site Utility concept (i.e., the sale of on-site energy services, rather than equipment) is still in an early stage of implementation. Unresolved issues include the pricing of energy services and the structuring of contracts to provide cost savings to customers and optimum financial returns to us. There is no assurance that we will be successful in developing a profitable On-Site Utility business model, and failure to do so would have a material adverse effect on our business and financial performance.

The economic viability of our projects depends on the price spread between fuel and electricity, and the variability of the prices of these components creates a risk that our projects will be uneconomic.

The economic viability of DG projects is dependent upon the price spread between 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 a greater or lesser extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity services may decline periodically due to excess capacity arising from over-building of utility power

plants or recessions in economic activity. Any sustained weakness in electricity prices could significantly limit the market for our cogeneration, cooling equipment and On-Site Utility energy services.

We may fail to make sales to certain prospective customers because of resistance from facilities management personnel to the outsourcing of their service function.

Any outsourcing of non-core activities by institutional or commercial entities will generally lead to reductions in permanent on-site staff employment. As a result, our proposals to implement On-Site Utility contracts are likely to encounter strong initial resistance from the facilities managers whose jobs will be threatened by energy outsourcing. The growth of our business will depend upon our ability to overcome such barriers among prospective customers.

Future government regulations, such as increased emissions standards, safety standards and taxes, may adversely impact the economics of our business.

The operation of DG equipment at our customers' sites may be subject to future changes in federal, state and local laws and regulations (e.g., emissions, safety, taxes, etc.). Any such new or substantially altered rules and standards may adversely affect our revenues, profits and general financial condition.

If we cannot expand our network of skilled technical support personnel, we will be unable to grow our business.

Each additional customer site for our services requires the initial installation and subsequent maintenance and service of equipment to be provided by a team of technicians skilled in a broad range of technologies, including combustion, instrumentation, heat transfer, information processing, microprocessor controls, fluid systems and other elements of DG. If we are unable to recruit, train, motivate, sub-contract, and retain such personnel in each of the regional markets where our business operates we will be unable to grow our business in those markets.

The Company operates in highly competitive markets and may be unable to successfully compete against competitors having significantly greater resources and experience.

Our business may be limited by competition from energy services companies arising from the breakup of conventional regulated electric utilities. Such competitors, both in the equipment and energy services sectors, are likely to have far greater financial and other resources than us, and could possess specialized market knowledge with existing channels of access to prospective customer locations. We may be unable to successfully compete against those competitors.

Future technology changes may render obsolete various elements of equipment comprising our On-Site Utility installations.

We must select equipment for our DG projects so as to achieve attractive operating efficiencies, while avoiding excessive downtimes from the failure of unproven technologies. If we are unable to achieve a proper balance between the cost, efficiency and reliability of equipment selected for our projects, our growth and profitability will be adversely impacted.

We have limited historical operating results upon which to base projections of future financial performance, making it difficult for prospective investors to assess the value of our stock.

Our experience is primarily on-site energy services, and we have only a few years of actual operating experience. These limitations make developing financial projections more difficult. We will expand our business infrastructure based on these projections. If these projections prove to be inaccurate, we will sustain additional losses and will jeopardize the success of our business.

We will need to raise additional capital for our business, which will dilute existing shareholders.

Additional financings will be required to implement our overall business plan. We will need additional capital. Equity financings will dilute the percentage ownership of our existing shareholders. Our ability to raise an adequate amount of capital and the terms of any capital that we are able to raise will be dependent upon our progress in implementing demonstration projects and related marketing service development activities. If we do not make adequate progress, we may be unable to raise adequate funds, which will limit our ability to expand our business. If the terms of any equity financings are unfavorable, the dilutive impact on our shareholders might be severe.

We may make acquisitions that could harm our financial performance.

In order 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.

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

George N. Hatsopoulos and John N. Hatsopoulos, who are brothers, beneficially own a majority 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 shareholder approval, including a merger, consolidation and sale of substantially all of our assets or other change of control transaction. The concurrence of our minority shareholders will not be required for any of these decisions.

We may be exposed to substantial liability claims if we fail to fulfill our obligations to our customers.

We enter into contracts with large commercial and not-for-profit customers under which we will assume responsibility for meeting a portion of the customers' building energy demand and equipment installation. We may be exposed to substantial liability claims if we fail to fulfill our obligations to customers. There can be no assurance that we will not be vulnerable to claims by customers and by third parties that are beyond any contractual protections that we are able to negotiate. We may be unable to obtain liability and other insurance on terms and at prices that are commercially acceptable to us. As a result, liability claims could cause us significant financial harm.

Investment in our common stock is subject to price fluctuations which have been significant for development stage companies like us.

Historically, valuations of many companies in the development stage have been highly volatile. The securities of many of these companies have experienced significant price and trading volume fluctuations, unrelated to the operating performance or the prospects of such companies. If the conditions in the equity markets further deteriorate, we may be unable to finance our additional funding needs in the private or the public markets. 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.

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 our future earnings, if any, to fund the development and growth of our business. We currently expect to retain earnings for use in the operation and expansion of our business, and therefore do not anticipate paying any cash dividends in the foreseeable future. In addition, the terms of any future debt or credit facility may preclude us from paying any cash dividends. As a result, capital appreciation, if any, of our Common Stock will be the sole source of gain for our stockholders for the foreseeable future.

Our ability to access capital for the repayment of debts and for future growth is limited as 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 markets in which we operate. The current economic conditions could adversely impact our business in 2012 and beyond.

The current 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 excess and obsolete inventories, increased pressure on the prices for our products and services; and greater difficulty in collecting accounts receivable.

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 the end of the period covered by this Annual Report on Form 10-K, our principal executive officer and principal accounting officer have 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 Securities Exchange Act of 1934, as amended, or 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 the end of the period covered by this report. The Company currently has material weaknesses in financial reporting relating to lack of 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 is restricted by the Securities and Exchange Commission's, or 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 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.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our headquarters are located in Waltham, Massachusetts and consist of 3,071 square feet of office and storage space that are shares with EuroSite Power and are sub-leased from Tecogen. Our sub-lease with Tecogen expires on March 31, 2014. We believe that our facilities are appropriate and adequate for our current needs.

Item 3. Legal Proceedings.

We are not currently a party to any material litigation, and we are not aware of any pending or threatened litigation against us that could have a material adverse affect on our business, operating results or financial condition.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market

Our common stock is traded on the NYSE Amex under the symbol ADGE. Prior to October 19, 2009, our stock was traded on the OTC Bulletin Board. The following table sets forth the high and low sale prices of the Company's common stock for 2011 and 2010, as reported by the exchange.

	2011		2010	
	High	Low	High	Low
First Quarter	$ 2.78	$ 1.95	$ 3.18	$ 2.65
Second Quarter	2.27	1.30	4.01	2.86
Third Quarter	1.80	1.12	3.46	2.47
Fourth Quarter	1.79	1.12	3.37	2.70

The closing price of our common stock as reported on the NYSE Amex on December 31, 2011 and 2010 was $1.45 and $2.77, respectively.

Holders

As of March 23, 2012, there were approximately 1,000 beneficial holders of our common stock.

Dividends

We have never declared or paid any cash dividends on shares of our common stock. We currently intend to retain earnings, if any, to fund the development and growth of our business and do not anticipate paying cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, cash needs and growth plans.

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. Information is included for both equity compensation plans approved by the company's stockholders and not approved by the company's stockholders (which date back to before the company became a reporting company under the Exchange Act).

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	2,008,375	$ 1.12	761,250
Equity compensation plans not approved by security holders	-	-	-
Total	2,008,375	$ 1.12	761,250

Our management has 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:

- 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 the company does not employ 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 a material adverse effect on the company.

Recent Sales of Unregistered Securities

None.

Stock Options

In 2010, the Company granted nonqualified options to purchase 290,000 shares of the common stock to seven employees and two directors at prices ranging between $2.76 and $3.45 per share. Those options have a vesting schedule of four years and expire in five years. The fair value of all options issued in 2010 was $359,408, with a weighted average grant date fair value of $1.24 per option. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

In 2011, the Company granted nonqualified options to purchase 105,000 shares of the common stock to five employees at prices ranging between $1.12 and $2.01 per share. Those options have a vesting schedule of four years and expire in five years. The fair value of all options issued in 2011 was $68,421, with a weighted average grant date fair value of $0.65 per option. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

Item 6. Selected Financial Data.

Not applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review "Item 1A. Risk Factors" beginning on page 10 of this Annual Report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We derive sales from selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term energy sales agreements (with a typical term of 10 to 15 years). The energy systems are owned by us and are installed in our customers' buildings. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from our customers' local energy utility, to derive the value of our monthly energy sale, less the applicable negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers' local energy utility that month. Our revenues commence as new energy systems become operational. As of December 31, 2011, we had 83 energy systems operational.

As a by-product of our energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy. In this case, we account for revenue and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are

recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, the Company's policy is to record the entire expected loss, regardless of the percentage of completion. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings is recorded as deferred revenue. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the Company. Any resulting gain on these transactions is recognized over the payment period in the accompanying consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

We have experienced total net losses since inception of approximately $17.9 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as our management executes our current business plan. The cash and cash equivalents available at December 31, 2011 will provide sufficient working capital to meet our anticipated expenditures including installations of new equipment for the next twelve months; however, as we continue to grow our business by adding more energy systems, the cash requirements will increase. We believe that our cash and cash equivalents available at December 31, 2011 and our ability to control certain costs, including those related to general and administrative expenses, will enable us to meet our anticipated cash expenditures through March 31, 2013. Beyond March 31, 2013, we may need to raise additional capital through a debt financing or equity offering to meet our operating and capital needs. There can be no assurance, however, that we will be successful in our fundraising efforts or that additional funds will be available on acceptable terms, if at all.

In 2011, we raised $17,000,000 from the issuance of convertible debentures $1,148,401, net of issuance costs, through a private placement of EuroSite Power common stock and $33,818 through the exercise of stock options. If we are unable to raise additional capital in 2013 we may need to terminate certain of our employees and adjust our current business plan. Financial considerations may cause us to modify planned deployment of new energy systems and we may decide to suspend installations until we are able to secure additional working capital. We will evaluate possible acquisitions of, or investments in, businesses, technologies and products that are complementary to our business; however, we are not currently engaged in such discussions.

The Company's operations are comprised of one business segment. Our business is selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements. All revenues were generated and all long lived assets are maintained in the United States.

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenues and expenses during the reporting period, and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. Management believes the following critical accounting policies involve more significant judgments and estimates used in the preparation of our consolidated financial statements.

Partnerships, Joint Ventures and Entities under Common Control

Certain contracts are executed jointly through partnerships and joint ventures with unrelated third parties. The Company consolidates all joint ventures and partnerships in which it owns, directly or indirectly, 50% or more of the membership interests. All significant intercompany accounts and transactions are eliminated. Noncontrolling interest in net assets and earnings or losses of consolidated entities are reflected in the caption "Noncontrolling interest" in the accompanying consolidated financial statements. Noncontrolling interest adjusts the consolidated results of operations to reflect only the Company's share of the earnings or losses of the consolidated entities. Upon dilution of ownership below 50%, the accounting method is adjusted to the equity or cost method of accounting, as appropriate.

Related Party Transactions

The Company purchases the majority of its cogeneration units from Tecogen, an affiliate Company sharing similar ownership. In addition, Tecogen pays certain operating expenses, including benefits and payroll, on behalf of the Company and the Company leases office space from Tecogen. These costs were reimbursed by the Company. Tecogen has a sublease agreement for the office building, which expires on March 31, 2014.

In January 2006, the Company entered into the 2006 Facilities, Support Services and Business Agreement, or the Agreement, with Tecogen, to provide the Company with certain office and business support services for a period of one year, renewable annually by mutual agreement. Under the current amendment to the Agreement, Tecogen provides the Company with office space and utilities at a monthly rate of $5,836.

The Company has sales representation rights to Tecogen's products and services. In New England, the Company has exclusive sales representation rights to Tecogen's cogeneration products. The Company has granted Tecogen sales representation rights to its On-Site Utility energy service in California. During the year ended December 31, 2011, the Company received $18,361 from Tecogen as a commission from the sale of equipment.

On February 15, 2007, the Company loaned Peter Westerhoff, the noncontrolling interest partner in ADGNY, $20,000 by signing a two year loan agreement earning interest at 12% per annum. On April 1, 2007, the Company loaned an additional $75,000 to the same noncontrolling partner by signing a two year note agreement earning interest at 12% per annum, and on May 16, 2007, the Company loaned an additional $55,000 to the same partner by signing a two year note agreement under the same terms. On October 11, 2007, the Company extended to the noncontrolling interest partner a line of credit of $500,000. Effective April 1, 2009 the Company reached an agreement with the noncontrolling interest partner in ADGNY to purchase its interest in the Riverpoint location. As a result of this transaction, the Company owns 100% of that location and the noncontrolling interest partners' share of that location was applied to his outstanding debt to the Company related to the above mentioned loan agreements and line of credit. Additionally, in 2009 ADGNY financed capital improvements at several projects, which per project agreements was the responsibility of the noncontrolling interest partner. This further reduced the noncontrolling interest partner's noncontrolling interest in ADGNY. In March 2010, the Company reached an agreement with the noncontrolling interest partner to reduce his debt by a non-cash amount of $124,111 in return for a decrease in the noncontrolling interest partner's economic position by 5%. In September 2010, the Company loaned an additional $135,000 to the noncontrolling partner by signing an eighteen month note agreement earning interest at 12% per annum. At December 31, 2011, the noncontrolling interest partner had no amount outstanding with the Company.

On October 22, 2009, the Company signed a five-year exclusive distribution agreement with Ilios, a subsidiary of Tecogen. Under terms of the agreement, the Company has exclusive rights to incorporate Ilios' ultra-high-efficiency heating products, such as a high efficiency water heater, in its energy systems throughout the European Union and New England. The Company also has non-exclusive rights to distribute Ilios' product in the remaining parts of the United States and the world in cases where the Company retains ownership of the equipment for its On-Site Utility business.

On December 17, 2009, the Company entered into a revolving line of credit agreement, or the agreement, with John N. Hatsopoulos, the Company's Chief Executive Officer. Under the terms of the agreement, during the period extending to December 31, 2012, Mr. Hatsopoulos agreed to lend to the Company on a revolving line of credit basis a principal amount up to $5,000,000. All sums advanced pursuant to this agreement bare interest from the date each advance was made until paid in full at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Interest was due and payable quarterly in arrears and prepayment of principal, together with accrued interest, could be made at any time without penalty. Also, under the terms of the agreement, the credit line from Mr. Hatsopoulos was used solely in connection with the development and installation of current and new energy systems such as cogeneration systems and chillers and not for general corporate purposes including operational expenses such as payroll, maintenance, travel, entertainment, or sales and marketing.

On May 23, 2011, the Company issued $12,500,000 aggregate principal amount of debentures to a European investor and to John N. Hatsopoulos, the Company's Chief Executive Officer. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes. As of May 23, 2011, Mr. Hatsopoulos had a revolving line of credit agreement with the Company with an outstanding balance of $2,400,000. That balance was converted into the debentures and the revolving line of credit agreement was canceled.

On November 30, 2011, the Company issued an additional $6,900,000 aggregate principal amount of debentures to the European investor. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes.

On January 4, 2010, the Company entered into an agreement with Nettlestone Enterprises Limited (formerly known as Codale Ltd.), whereby Nettlestone Enterprises Limited provided the Company an amount up to two hundred fifty thousand British Pounds sterling (£250,000) to cover expenses incurred in connection with an investigation and research effort for the development of the Company's business in European markets. Expenses relating to this investigation were to be incurred over a period of up to one year and in consideration for the funds provided to the Company, when the Company forms a new subsidiary, Nettlestone Enterprises Limited would be entitled to an equity interest in such subsidiary equal to 10% of the equity thereof. In July 2010, the Company established EuroSite Power to introduce the Company's On-Site Utility solution into the European market and Nettlestone Enterprises Limited invested $5,000 in exchange for 5 million shares in EuroSite Power.

The Company's Chief Financial Officer devotes approximately half of his business time to the affairs of GlenRose Instruments and 50% of his salary is reimbursed by GlenRose Instruments. Also, the Company's Chief Executive Officer is the Chairman of the Board and a significant investor in GlenRose Instruments and does not receive a salary, bonus or any other compensation from GlenRose Instrumnets. At December 31, 2011, the Company had a balance of $20,400 due to John N. Hatsopoulos related to interest payable on his outstanding convertible debentures.

Property and Equipment and Depreciation and Amortization

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method at rates sufficient to write off the cost of the applicable assets over their estimated useful lives. Repairs and maintenance are expensed as incurred.

The Company evaluates the recoverability of its long-lived assets by comparing the net book value of the assets to the estimated future undiscounted cash flows attributable to such assets. The useful life of the Company's energy systems is the lesser of the economic life of the asset or the term of the underlying contract with the customer, typically 12 to 15 years. The Company reviews the useful life of its energy systems on a quarterly basis or whenever events or changes in business circumstances indicate that the carrying value of the assets may not be fully recoverable or that the useful lives of the assets are no longer appropriate. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis.

The Company receives rebates and incentives from various utility companies which are accounted for as a reduction in the book value of the assets. The rebates are payable from the utility to the Company and are applied against the cost of construction, therefore reducing the book value of the installation. As a reduction of the facility construction costs, these rebates are treated as an investing activity in the statements of cash flows. The rebates received by the Company from the utilities that apply to the cost of construction are one time rebates based on the installed cost, capacity and thermal efficiency of installed unit and are earned upon the installation and inspection by the utility and are not related to or subject to adjustment based on the future operating performance of the installed units. The rebate agreements with utilities are based on standard terms and conditions, the most significant being customer eligibility and post-installation work verification by a specific date. At December 31, 2011 and 2010, the amount of rebates applied to the cost of construction was $510,069 and $451,603, 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. Expected volatility is calculated based on the Company's historic volatility over the expected life of the option grant. 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.

Revenue Recognition

Revenue from energy contracts is recognized when electricity, heat, and chilled water is produced by the cogeneration systems on-site. The Company bills each month based on various meter readings installed at each site. The amount of energy produced by on-site energy systems is invoiced, as determined by a contractually defined formula. Under certain energy contracts, the customer directly acquires the fuel to power the systems and receives credit for that expense from the Company. The credit is recorded as a reduction of revenue and as reduction of cost of fuel. Revenues from operation, including shared savings are recorded when provided and verified. Maintenance service revenue is recognized over the term of the agreement and is billed on a monthly basis in arrears.

As a by-product of the energy business, in some cases, the customer may choose to have the Company construct the system for them rather than have it owned by American DG Energy. In this case, the Company accounts for revenue, or turnkey revenue, and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, the Company's policy is to record the entire expected loss, regardless of the percentage of completion. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings is recorded as deferred revenue.

Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the Company. Any resulting gain on these transactions is recognized over the payment period in the accompanying consolidated statements of operations. The Company had no such arrangements at December 31, 2011 and 2010, respectively.

Occasionally, the Company will enter into a sales arrangement with a customer to construct and sell an energy system and provide energy and maintenance services over the term of the contract. 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. Revenue is allocated to each element based upon its relative fair value which is determined based on the estimated price of the deliverables when sold on a standalone basis. Revenue related to the construction of the energy system is recognized using the percentage-of-completion method as the unit is being constructed. Revenue from the sale of energy is recognized when electricity, heat, and chilled water is produced by the energy system, and revenue from maintenance services is recognized over the term of the maintenance agreement. The Company had no such arrangements at December 31, 2011 and 2010, respectively.

The Company is able to participate in the demand response market and receive payments due to the availability of its energy systems. Demand response programs provide payments for either the reduction of electricity usage or the increase in electricity production during periods of peak usage throughout a utility territory. At December 31, 2011 and 2010, the revenue recognized from demand response activity was $60,980 and $106,928, respectively. The Company treats demand response payments as an operating activity in the statements of cash flows.

Other revenue represents various types of ancillary activities for which the Company engages from time to time such as the sale of equipment, and feasibility studies.

Income Taxes

As part of the process of preparing its consolidated financial statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves the Company estimating its actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as depreciation and certain accrued liabilities for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the Company's consolidated balance sheet. The Company must then assess the likelihood that its deferred tax assets will be recovered from future taxable income and to the extent it believes that recovery is not likely, the Company must establish a valuation allowance.

The Company is allowed to recognize the tax benefits of uncertain tax positions only where the position is "more likely than not" to be sustained assuming examination by tax authorities. The amount recognized is the amount that represents the largest amount of tax benefit that is greater than 50% likely of being ultimately realized. A liability is recognized for any benefit claimed, or expected to be claimed, in a tax return in excess of the benefit recorded in the financial

statements, along with any interest and penalties (if applicable) on that excess. In addition, the Company is required to provide a tabular reconciliation of the change in the aggregate unrecognized tax benefits claimed, or expected to be claimed, in tax returns and disclosure relating to the accrued interest and penalties for unrecognized tax benefits. Discussion is also required for those uncertain tax positions where it is reasonably possible that the estimate of the tax benefit will change significantly in the next twelve months.

The tax years 2003 through 2005 and 2010 remain open to examination by major taxing jurisdictions to which the Company is subject, which are primarily in the United States, as carry forward attributes generated in years past may still be adjusted upon examination by the Internal Revenue Service or state tax authorities if they are or will be used in a future period. The Company is currently not under examination by the Internal Revenue Service or any other jurisdiction for any tax years. The Company did not recognize any interest and penalties associated with unrecognized tax benefits in the accompanying consolidated financial statements. The Company would record any such interest and penalties as a component of interest expense. The Company does not expect any material changes to the unrecognized benefits within 12 months of the reporting date.

Impact of New Accounting Pronouncements

The Company does not expect the impact of recently issued accounting pronouncements to have a material impact on the Company's results of operations, financial position or cash flows.

Results of Operations

Fiscal Year Ended December 31, 2011 Compared with Fiscal Year Ended December 31, 2010

Revenues

Revenues in 2011 were $6,022,868 compared to $5,634,765 for the same period in 2010, an increase of $388,103 or 6.9%. The increase in revenues was primarily due to increased energy production from the addition of new systems during the period offset by a reduction in our turnkey and other revenue. Our On-Site Utility energy revenues in 2011 increased to $5,705,418 compared to $5,043,744 for the same period in 2010, an increase of $661,674 or 13.1%. Our turnkey and other revenue in 2011 decreased to $317,450 compared to $591,021 for the same period in 2010. In 2011 we did not have any turnkey installation revenue and the only revenue recorded was from ancillary revenue related to a feasibility study, maintenance of our energy systems and commissions from the sale of equipment. The revenue from our turnkey projects can vary substantially per period. While we accept turnkey installation projects, they are not considered our core business.

During 2011, we operated 83 energy systems, at 44 locations in the Northeast, representing 5,835 kW of installed electricity plus thermal energy, compared to 76 energy systems at 42 locations, representing 5,250 kW of installed electricity plus thermal energy for the same period in 2010. The revenue per customer on a monthly basis is based on the sum of the amount of energy produced by our energy systems, which is derived by the monthly published price of energy (electricity, natural gas or oil) from our customers' local utility, less the discounts we provide our customers. Our revenues commence as new energy systems become operational.

Cost of Sales

Cost of sales, including depreciation, in 2011 were $5,092,548 compared to $4,493,327 for the same period in 2010, an increase of $599,221 or 13.3%. Included in the cost of sales was depreciation expense of $1,265,009 in 2011, compared to $867,923 for the same period in 2010, due to additional installations and expenses related to River Point Towers Cooperative Inc., or RPT. The increase in our cost of sales was primarily associated with additional sites operating during the period.

Our cost of sales for our core On-Site Utility business consists primarily of fuel required to operate our energy systems that decreased by 0.1% as a percentage of energy revenue in 2011, compared to the same period in 2010. Our cost of sales also includes the cost of maintenance of our systems which increased by 0.9% as a percentage of energy revenue in 2011, compared to the same period in 2010.

In 2011, our gross margins were 15.4% compared to 20.3% for the same period in 2010, primarily due additional depreciation expense associated with additional energy systems operating during the period and due to expenses related to RPT. Our On-Site Utility energy margins excluding depreciation were at 36.1% in 2011 compared to 37.0% for the same period in 2010.

Operating Expenses

Our general and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. Our general and administrative expenses in 2011 were $2,384,774 compared to $1,487,040 for the same period in 2010, an increase of $897,734 or 60.4%. The increase was due to additional expenses relating to our subsidiary EuroSite Power and increased non-cash compensation expense related to the issuance of stock option awards to EuroSite Power employees and directors.

Our selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses including provisions for bad debt write-offs. The Company sells energy using both direct sales and commissioned agents. Our marketing efforts consisted of internet marketing, print literature, media relations and event driven direct mail. Our selling expenses in 2011 were $1,496,764 compared to $602,597 for the same period in 2010, an increase of $894,167. The increase in our selling expenses was due to the expansion of our domestic sales force, the addition of new employees at our EuroSite Power subsidiary and increase in marketing in the United States and United Kingdom.

Our engineering expenses consisted of technical staff and other engineering related expenses. The role of engineering is to evaluate potential customer sites based on technical and economic feasibility, manage the installed base of energy systems and oversee each new installation project. Our engineering expenses in 2011 were $763,260 compared to $733,504 for the same period in 2010, an increase of $29,756 or 4.1%. The increase in our engineering expenses was due to consulting services for our engineering department.

Loss from Operations

The loss from operations in 2011 was $3,714,478 compared to $1,681,703 for the same period in 2010. The increase in the operating loss was due to additional expenses relating to our EuroSite Power subsidiary and increased non-cash compensation expense related to the issuance of stock option awards to EuroSite Power employees and directors. Our non-cash compensation expense related to outstanding restricted stock and option awards to our employees was $667,000 in 2011, compared to $228,736 for the same period in 2010.

Other Income (Expense), Net

Our other income (expense), net, in 2011 was an expense of $65,268 compared to an expense of $14,065 for the same period in 2010. Other income (expense), net, includes interest and other income, interest expense and change in fair value of warrant liability. Interest and other income was $40,234 in 2011 compared to $51,385 for the same period in 2010. The decrease was primarily due to lower yields on our invested funds. Interest expense was $532,544 in 2011 compared to $125,131 for the same period in 2010, due to interest expense on our debentures. In 2011, the change in fair value of warrant liability was a gain of $427,042 (see "Note 6 – Warrant liability").

Provision for Income Taxes

Our provision for state income taxes in 2011 was $0 compared to $14,730 for the same period in 2010, due to the profitability of our joint venture ADGNY. No benefit to the Company's losses has been provided in either period.

Noncontrolling Interest

The noncontrolling interest share in the profits in ADGNY and EuroSite Power was $4,199 in 2011 compared to $197,505 for the same period in 2010. The decrease in noncontrolling income was due to revenue increase in the joint venture, offset by the expenses in the EuroSite Power subsidiary.

Liquidity and Capital Resources

Consolidated working capital at December 31, 2011 was $18,250,164, compared to $1,974,594 at December 31, 2010. Included in working capital were cash and cash equivalents of $17,801,025 at December 31, 2011, compared to $3,921,054 at December 31, 2010. The increase in working capital was a result of $17,000,000 in cash raised from the issuance of $19,400,000 of convertible debentures issued in May and November 2011, offset by cash used to fund energy projects.

Cash used in operating activities was $2,227,944 in 2011 compared to $862,280 for the same period in 2010. The Company's short and long-term receivables balance, including unbilled revenue, increased to $981,119, in 2011 compared to $796,315 at December 31, 2010, using $184,804 of cash due to the increased revenue in the period and the timing of

collections. Amount due to the Company from related parties decreased to $21,140 in 2011 compared to $52,432 at December 31, 2010, providing $31,292 of cash due related party payments. Our inventory increased to $634,120 in 2011 compared to 487,724 at December 31, 2010, using $146,396 of cash due additional costs to upgrade and transfer systems to the United Kingdom. Our prepaid and other current assets increased to $322,276 in 2011 compared to $86,089 at December 31, 2010, using $236,187 of cash due to prepaid insurance, marketing and other fees.

Accounts payable increased to $520,608 in 2011, compared to $482,917 at December 31, 2010, providing $37,691 of cash. Our accrued expenses and other current liabilities increased to $589,032 at December 31, 2011 compared to $370,774 at December 31, 2010, providing $218,258 of cash, primarily due to accrued interest on convertible debentures and other accrued expenses. The amount due to related party decreased to $313,847 in 2011, compared to $2,560,720 at December 31, 2010, providing $153,127 of cash and settling $2,400,000 in a non-cash conversion to convertible debentures.

During 2011, the investing activities of the Company's operations were expenditures for the purchase of property, plant and equipment for energy system installations. The Company used $1,643,534 for purchases and installation of energy systems, net of rebates and incentives of $510,069. The Company's financing activities provided $17,751,449 of cash in 2011 from the issuance of convertible debentures, sale of subsidiary common stock and exercise of stock options, offset by convertible debenture transaction costs, payments on capital lease obligations and distributions to noncontrolling interest.

At December 31, 2011, the Company's commitments included a lease for a plotter with a remaining balance of $10,006 and a rental commitment. The source of funds to fulfill those commitments will be provided from our cash balance.

On May 23, 2011, the Company issued $12,500,000 aggregate principal amount of debentures to a European investor and to John N. Hatsopoulos, the Company's Chief Executive Officer. The debentures will mature on May 25, 2018 and will accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes. The debentures canceled the revolving line of credit agreement with John N. Hatsopoulos, which as of May 23, 2011 had a principal amount outstanding of $2,400,000.

On November 30, 2011, the Company issued an additional $6,900,000 aggregate principal amount of debentures to the European investor. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes.

The Company's On-Site Utility energy program allows customers to reduce both their energy costs and site carbon production by deploying combined heat and power technology on its customers' premises at no cost. Therefore the Company is capital intensive. The Company believes that its existing resources, including cash and cash equivalents and future cash flow from operations, are sufficient to meet the working capital requirements of its existing business for the foreseeable future, including the next 12 months; however, as the Company continues to grow its business by adding more energy systems, the cash requirements will increase. Beyond March 31, 2013, the Company may need to raise additional capital through a debt financing or an equity offering to meet its operating and capital needs for future growth. There can be no assurance, however, that the Company will be successful in its fundraising efforts or that additional funds will be available on acceptable terms, if at all.

Our ability to continue to access capital could be impacted by various factors including general market conditions, 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. In such case, the Company may need to suspend any new installation of energy systems and significantly reduce its operating costs until market conditions improve.

Seasonality

The majority of our heating systems sales are in the winter and the majority of our chilling systems sales are in the summer.

Inflation

We install, maintain, finance, own and operate complete on-site CHP systems that supply, on a long-term, contractual basis, electricity and other energy services. We sell the energy to customers at a guaranteed discount rate to the rates charged by conventional utility suppliers. Our customers benefit from a reduction in their current energy bills without the capital costs and risks associated with owning and operating a CHP or chiller system. Inflation will cause an increase in the rates charged by conventional utility suppliers, and since we bill our customers based on the electric utility rates, our pricing will increase in tandem and positively affect our revenue. However, inflation might cause both our investment and cost of goods sold to increase, therefore lowering our return on investment and depressing our gross margins.

Off Balance Sheet Arrangements

The Company has no material off balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 8. Financial Statements and Supplementary Data.

The information required by this item is included in Item 15 of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Management's Evaluation of Disclosure Controls and Procedures:

Our disclosure controls and procedures are designed to provide reasonable assurance that the control system's objectives will be met. Our management, including our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report, or the Evaluation Date, have concluded that as of the Evaluation Date, our disclosure controls and procedures were not effective due to material weaknesses in financial reporting relating to lack of personnel with a sufficient level of accounting knowledge and a small number of employees dealing with general controls over information technology. At the present time, our management has decided that, considering the employees involved and the control procedures in place, there are risks associated with the above, but the potential benefits of adding additional employees to mitigate these weaknesses do not justify the expenses associated with such increases. Management will continue to evaluate the above weaknesses, and as the Company grows and resources become available, the Company plans to take the necessary steps in the future to remediate the weaknesses.

For these purposes, the term disclosure controls and procedures of an issuer means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting:

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting in accordance with the Exchange Act. Management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our internal control over financial reporting based on the framework and criteria established in *Internal Control—Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion of this evaluation. Based on this evaluation, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2011.

At December 31, 2011, the Company employed 21 active full-time employees and 3 part-time employees. 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 accepted 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. At this time, management has decided that considering the employees involved and the control procedures in place, there are risks associated with the above, but the potential benefits of adding additional employees to mitigate these weaknesses, does not justify the expenses associated with such increases. Management will continue to evaluate the above weaknesses.

The Company reported in previous periods the lack of segregation of duties as a material weakness in financial reporting. The Company hired a consultant to review its existing controls and propose changes to the Company's procedures to proper segregation of duties. Based on the consultant's recommendation, the Company has put procedures in place and has trained additional personnel to mitigate the risk. Management believes the previous weakness in financial reporting due to the lack of segregation of duties has been remediated.

Our management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our Disclosure Controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Changes in Internal Control over Financial Reporting:

In connection with the evaluation referred to above, we have made changes in our internal controls over financial reporting. We hired a consultant to review existing controls and review recent updates and changes to the Company's documentation to ensure that any process or control changes are properly identified and documented, including updating the Company's existing risk matrix. The engagement included the creation of testing plans based upon the current state of processes and key controls and the identification of areas for process improvements and documentation updates. The Company has already implemented many of the recommended processes. We plan to make additional changes in our internal controls over financial reporting as soon as the resources become available.

This Annual Report on Form 10-K does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report on Form 10-K.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by Item 10 is incorporated by reference to our definitive Proxy Statement for our 2012 annual meeting of shareholders, or our Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

Item 11. Executive Compensation.

The information required by Item 11 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 12 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 13 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

Item 14. Principal Accountant Fees and Services.

The information required by Item 14 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) Index To Financial Statements and Financial Statements Schedules:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2011 and December 31, 2010

Consolidated Statements of Operations for the years ended December 31, 2011 and December 31, 2010

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2011 and December 31, 2010

Consolidated Statements of Cash Flows for the years ended December 31, 2011 and December 31, 2010

Notes to Consolidated Financial Statements

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.

(b) Exhibits

Exhibit Number	Description
3.1	Certificate of Incorporation, as amended and restated December 9, 2009 (incorporated by reference to Exhibit 3.1 to the Company's Form S-3, as amended, originally filed with the SEC on December 23, 2009).
3.2	By-laws, as amended and restated August 31, 2009 (incorporated by reference to Exhibit 3.2 to the Company's Form S-3, as amended, originally filed with the SEC on December 23, 2009).
4.1	Form of Warrant (incorporated by reference to Exhibit 4.1 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).
4.2	Specimen Common Stock Certificate of American DG Energy Inc.
4.3	Form of 6% Senior Unsecured Convertible Debenture Due 2018, dated May 23, 2011 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on May, 24, 2011).
4.4	Form of 6% Senior Unsecured Convertible Debenture Due 2018, dated November 30, 2011 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 2, 2011).
10.1*	American Distributed Generation Inc. 2001 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).
10.2*	2005 Stock Incentive Plan (incorporated by reference to Exhibit A to our definitive proxy statement for the 2008 Annual Meeting of shareholders originally filed with the SEC on April 29, 2008).
10.3	Facilities, Support Services and Business Agreement with Tecogen Inc. (incorporated by reference to Exhibit 10.5 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 22, 2006. Confidential treatment has been granted for portions of this document. The confidential portions have been omitted and have been filed separately, on a confidential basis, with the SEC).
10.4	Amendment to Facilities, Support Services and Business Agreement with Tecogen Inc. dated April 1, 2008 (incorporated by reference to Exhibit 10.5 to the Company's Form 10-Q, filed with the SEC on May 14, 2008, for the quarter ended March 31, 2008).
10.5	Amendment No. 2 to Facilities, Support Services and Business Agreement with Tecogen Inc. dated May 15, 2008 (incorporated by reference to Exhibit 10.7 to the Company's Form 10-K, originally filed with the SEC on March 20, 2009).
10.6	Amendment No. 3 to Facilities, Support Services and Business Agreement with Tecogen Inc. dated January 2, 2009 (incorporated by reference to Exhibit 10.8 to the Company's Form 10-K, originally filed with the SEC on March 20, 2009).
10.7	Operating Agreement of American DG New York LLC (incorporated by reference to Exhibit 10.6 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 22, 2006).
10.8	Form of Energy Purchase Agreement (incorporated by reference to Exhibit 10.6 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).
10.9	Form of Subscription Agreement for private placement of common stock for American Distributed Generation Inc. (incorporated by reference to Exhibit 10.12 to the Company's Amendment No. 1 to Form S-3, originally filed with the SEC on January 13, 2010).
10.10	Restricted Stock Purchase Agreement with Charles T. Maxwell dated February 20, 2007 (incorporated by reference to Exhibit 10.13 to the Company's Form S-3, as amended, originally filed with the SEC on December 23, 2009).
10.11	Form of 8% Senior Convertible Debenture Due 2011 (incorporated by reference to Exhibit 10.7 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).

10.12 Form of Subscription Agreement for private placement of common stock, February 2007 (incorporated by reference to Exhibit 10.15 to the Company's Amendment No. 1 to Form S-3, originally filed with the SEC on January 13, 2010).

10.13 Form of Warrant to purchase shares of common stock, dated February 24, 2009, entered into between the Company and Daniel Barnett (incorporated by reference to Exhibit 4.1 to the Company's current report on Form 8-K, originally filed with the SEC on February 26, 2009).

10.14 Form of Subscription Agreement for private placement of common stock, April 2009 (incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K, originally filed with the SEC on April 27, 2009).

10.15 Form of Subscription Agreement for private placement of common stock, July 2009 (incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K, originally filed with the SEC on July 27, 2009).

10.16 Form of Subscription Agreement for private placement of common stock, October 2009 (incorporated by reference to Exhibit 10.19 to the Company's Amendment No. 1 to Form S-3, originally filed with the SEC on January 13, 2010).

10.17 Warrant Agreement with Hayden IR dated October 1, 2009 (incorporated by reference to Exhibit 10.20 to the Company's Amendment No. 1 to Form S-3, originally filed with the SEC on January 13, 2010).

10.18 Revolving Line of Credit Agreement with John N. Hatsopoulos (incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K, originally filed with the SEC on December 17, 2009).

10.19 Amendment No. 4 to Facilities, Support Services and Business Agreement with Tecogen Inc. dated January 2, 2010 (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K, originally filed with the SEC on March 31, 2010).

10.20 Letter to John N. Hatsopoulos dated February 22, 2010, as amended, (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K, originally filed with the SEC on March 31, 2010).

10.21 Subscription Agreement, dated as of July 12, 2010, by and between the Company and Nettlestone Enterprises Limited (incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K dated July 12, 2010).

10.22 Warrant Agreement for Common Stock of EuroSite Power Inc., dated as of July 12, 2010, by and between the Company and Nettlestone Enterprises Limited (incorporated by reference to Exhibit 10.2 to the Company's current report on Form 8-K dated July 12, 2010).

10.23 Form of Common Stock Purchase Agreement for EuroSite Power Inc. dated July 2010 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q dated November 10, 2010).

10.24 Warrant Agreement with AIM Capital Corporation d/b/a Barry Kaplan Associates dated January 15, 2011 (incorporated by reference to Exhibit 10.24 to the Company's Form 10-K originally filed with the SEC on March 31, 2011).

10.25 Form of Subscription Agreement for 6% Senior Unsecured Convertible Debenture Due 2018, dated May 23, 2011 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on May, 24, 2011).

10.26 Form of Subscription Agreement for 6% Senior Unsecured Convertible Debenture Due 2018, dated November 30, 2011 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on December 2, 2011).

14.1 Code of Business Conduct and Ethics (incorporated by reference to Exhibit 14.1 to the Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).

16.1 Letter on change in certifying accountant (incorporated by reference to Exhibit 16.1 to the Company's current report on Form 8-K/A dated September 24, 2010).

21.1	List of subsidiaries (incorporated by reference to Exhibit 21.1 to the Company's Form 10-K originally filed with the SEC on March 31, 2011).
23.1#	Consent of McGladrey & Pullen, LLP.
31.1#	Rule 13a-14(a) Certification of Chief Executive Officer.
31.2#	Rule 13a-14(a) Certification of Chief Financial Officer.
32.1	Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer (Furnished herewith).
99.1	Audit Committee Charter, as amended October 13, 2009 (incorporated by reference to Exhibit 10.1 to Company's Form S-3, as amended, originally filed with the SEC on December 23, 2009).
99.2	Compensation Committee Charter (incorporated by reference to Exhibit 10.2 to Company's Form 10-SB, as amended, originally filed with the SEC on November 2, 2006).
99.3	Nominating and Governance Committee Charter dated August 31, 2009 (incorporated by reference to Exhibit 10.3 to Company's Form S-3, as amended, originally filed with the SEC on December 23, 2009).
101.1	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2011 formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Stockholders' Equity, (iv) the Consolidated Statements of Cash Flows, and (v) related notes to these financial statements, tagged as blocks of text and in detail (Furnished herewith).

\# Filed herewith.
* Management contract or compensatory plan or arrangement.

AMERICAN DG ENERGY INC.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMERICAN DG ENERGY INC.
(Registrant)

By: /s/ John N. Hatsopoulos
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Anthony S. Loumidis
Chief Financial Officer, Treasurer and Secretary
(Principal Financial and Accounting Officer)

Dated: March 26, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacity and on the dates indicated.

Signature	**Title**	**Date**
/s/ George N. Hatsopoulos George N. Hatsopoulos	Chairman of the Board and Director	March 26, 2012
/s/ John N. Hatsopoulos John N. Hatsopoulos	Director and Chief Executive Officer (Principal Executive Officer)	March 26, 2012
/s/ Anthony S. Loumidis Anthony S. Loumidis	Chief Financial Officer, Treasurer and Secretary Principal Financial and Accounting Officer)	March 26, 2012
/s/ Charles T. Maxwell Charles T. Maxwell	Director	March 26, 2012
/s/ Deanna M. Petersen Deanna M. Petersen	Director	March 26, 2012
/s/ Francis A. Mlynarczyk Francis A. Mlynarczyk	Director	March 26, 2012
/s/ Christine M. Klaskin Christine M. Klaskin	Director	March 26, 2012

AMERICAN DG ENERGY INC.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
American DG Energy Inc.:

We have audited the accompanying consolidated balance sheets of American DG Energy Inc. (the "Company") 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 the consolidated 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 our audits 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. An audit includes 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 the Company at December 31, 2011 and 2010 and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ MCGLADREY & PULLEN, LLP

Boston, Massachusetts
March 26, 2012

AMERICAN DG ENERGY INC.

CONSOLIDATED BALANCE SHEETS

	2011	2010
ASSETS		
Current assets:		
Cash and cash equivalents	$ 17,801,025	$ 3,921,054
Restricted cash	-	65,790
Accounts receivable, net	879,630	661,435
Unbilled revenue	18,825	117,846
Due from related party	21,140	52,432
Inventory	634,120	487,724
Prepaid and other current assets	322,276	86,089
Total current assets	19,677,016	5,392,370
Property, plant and equipment, net	14,690,117	14,362,444
Accounts receivable, long-term	82,664	17,034
Other assets, long-term	53,504	-
TOTAL ASSETS	$ 34,503,301	$ 19,771,848
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 520,608	$ 482,917
Accrued expenses and other current liabilities	589,032	370,774
Due to related party	313,847	2,560,720
Capital lease obligations	3,365	3,365
Total current liabilities	1,426,852	3,417,776
Long-term liabilities:		
Convertible debentures	19,400,000	-
Warrant liability	249,561	676,603
Capital lease obligations, long-term	3,365	6,730
Other long-term liabilities	43,052	-
Total liabilities	21,122,830	4,101,109
Stockholders' equity:		
American DG Energy Inc. shareholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 46,001,404 and 45,598,029 issued and outstanding at December 31, 2011 and 2010, respectively	46,001	45,598
Additional paid-in capital	30,399,370	28,905,660
Accumulated deficit	(17,931,058)	(14,147,113)
Total American DG Energy Inc. stockholders' equity	12,514,313	14,804,145
Noncontrolling interest	866,158	866,594
Total stockholders' equity	13,380,471	15,670,739
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 34,503,301	$ 19,771,848

See accompanying notes to consolidated financial statements

AMERICAN DG ENERGY INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	2011	2010
Revenues		
Energy revenues	$ 5,705,418	$ 5,043,744
Turnkey & other revenues	317,450	591,021
	6,022,868	5,634,765
Cost of sales		
Fuel, maintenance and installation	3,827,539	3,625,404
Depreciation expense	1,265,009	867,923
	5,092,548	4,493,327
Gross profit	930,320	1,141,438
Operating expenses		
General and administrative	2,384,774	1,487,040
Selling	1,496,764	602,597
Engineering	763,260	733,504
	4,644,798	2,823,141
Loss from operations	(3,714,478)	(1,681,703)
Other income (expense)		
Interest and other income	40,234	51,385
Interest expense	(532,544)	(125,131)
Change in fair value of warrant liability	427,042	59,681
	(65,268)	(14,065)
Loss before provision for state income taxes	(3,779,746)	(1,695,768)
Provision for state income taxes	-	(14,730)
Consolidated net loss	(3,779,746)	(1,710,498)
Income attributable to the noncontrolling interest	(4,199)	(197,505)
Net loss attributable to American DG Energy Inc.	$ (3,783,945)	$ (1,908,003)
Net loss per share - basic and diluted	$ (0.08)	$ (0.04)
Weighted average shares outstanding - basic and diluted	45,705,793	43,525,374

See accompanying notes to consolidated financial statements

AMERICAN DG ENERGY INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

		American DG Energy Inc. Shareholders			
	Total	Accumulated Deficit	Common Stock $0.001 Par Value	Additional Paid-In Capital	Noncontrolling Interest
Balance at December 31, 2009	$ 8,304,629	$ (12,239,110)	37,677	$ 19,725,793	$ 780,269
Distributions to noncontrolling interest	(302,598)	-	-	-	(302,598)
Ownership changes to noncontrolling interest	(124,111)	-	-	-	(124,111)
Conversion of convertible debenture to common stock	5,378,488	-	6,403	5,372,085	-
Convertible debenture issuance costs	(21,556)	-	-	(21,556)	-
Sale of common stock, net of costs	1,286,855	-	852	1,286,003	-
Sale of subsidiary common stock, net of costs	2,226,019	-	-	1,910,490	315,529
Stock based compensation expense	228,736	-	-	228,736	-
Exercise of stock options	54,775	-	166	54,609	-
Exercise of warrants	350,000	-	500	349,500	-
Net (loss) income	(1,710,498)	(1,908,003)	-	-	197,505
Balance at December 31, 2010	$ 15,670,739	$ (14,147,113)	45,598	$ 28,905,660	$ 866,594
Distributions to noncontrolling interest	(359,741)	-	-	-	(359,741)
Sale of subsidiary common stock, net of costs	1,148,401	-	-	875,046	273,355
Stock based compensation expense	667,000	-	-	585,249	81,751
Exercise of stock options	33,838	-	423	33,415	-
Cancellation of restricted stock	(20)	-	(20)	-	-
Net (loss) income	(3,779,746)	(3,783,945)	-	-	4,199
Balance at December 31, 2011	$ 13,380,471	$ (17,931,058)	46,001	$ 30,399,370	$ 866,158

See accompanying notes to consolidated financial statements

AMERICAN DG ENERGY INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	2011	2010
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (3,783,945)	$ (1,908,003)
Income attributable to noncontrolling interest	4,199	197,505
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,315,861	911,125
Provision for losses on accounts receivable	110,229	57,576
Amortization of deferred financing costs	2,256	8,526
Change in fair value of warrant liability	(427,042)	(59,681)
Stock-based compensation	667,000	228,736
Changes in operating assets and liabilities		
(Increase) decrease in:		
Restricted cash	65,790	(65,790)
Accounts receivable and unbilled revenue	(295,033)	(188,572)
Due from related party	31,292	193,857
Inventory	(146,396)	(108,421)
Prepaid and other current assets	(224,283)	9,504
Increase (decrease) in:		
Accounts payable	37,691	(257,557)
Accrued expenses and other current liabilities	218,258	(24,274)
Other long-term liabilities	43,052	-
Due to related party	153,127	143,189
Net cash used in operating activities	(2,227,944)	(862,280)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(1,643,534)	(5,771,223)
Sale of short-term investments	-	678,921
Net cash used in investing activities	(1,643,534)	(5,092,302)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of convertible debentures	17,000,000	-
Proceeds from issuance of warrants	-	736,284
Proceeds from exercise of warrants	-	350,000
Proceeds from sale of common stock, net of costs	-	1,286,855
Proceeds from sale of subsidiary common stock, net of costs	1,148,401	2,226,019
Proceeds from exercise of stock options	33,838	54,775
Proceeds from related party line of credit	-	2,400,000
Convertible debenture transaction costs	(67,664)	(21,556)
Principal payments on capital lease obligations	(3,365)	(3,365)
Cancellation of restricted stock	(20)	-
Distributions to noncontrolling interest	(359,741)	(302,598)
Net cash provided by financing activities	17,751,449	6,726,414
Net increase in cash and cash equivalents	13,879,971	771,832
Cash and cash equivalents, beginning of the year	3,921,054	3,149,222
Cash and cash equivalents, end of the year	$ 17,801,025	$ 3,921,054
Supplemental disclosures of cash flows information:		
Cash paid during the year for:		
Interest	$ 343,750	$ 114,116
Income taxes	$ 91,931	$ 31,329
Non-cash investing and financing activities:		
Conversion of convertible debentures to common stock	$ -	$ 5,320,000
Conversion of due to related party to convertible debentures	$ 2,400,000	$ -
Forgiveness of related party debt in exchange for reduction in noncontrolling interest	$ -	$ 124,111

See accompanying notes to consolidated financial statements

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — The Company:

American DG Energy Inc. ("American DG Energy", or "Company") distributes and operates on-site cogeneration systems that produce both electricity and heat. The Company's business is to own the equipment that it installs at customers' facilities and to sell the energy produced by these systems to the customers on a long-term contractual basis. The Company calls this business the American DG Energy "On-Site Utility".

The Company was incorporated as a Delaware corporation on July 24, 2001 to install, own, operate and maintain complete DG systems, or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2011, the Company had installed 83 energy systems, representing approximately 5,835 kilowatts, or kW, 48.0 million British thermal units, or MMBtu's, of heat and hot water and 2,820 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated.

The Company derives sales from selling energy in the form of electricity, heat, hot water and cooling to its customers under long-term energy sales agreements (with a typical term of 10 to 15 years). The energy systems are generally owned by the Company and are installed in its customers' buildings. Each month the Company obtains readings from energy meters to determine the amount of energy produced for each customer. The Company multiplies these readings by the appropriate published price of energy (electricity, natural gas or oil) from its customers' local energy utility, to derive the value of its monthly energy sale, less the applicable negotiated discount. The Company's revenues per customer on a monthly basis vary based on the amount of energy produced by its energy systems and the published price of energy (electricity, natural gas or oil) from its customers' local energy utility that month. The Company's revenues commence as new energy systems become operational. As of December 31, 2011, the Company had 83 energy systems operational. As a by-product of its energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy.

Note 2 — Summary of significant accounting policies:

Principles of Consolidation and Basis of Presentation:

The accompanying consolidated financial statements include the accounts of the Company, its wholly-owned subsidiary American DG Energy, its 51% joint venture, American DG New York, LLC, or ADGNY, and its 82.8% owned subsidiary EuroSite Power Inc., or EuroSite Power. The Company's owns 51% of ADGNY, after elimination of all material intercompany accounts, transactions and profits. The interest in underlying energy system projects in the joint venture varies between the Company and its joint venture partner. As the controlling partner, all major decisions in ADGNY are made by the Company according to the joint venture agreement. Distributions, however, are made based on the economic ownership and profitability of the joint venture and underlying energy projects. The economic ownership is calculated by the amount invested by the Company and the noncontrolling partner in each site. Each quarter the Company calculates a year-to-date profit/loss for each site that is part of ADGNY and the noncontrolling interest percent ownership in each site is applied to determine the noncontrolling interest share in the profit/loss. The Company follows the same calculation regarding available cash and a cash distribution is made to the noncontrolling interest partner, Peter Westerhoff, each quarter. On the Company's balance sheet, noncontrolling interest represents the partner's investment in the entity, plus its share of after tax profits less any cash distributions. The Company owned a controlling 51% legal interest and a 63% economic interest in ADGNY as of December 31, 2011.

In July 2010 the Company invested $45,000 in exchange for 45 million shares of EuroSite Power, a newly established corporation. The investment gave the Company a controlling financial interest in EuroSite Power, whose business focus is to introduce the On-Site Utility solution into the European market. Also in July 2010, Nettlestone Enterprises Limited, invested $5,000 in exchange for 5 million shares in EuroSite Power. During the year ended December 31, 2011 EuroSite Power raised approximately $1,250,000 in private placements by selling 1,250,000 shares of EuroSite Power common stock to accredited investors at $1.00 per share. As of December 31, 2011 the Company owns an 82.8% interest in EuroSite Power and has consolidated EuroSite Power into its financial statements in accordance with generally accepted accounting principles, or GAAP.

On February 10, 2012, EuroSite Power announced that its Board of Directors declared a stock dividend of 10% per share on the outstanding shares of EuroSite Power common stock. The dividend was payable on March 12, 2012 to common stockholders of record at the close of business on February 24, 2012. EuroSite Power has retroactively reflected this dividend

to its December 31, 2011 financial statements. The Company has rejected the receipt of the dividend on the EuroSite Power shares it currently holds.

The Company's operations are comprised of one business segment. The Company's business is selling energy in the form of electricity, heat, hot water and cooling to its customers under long-term sales agreements. All revenues were generated and all long lived assets are maintained in the United States.

The Company has experienced total net losses since inception of approximately $17.9 million. For the foreseeable future, the Company expects to experience continuing operating losses and negative cash flows from operations as its management executes the current business plan. The cash and cash equivalents available at December 31, 2011 will provide sufficient working capital to meet the Company's anticipated expenditures including installations of new equipment for the next twelve months; however, as the Company continues to grow its business by adding more energy systems, the cash requirements will increase. The Company believes that its cash and cash equivalents available at December 31, 2011 and its ability to control certain costs, including those related to general and administrative expenses, will enable it to meet its anticipated cash expenditures through March 31, 2013. Beyond March 31, 2013, the Company may need to raise additional capital through a debt financing or equity offering to meet its operating and capital needs. There can be no assurance, however, that the Company will be successful in its fundraising efforts or that additional funds will be available on acceptable terms, if at all.

In 2011, the Company raised $17,000,000 from the issuance of convertible debentures $1,148,401, net of issuance costs, through a private placement of EuroSite Power common stock and $33,818 through the exercise of stock options. If the Company is unable to raise additional capital in 2013 it may need to terminate certain of its employees and adjust its current business plan. Financial considerations may cause the Company to modify planned deployment of new energy systems and may decide to suspend installations until it is able to secure additional working capital. The Company will evaluate possible acquisitions of, or investments in, businesses, technologies and products that are complementary to its business; however, the Company is not currently engaged in such discussions.

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.

Revenue Recognition

Revenue from energy contracts is recognized when electricity, heat, and chilled water is produced by the cogeneration systems on-site. The Company bills each month based on various meter readings installed at each site. The amount of energy produced by on-site energy systems is invoiced, as determined by a contractually defined formula. Under certain energy contracts, the customer directly acquires the fuel to power the systems and receives credit for that expense from the Company. The credit is recorded as a reduction of revenue and as reduction of cost of fuel. Revenues from operation, including shared savings are recorded when provided and verified. Maintenance service revenue is recognized over the term of the agreement and is billed on a monthly basis in arrears.

As a by-product of the energy business, in some cases, the customer may choose to have the Company construct the system for them rather than have it owned by American DG Energy. In this case, the Company accounts for revenue, or turnkey revenue, and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, the Company's policy is to record the entire expected loss, regardless of the percentage of completion. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings is recorded as deferred revenue.

Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the Company. Any resulting gain on these transactions is recognized over the payment period in the accompanying consolidated statements of operations. The Company had no such arrangements at December 31, 2011 and 2010, respectively.

Occasionally, the Company will enter into a sales arrangement with a customer to construct and sell an energy system and provide energy and maintenance services over the term of the contract. 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. Revenue is allocated to each element based upon its relative fair value which is determined based on the estimated price of the deliverables when sold on a standalone basis. Revenue related to the construction of the energy system is recognized using the percentage-of-completion method as the unit is being constructed. Revenue from the sale of energy is recognized when electricity, heat, and chilled water is produced by the energy system, and revenue from maintenance services is recognized over the term of the maintenance agreement. The Company had no such arrangements at December 31, 2011 and 2010, respectively.

The Company is able to participate in the demand response market and receive payments due to the availability of its energy systems. Demand response programs provide payments for either the reduction of electricity usage or the increase in electricity production during periods of peak usage throughout a utility territory. At December 31, 2011 and 2010, the revenue recognized from demand response activity was $60,980 and $106,928, respectively. The Company treats demand response payments as an operating activity in the statements of cash flows.

Other revenue represents various types of ancillary activities for which the Company engages from time to time such as the sale of equipment, and feasibility studies.

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.

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 December 31, 2011, the Company had a balance of $14,522,991 in cash and cash equivalents that exceeded the Federal Deposit Insurance Corporation limit of $250,000.

Accounts Receivable

The Company maintains receivable balances primarily with customers located throughout New York and New Jersey. The Company reviews its customers' credit history before extending credit and generally does not require collateral. An allowance for doubtful accounts is established based upon factors surrounding the credit risk of specific customers, historical trends and other information. Generally, such losses have been within management's expectations. Bad debt is written off when identified.

Accounts receivable are presented net of an allowance for doubtful collections of $172,000 and $67,000 at December 31, 2011 and 2010, respectively. Included in accounts receivable are amounts from four major customers accounting for approximately 42% and 40% of total accounts receivable for the years ended December 31, 2011 and 2010, respectively. There were sales to four major customers accounting for approximately 27% and 28% of total sales for the years ended December 31, 2011 and 2010, respectively.

Inventory

Inventories are stated at the lower of cost or market, valued on a first-in, first-out basis. Inventory is reviewed periodically for slow-moving and obsolete items. As of December 31, 2011 and 2010, there were no reserves or write-downs recorded against inventory.

Accounts Payable

Included in accounts payable are amounts due to four major vendors accounting for approximately 45% and 58% of total accounts payable for the years ended December 31, 2011 and 2010, respectively. Purchases from four vendors accounted for approximately 38% and 72% of total purchases for the years ended December 31, 2011 and 2010, respectively.

Supply Concentrations

All of the Company's cogeneration unit purchases for the years ended December 31, 2011 and 2010 were from one vendor (see "Note 8 - Related parties"). The Company believes there are sufficient alternative vendors available to ensure a constant supply of cogeneration units on comparable terms. However, in the event of a change in suppliers, there could be a delay in obtaining units which could result in a temporary slowdown of installing additional income producing sites. In addition, the majority of the Company's units are installed and maintained by the noncontrolling interest holder or maintained by Tecogen Inc., or Tecogen. The Company believes there are sufficient alternative vendors available to ensure a constant supply of maintenance and installation services on comparable terms. However, in the event of a change of vendor, there could be a delay in installation or maintenance services.

Property and Equipment and Depreciation and Amortization

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method at rates sufficient to write off the cost of the applicable assets over their estimated useful lives. Repairs and maintenance are expensed as incurred.

The Company evaluates the recoverability of its long-lived assets by comparing the net book value of the assets to the estimated future undiscounted cash flows attributable to such assets. The useful life of the Company's energy systems is lesser of the economic life of the asset or the term of the underlying contract with the customer, typically 12 to 15 years. The Company reviews the useful life of its energy systems on a quarterly basis or whenever events or changes in business circumstances indicate that the carrying value of the assets may not be fully recoverable or that the useful lives of the assets are no longer appropriate. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis.

The Company receives rebates and incentives from various utility companies which are accounted for as a reduction in the book value of the assets. The rebates are payable from the utility to the Company and are applied against the cost of construction, therefore reducing the book value of the installation. As a reduction of the facility construction costs, these rebates are treated as an investing activity in the statements of cash flows. The rebates received by the Company from the utilities that apply to the cost of construction are one time rebates based on the installed cost, capacity and thermal efficiency of installed unit and are earned upon the installation and inspection by the utility and are not related to or subject to adjustment based on the future operating performance of the installed units. The rebate agreements with utilities are based on standard terms and conditions, the most significant being customer eligibility and post-installation work verification by a specific date. At December 31, 2011 and 2010, the amount of rebates applied to the cost of construction was $510,069 and $451,603, 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. Expected volatility is calculated based on the Company's historic volatility over the expected life of the option grant. 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 5 – Stockholders' Equity" for a summary of the restricted stock and stock option activity under the Company's stock-based employee compensation plan for the years ended December 31, 2011 and 2010, respectively.

Loss per Common Share

The Company computes basic loss per share by dividing net income (loss) for the period by the weighted average number of shares of common stock outstanding during the period. The Company computes 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 convertible debentures, stock options and warrants to be dilutive common stock

equivalents when the exercise price is less than the average market price of its common stock for the period. As of the year ended December 31, 2011, the Company excluded 11,414,557 anti-dilutive shares resulting from exercise of stock options, warrants and shares issuable in connection with convertible debentures, and as of the year ended December 31, 2010, the Company excluded 3,161,625 anti-dilutive shares resulting from exercise of stock options, warrants and unvested restricted stock. All shares issuable for both years were anti-dilutive because of the reported net loss.

Other Comprehensive Net Loss

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

Income Taxes

As part of the process of preparing its consolidated financial statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves the Company estimating its actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as depreciation and certain accrued liabilities for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the Company's consolidated balance sheet. The Company must then assess the likelihood that its deferred tax assets will be recovered from future taxable income and to the extent it believes that recovery is not likely, the Company must establish a valuation allowance.

The Company is allowed to recognize the tax benefits of uncertain tax positions only where the position is "more likely than not" to be sustained assuming examination by tax authorities. The amount recognized is the amount that represents the largest amount of tax benefit that is greater than 50% likely of being ultimately realized. A liability is recognized for any benefit claimed, or expected to be claimed, in a tax return in excess of the benefit recorded in the financial statements, along with any interest and penalties (if applicable) on that excess. In addition, the Company is required to provide a tabular reconciliation of the change in the aggregate unrecognized tax benefits claimed, or expected to be claimed, in tax returns and disclosure relating to the accrued interest and penalties for unrecognized tax benefits. Discussion is also required for those uncertain tax positions where it is reasonably possible that the estimate of the tax benefit will change significantly in the next twelve months.

The tax years 2003 through 2005 and 2010 remain open to examination by major taxing jurisdictions to which the Company is subject, which are primarily in the United States, as carry forward attributes generated in years past may still be adjusted upon examination by the Internal Revenue Service or state tax authorities if they are or will be used in a future period. The Company is currently not under examination by the Internal Revenue Service or any other jurisdiction for any tax years. The Company did not recognize any interest and penalties associated with unrecognized tax benefits in the accompanying consolidated financial statements. The Company would record any such interest and penalties as a component of interest expense. The Company does not expect any material changes to the unrecognized benefits within 12 months of the reporting date.

Fair Value of Financial Instruments

The Company's financial instruments are cash and cash equivalents, short-term investments, accounts receivable, accounts payable, convertible debentures and amounts due to/from related parties. The recorded values of cash and cash equivalents, accounts receivable, accounts payable and amounts due to/from related parties approximate their fair values based on their short-term nature. The warrant liability is recorded at fair value. The carrying value of the convertible debentures on the balance sheet at December 31, 2011 approximates fair value as the terms approximate those currently available for similar instruments. See "Note 9 - Fair value measurements."

Impact of New Accounting Pronouncements

The Company does not expect the impact of recently issued accounting pronouncements to have a material impact on the Company's results of operations, financial position or cash flows.

Note 3 — Property, plant and equipment:

Property, plant and equipment consist of the following as of December 31, 2011 and 2010, respectively:

	2011	2010
Energy Systems	$ 18,412,041	$ 12,682,708
Computer equipment and software	88,082	60,760
Furniture and fixtures	69,109	31,399
Vehicles	149,048	117,953
	18,718,280	12,892,820
Less -- accumulated depreciation	(4,395,049)	(3,079,188)
	14,323,231	9,813,632
Construction in progress	366,886	4,548,812
	$ 14,690,117	$ 14,362,444

Depreciation expense of property, plant and equipment totaled $1,315,861 and $911,125 for the years ended December 31, 2011 and 2010, respectively.

Note 4 — Convertible debentures:

In April and June of 2006, the Company issued convertible debentures totaling $6,075,000 to existing investors, or the debentures. The debentures accrued interest at a rate of 8% per annum and were due five years from the issuance date. The debentures were convertible, at the option of the holder, into a number of shares of common stock as determined by dividing the original outstanding amount of the respective debenture by the conversion price in effect at the time. The initial conversion price of the debenture was $0.84 and was subject to adjustment in accordance with the agreement. As of December 31, 2009, the conversion price of the debenture had not been adjusted. On February 9, 2010, the Company issued a Notice of Redemption to all holders of its outstanding 8% Convertible Debentures to announce redemption as of February 26, 2010, of all of its outstanding convertible debentures that had not been converted into common stock. The aggregate principal amount of convertible debentures outstanding on February 26, 2010 was $5,320,000 and accrued interest was $66,204. All holders of the convertible debentures elected to convert their principal amount outstanding into shares of common stock at a conversion price of $0.84. In connection with this transaction, the Company issued to the holders of the convertible debentures an aggregate of 6,402,962 shares of common stock and paid $7,716 of accrued interest in cash. The closing price of the Company's common stock on the NYSE Amex on February 8, 2010 was $2.82.

On May 23, 2011, the Company issued $12,500,000 aggregate principal amount of debentures to a European investor and to John N. Hatsopoulos, the Company's Chief Executive Officer. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes. The debentures canceled the revolving line of credit agreement with John N. Hatsopoulos, which as of May 23, 2011 had a principal amount outstanding of $2,400,000.

On November 30, 2011, the Company issued an additional $6,900,000 aggregate principal amount of debentures to the European investor. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes.

Note 5 — Stockholders' equity:

Common Stock

In July 2010, the Company invested $45,000 in exchange for 45 million shares and obtained controlling interest in EuroSite Power, a newly established corporation. Also in July 2010, Nettlestone Enterprises Limited invested $5,000 in exchange for 5 million shares in EuroSite Power. During the period from July to December 31, 2010, EuroSite Power raised

an additional $2,261,000 in a private placement by selling 2,261,000 shares of EuroSite Power common stock to accredited investors at a price of $1.00 per share.

On July 12, 2010, the Company raised $1,000,000 in a private placement of 400,000 shares of common stock at a price of $2.50 per share. The Company also granted the investor a special purchase right, or warrant, regarding the Company's EuroSite Power subsidiary. The warrant grants the investor the non-assignable right but not the obligation, for a period of two years from July 12, 2010, to purchase up to 400,000 shares of the common equity of EuroSite Power at a per share purchase price of $1.00.

On December 9, 2010, the Company entered into subscription agreements with selected investors for the purchase of units consisting, in the aggregate, of 500,000 shares of its common stock and warrants to purchase 500,000 shares of its common stock (see "Note 6 – Warrant liability"). The subscription agreements provided for the purchase of the units at a purchase price of $2.50 per unit, and the warrants had an exercise price of $3.25 per share of common stock. Canaccord Genuity Inc., or Canaccord, acted as placement agent, on a reasonable efforts basis, for the offering and received a placement fee equal to 6.0% of the gross proceeds of the offering (excluding any consideration that may be paid in the future upon exercise of the warrants). The Company also reimbursed certain expenses incurred by Canaccord in the offering. The offering was made pursuant to the Company's shelf registration statement on Form S-3, which became effective on October 6, 2010.

The holders of common stock have the right to vote their interest on a per share basis. At December 31, 2011, there were 45,001,404 shares of common stock outstanding.

Warrants

In March 2010, certain investors including George N. Hatsopoulos and John N. Hatsopoulos exercised 500,000 warrants with an expiration date of April 5, 2010, providing gross proceeds to the Company of $350,000.

On January 15, 2011, the company signed an investor relations consulting agreement with AIM Capital Corporation d/b/a Barry Kaplan Associates, or AIM Capital, for a period of twelve months. In connection with that agreement the company granted AIM Capital a warrant to purchase 30,000 shares of the company's common stock at an exercise price per share of $2.69, with a four year vesting period and an expiration date of January 15, 2016. The company received no other consideration from the issuance of the warrants.

Warrant activity for the years ended December 31, 2011 and 2010 was as follows:

	Number of Warrants	Weighted Average Grant Date Fair Value
Outstanding, December 31, 2009	562,000	$ 0.95
Granted	500,000	3.25
Exercised	(500,000)	0.70
Expired	(4,000)	2.98
Unvested, December 31, 2010	558,000	$ 3.22
Granted	30,000	1.28
Exercised	-	-
Expired	-	-
Unvested, December 31, 2011	588,000	$ 3.12

Stock Based Compensation – American DG Energy

The Company has adopted the 2005 Stock Incentive Plan, or 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.

The maximum number of shares of stock allowable for issuance under the Amended Plan is 5,000,000 shares of common stock, including 1,097,500 shares of restricted stock outstanding as of December 31, 2011. Stock options vest based upon the terms within the individual option grants, usually over a two- or ten-year period with an acceleration of the unvested portion of such options upon a liquidity event, as defined in the Company's stock option agreement. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan is not less than

the fair market value of the shares on the date of the grant. The number of securities remaining available for future issuance under the Amended Plan was 761,250 at December 31, 2011.

During the years ended December 31, 2011 and 2010, the Company recognized employee non-cash compensation expense of $667,000 and $228,736, respectively, related to the issuance of stock options and restricted stock. At December 31, 2011, there were no unvested shares of restricted stock outstanding. At December 31, 2011, the total compensation cost related to unvested stock option awards, including EuroSite Power, not yet recognized is $1,212,131. This amount will be recognized over the weighted average period of 3.65 years.

In 2010, the Company granted nonqualified options to purchase 290,000 shares of the common stock to seven employees and two directors at prices ranging between $2.76 and $3.45 per share. Each of those options has a vesting schedule of four years and expires in five years. The fair value of all options issued in 2010 was $359,408, with a weighted average grant date fair value of $1.24 per option.

In 2011, the Company granted nonqualified options to purchase 105,000 shares of the common stock to five employees at prices ranging between $1.12 and $2.01 per share. Those options have a vesting schedule of four years and expire in five years. The fair value of all options issued in 2011 was $68,421, with a weighted average grant date fair value of $0.65 per option.

The weighted average assumptions used in the Black-Scholes option pricing model are as follows:

	2011	2010
Stock options and restricted stock awards		
Expected life	5 years	5 years
Risk-free interest rate	1.27%	1.80%
Expected volatility	64.50%	50.97%

Stock option activity for the years 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	2,308,000	$0.07-$2.95	$ 0.70	5.94 years	$ 5,203,740
Granted	330,000	$2.76-$3.45	2.96		
Exercised	(166,250)	$0.07-$1.82	0.33		
Canceled	(40,000)	$ 2.89	2.89		
Expired	-	-	-		
Outstanding, December 31, 2010	2,431,750	$0.07-$3.45	$ 0.99	5.11 years	$ 4,379,711
Exercisable, December 31, 2010	1,395,125		$ 0.58		$ 3,058,719
Vested and expected to vest, December 31, 2010	2,431,750		$ 0.99		$ 4,379,711
Outstanding, December 31, 2010	2,431,750	$0.07-$3.45	$ 0.99	5.11 years	$ 4,379,711
Granted	105,000	$1.12-$2.01	1.32		
Exercised	(423,375)	$0.07-$1.82	0.08		
Canceled	(100,000)	$ 1.95	1.95		
Expired	(5,000)	$ 3.45	3.45		
Outstanding, December 31, 2011	2,008,375	$0.07-$3.45	$ 1.15	4.87 years	$ 1,055,319
Exercisable, December 31, 2011	1,115,125		$ 0.90		$ 727,419
Vested and expected to vest, December 31, 2011	2,008,375		$ 1.15		$ 1,055,319

The aggregate intrinsic value of options outstanding as of December 31, 2011 is calculated as the difference between the exercise price of the underlying options and the price of the Company's common stock for options that were in-the-money as of that date. Options that were not in-the-money as of that date, and therefore have a negative intrinsic value, have been excluded from this amount.

The Company did not make any restricted stock grants to employees in 2011 or 2010. 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	440,125	$ 0.79
Granted	-	-
Vested	(216,875)	0.76
Forfeited	(48,000)	0.70
Unvested, December 31, 2010	175,250	$ 0.84
Granted	-	-
Vested	(130,250)	0.70
Forfeited	(45,000)	1.26
Unvested, December 31, 2011	-	$ -

Stock-Based Compensation – EuroSite Power

In January 2011, EuroSite Power adopted the 2011 Stock Incentive Plan, or the Plan, under which the Board of Directors may grant up to 3,000,000 shares of incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of EuroSite Power. On June 13, 2011, the Board of Directors unanimously amended the Plan, to increase the reserved shares of Common Stock issuable under the Plan from 3,000,000 to 4,500,000, or the Amended Plan.

Stock options vest based upon the terms within the individual option grants, usually over a four year period with an acceleration of the unvested portion of such options upon a liquidity event, as defined in EuroSite Power's stock option agreement. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan is not less than the fair value of the shares on the date of the grant. The number of securities remaining available for future issuance under the Amended Plan was 900,000 at December 31, 2011.

On January 15, 2011, EuroSite Power granted nonqualified options to purchase 2,100,000 shares of Common Stock to five employees and two directors at a purchase price of $1.00 per share. Those options have a vesting schedule of four years and expire in ten years. The assumptions used in the Black-Scholes option pricing model include an expected life of 6.25 years, a risk-free interest rate of 2.7% and an expected volatility of 32.8%. The fair value of the options issued was $790,908, with a grant date fair value of $0.38 per option.

On June 13, 2011, EuroSite Power granted nonqualified options to purchase 300,000 shares of Common Stock to three directors at a purchase price of $1.00 per share. Those options have a vesting schedule of four years and expire in ten years. The assumptions used in the Black-Scholes option pricing model include an expected life of 6.25 years, a risk-free interest rate of 2.3% and an expected volatility of 32.4%. The fair value of the options issued was $109,304, with a grant date fair value of $0.36 per option.

On November 3, 2011, EuroSite Power granted its managing director options to purchase 900,000 shares of common stock at purchase price of $1.00 per share and granted to the three members of its advisory board options to purchase 300,000 shares of common stock at purchase price of $1.00 per share. Those options have a vesting schedule of four years and expire in ten years and were made under the UK Sub-Plan to EuroSite Power's 2011 Stock Incentive Plan. The assumptions used in the Black-Scholes option pricing model include an expected life of 6.25 years, a risk-free interest rate of 1.5% and an expected volatility of 33.1%. The fair value of the options issued was $423,400, with a grant date fair value of $0.35 per option.

At December 31, 2011, EuroSite Power had 3,600,000 options outstanding and recognized employee non-cash compensation expense of $474,695 related to the issuance of those stock options. At December 31, 2011, the total compensation cost related to unvested stock option awards not yet recognized was $848,917. This amount will be recognized over the weighted average period of 3.34 years.

Stock option activity for the years 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, 2010	-	-	$ -	-	$ -
Granted	3,600,000	$ 1.00	1.00		
Exercised	-	-	-		
Canceled	-	-	-		
Expired	-	-	-		
Outstanding, December 31, 2011	3,600,000	$ 1.00	$ 1.00	9.34 years	$ -
Exercisable, December 31, 2011	-		$ -		$ -
Vested and expected to vest, December 31, 2011	3,600,000		$ 1.00		$ -

The aggregate intrinsic value of options outstanding as of December 31, 2011 is calculated as the difference between the exercise price of the underlying options and the price of EuroSite Power's Common Stock for options that were in-the-money as of that date. Options that were not in-the-money as of that date, and therefore have a negative intrinsic value, have been excluded from this amount.

Note 6 – Warrant liability

In connection with the subscription agreement that the Company entered into on December 9, 2010 (see "Note 5 – Stockholders' equity"), the Company issued warrants for the purchase of 500,000 shares of its common stock. The warrants have an exercise price of $3.25 and are exercisable for five years commencing six months after the closing of the offering and expire on December 14, 2015.

The warrants contain both a right to obtain stock upon exercise, or a Call, and a right to settle the warrants for cash upon the occurrence of certain events, or a Put. Generally, the Put provisions allow the warrant holders liquidity protection; the right to receive cash equal to the value of the remaining unexercised portion of the warrants in certain situations where the holders would not have a means of readily selling the shares issuable upon exercise of the warrants (e.g., where there would no longer be a significant public market for the Company's common stock). Specifically, the Put rights would be triggered upon the occurrence of a Fundamental Transaction as defined in the agreement. Pursuant to the agreement, in the case of a Fundamental Transaction the warrant holders would receive a cash settlement in an amount equal to the value of obtained by using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg L.P. using (i) a price per share of Common Stock equal to the Volume-Weighted Average Price of the Common Stock for the Trading Day immediately preceding the date of consummation of the applicable Fundamental Transaction, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction and (iii) an expected volatility equal to the lesser of (1) the thirty (30) day volatility obtained from the "HVT" function on Bloomberg L.P. determined as of the end of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction or (2) 70%. These warrants are classified as liabilities pursuant to the FASB guidance contained in ASC 480. Changes in the fair value of the warrant liabilities are recorded in the accompanying statement of operations (see "Note 9 – Fair value measurements").

Note 7 — Employee benefit plan:

The Company has a defined contribution retirement plan, or the Retirement Plan, which qualifies under Section 401(k) of the Internal Revenue Code, or the IRC. Under the Retirement 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 contributions up to a maximum of 4.5% of each participant's salary. The Company contributed $43,546 and $41,323 to the Retirement Plan for the years ended December 31, 2011 and 2010, respectively.

Note 8 — Related parties

The Company purchases the majority of its cogeneration units from Tecogen, an affiliate Company sharing similar ownership. In addition, Tecogen pays certain operating expenses, including benefits and payroll, on behalf of the Company and the Company leases office space from Tecogen. These costs were reimbursed by the Company. Tecogen has a sublease agreement for the office building, which expires on March 31, 2014.

In January 2006, the Company entered into the 2006 Facilities, Support Services and Business Agreement, or the Agreement, with Tecogen, to provide the Company with certain office and business support services for a period of one year, renewable annually by mutual agreement. Under the current amendment to the Agreement, Tecogen provides the Company with office space and utilities at a monthly rate of $5,836.

The Company has sales representation rights to Tecogen's products and services. In New England, the Company has exclusive sales representation rights to Tecogen's cogeneration products. The Company has granted Tecogen sales representation rights to its On-Site Utility energy service in California. During the year ended December 31, 2011, the Company received $18,361 from Tecogen as a commission from the sale of equipment.

On February 15, 2007, the Company loaned Peter Westerhoff, the noncontrolling interest partner in ADGNY, $20,000 by signing a two year loan agreement earning interest at 12% per annum. On April 1, 2007, the Company loaned an additional $75,000 to the same noncontrolling partner by signing a two year note agreement earning interest at 12% per annum, and on May 16, 2007, the Company loaned an additional $55,000 to the same partner by signing a two year note agreement under the same terms. On October 11, 2007, the Company extended to the noncontrolling interest partner a line of credit of $500,000. Effective April 1, 2009 the Company reached an agreement with the noncontrolling interest partner in ADGNY to purchase its interest in the Riverpoint location. As a result of this transaction, the Company owns 100% of that location and the noncontrolling interest partners' share of that location was applied to his outstanding debt to the Company related to the above mentioned loan agreements and line of credit. Additionally, in 2009 ADGNY financed capital improvements at several projects, which per project agreements was the responsibility of the noncontrolling interest partner. This further reduced the noncontrolling interest partner's noncontrolling interest in ADGNY. In March 2010, the Company reached an agreement with the noncontrolling interest partner to reduce his debt by a non-cash amount of $124,111 in return for a decrease in the noncontrolling interest partner's economic position by 5%. In September 2010, the Company loaned an additional $135,000 to the noncontrolling partner by signing an eighteen month note agreement earning interest at 12% per annum. At December 31, 2011, the noncontrolling interest partner had no amount outstanding with the Company.

On October 22, 2009, the Company signed a five-year exclusive distribution agreement with Ilios Inc., or Ilios, a subsidiary of Tecogen. Under terms of the agreement, the Company has exclusive rights to incorporate Ilios' ultra-high-efficiency heating products, such as a high efficiency water heater, in its energy systems throughout the European Union and New England. The Company also has non-exclusive rights to distribute Ilios' product in the remaining parts of the United States and the world in cases where the Company retains ownership of the equipment for its On-Site Utility business.

On December 17, 2009, the Company entered into a revolving line of credit agreement, or the agreement, with John N. Hatsopoulos, the Company's Chief Executive Officer. Under the terms of the agreement, during the period extending to December 31, 2012, Mr. Hatsopoulos agreed to lend to the Company on a revolving line of credit basis a principal amount up to $5,000,000. All sums advanced pursuant to this agreement bare interest from the date each advance was made until paid in full at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Interest was due and payable quarterly in arrears and prepayment of principal, together with accrued interest, could be made at any time without penalty. Also, under the terms of the agreement, the credit line from Mr. Hatsopoulos was used solely in connection with the development and installation of current and new energy systems such as cogeneration systems and chillers and not for general corporate purposes including operational expenses such as payroll, maintenance, travel, entertainment, or sales and marketing.

On May 23, 2011, the Company issued $12,500,000 aggregate principal amount of debentures to a European investor and to John N. Hatsopoulos, the Company's Chief Executive Officer. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes. As of May 23, 2011, Mr. Hatsopoulos had a revolving line of credit agreement with the Company with an outstanding balance of $2,400,000. That balance was converted into the debentures and the revolving line of credit agreement was canceled.

On November 30, 2011, the Company issued an additional $6,900,000 aggregate principal amount of debentures to the European investor. The debentures mature on May 25, 2018 and accrue interest at the rate of 6% per annum payable on a semi-annual basis. At the holder's option, the debentures may be converted into shares of the Company's common stock at a conversion price of $2.20 per share, subject to adjustment in certain circumstances. The Company has the option to redeem at 115% of Par Value any or all of the debentures after May 25, 2016. The proceeds of the debentures will be used in connection with the development and installation of current and new energy systems, business development and for general corporate purposes.

On January 4, 2010, the Company entered into an agreement with Nettlestone Enterprises Limited (formerly known as Codale Ltd.), whereby Nettlestone Enterprises Limited provided the Company an amount up to two hundred fifty thousand British Pounds sterling (£250,000) to cover expenses incurred in connection with an investigation and research effort for the development of the Company's business in European markets. Expenses relating to this investigation were to be incurred over a period of up to one year and in consideration for the funds provided to the Company, when the Company forms a new subsidiary, Nettlestone Enterprises Limited would be entitled to an equity interest in such subsidiary equal to 10% of the equity thereof. In July 2010, the Company established EuroSite Power to introduce the Company's On-Site Utility solution into the European market and Nettlestone Enterprises Limited invested $5,000 in exchange for 5 million shares in EuroSite Power.

The Company's Chief Financial Officer devotes approximately half of his business time to the affairs of GlenRose Instruments Inc., or GlenRose Instruments, and 50% of his salary is reimbursed by GlenRose Instruments. Also, the Company's Chief Executive Officer is the Chairman of the Board and a significant investor in GlenRose Instruments and does not receive a salary, bonus or any other compensation from GlenRose Instruments. At December 31, 2011, the Company had a balance of $20,400 due to John N. Hatsopoulos related to interest payable on his outstanding convertible debentures.

Note 9 — 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:

Level 1 — Unadjusted quoted prices in active markets for identical assets or liabilities. The Company currently does 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. The Company currently does not have any Level 2 financial assets or liabilities.

Level 3 — Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. As of December 31, 2011, the Company has classified the warrants with put and call rights as Level 3 (see "Note 6 – Warrant liability"). The Company estimated that the fair value of the warrants using a Black-Scholes option pricing model under various probability-weighted outcomes which take into consideration the protective, but limited, cash-settlement feature of the warrants. At issuance, the following average assumptions were assigned to the varying outcomes: expected volatility of 57%, risk free interest rate of 2.08%, expected life of five years and no dividends. The Company estimated that the fair value of the warrants at December 31, 2011 using this same model with the following average assumptions assigned to the varying outcomes: expected volatility of 72%, risk free interest rates of 0.83%, expected lives of 3.96 years and no dividends. As of December 31, 2011, the financial liabilities held by the Company and measured at fair value on a recurring basis (which consist solely of the warrant liability) were $249,561. The following table summarizes the activity for the period:

	Warrant Liabilities
Fair value at December 31, 2010	$ 676,603
Fair value adjustment at December 31, 2011	427,042
Fair value at December 31, 2011	$ 249,561

Note 10 — Income taxes:

A reconciliation of federal statutory income tax provision to the Company's actual provision for the years ended December 31, 2011 and 2010, respectively, are as follows:

	2011	2010
Benefit at federal statutory tax rate	$ (1,420,000)	$ (649,000)
Unbenefited operating losses	1,420,000	649,000
Provision for state income taxes	-	14,730
Income tax provision	$ -	$ 14,730

The components of net deferred tax assets recognized in the accompanying balance sheets at December 31, 2011 and 2010, respectively, are as follows:

	2011	2010
Net operating loss carryforwards	$ 7,248,000	$ 5,896,090
Accrued expenses and other	703,000	316,000
Depreciation	(1,071,000)	(1,257,000)
	6,880,000	4,955,090
Valuation allowance	(6,880,000)	(4,955,090)
Net deferred tax asset	$ -	$ -

As of December 2011, the Company has federal and state loss carryforwards of approximately $19,038,000 and $14,801,000, respectively, which may be used to offset future federal and state taxable income, expiring at various dates through 2031. Included in these net operating losses is $1,022,000 of excess stock compensation deductions, related to the amount of tax deductions on restricted stock, in excess of book compensation expense. 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. 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 adopted accounting for uncertain tax positions effective January 1, 2007. The adoption of this statement had no effect on the Company's financial position. The Company has no uncertain tax positions as of either the date of the adoption, or as of December 31, 2011.

In 2011, the Company received $189,000 in grant awards from the US Treasury Department, or Treasury, under 1603 of the 2009 American Recovery and Reinvestment Act, or the Act. The Act authorizes the treasury to make payments to eligible persons who place in service qualifying renewable energy property. The grants are paid in lieu of investment tax credits. All of the proceeds from the grants were used and recorded as a reduction in the cost basis of the applicable project assets. If the Company disposes of the property, or the property ceases to qualify as specified energy property within five years from the date the property was placed in service, then the prorated portion of the Section 1603 payments must be repaid. For tax purposes, the section 1603 payments are not included in federal and certain state taxable income and the basis of the property is reduced by 50% of the payment received.

Note 11 — Commitments and contingencies:

In January 2006, the Company entered into the Agreement with Tecogen to provide the Company with certain office and business support services for a period of one year, renewable annually by mutual agreement. The Company also shares personnel support services with Tecogen. The Company is allocated its share of the cost of the personnel support services based upon the amount of time spent by such support personnel while working on the Company's behalf. To the extent Tecogen is able to do so under its current plans and policies, Tecogen includes the Company and its employees in several of its insurance and benefit programs. The costs of these programs are charged to the Company on an actual cost basis. Under this agreement, the Company receives pricing based on a volume discount if it purchases cogeneration and chiller products from Tecogen. For certain sites, the Company hires Tecogen to service its Tecogen chiller and cogeneration products. Under the current amendment to the Agreement, Tecogen provides the Company with office space and utilities at a monthly rate of $5,836.

In July 2011, the Company put on notice an On-Site Utility energy customer, River Point Towers Cooperative Inc., or RPT, over services provided pursuant to an Equipment Lease Agreement between the Company and RPT due to breach of contract for non-payment of receivables. The Company notified the management of RPT that the non-payment of receivables violated the terms of the agreement and that termination charges would apply. The Company is currently not providing energy services at the site. On October 2011, the Company filed a lawsuit at the United States District Court for the Southern District of New York to collect the receivables it was due. The Company will vigorously make every effort to collect the outstanding receivable and termination value of the equipment. The Company does not expect the outcome to have a material impact on its results of operations and financial condition at the current time and will continue to assess the situation.

The Company is the lessee of certain equipment under capital lease expiring in 2013. The following is a schedule of future minimum lease payments, together with the present value of the net minimum lease payments under capital leases as of December 31, 2011.

	Payments
2012	$ 5,221.00
2013	5,221
Total lease payments	10,442
Less: Amount representing interest	(3,712)
Present value of minimum lease payments	$ 6,730

At December 31, 2011, the Company's commitments included a lease for a plotter with a remaining balance of $10,006 and a rental commitment. The source of funds to fulfill those commitments will be provided from the Company's cash balance.

Note 12 — Subsequent events:

On February 2, 2012, the Company completed the repurchase of 500,000 shares of its common stock at $1.50 per share for a total purchase price of $750,000, in a private transaction. The Company's Board of Directors authorized this transaction at a meeting held on January 18, 2012.

On February 10, 2012, the Company's subsidiary EuroSite Power announced that its Board of Directors declared a stock dividend of 10% per share on the outstanding shares of EuroSite Power Common Stock. The dividend was payable on March 12, 2012 to common stockholders of record at the close of business on February 24, 2012, however, the Company's Board of Directors declined the dividend. EuroSite Power has retroactively reflected this dividend to its December 31, 2011 financial statements. The Company's ownership percentage (82.8%) of Eurosite Power Common Stock reflects this dividend as of December 31, 2011. Prior to that transaction, EuroSite Power had paid no cash or stock dividends on its common stock.

On February 22, 2012, the Company sold a warrant to purchase shares of common stock of the Company to an investor for a purchase price of $7,500. The warrant, which expires on February 22, 2013, gives the Investor the right but not the obligation to purchase 50,000 shares of the Company's common stock at an exercise price per share of $3.00.

On March 12, 2012, at the request of all holders of the Company's Senior Unsecured Convertible Debentures, due 2018, the Company modified the terms of the interest payment due to the holders from cash to shares of the Company's Common Stock. The modification to the interest payment was for interest paid in 2012, 2013 and 2014. Under the terms of the agreement, for the May semi-annual interest payment, the Company will use the April average daily closing price of the Common Stock in order to determine the conversion price and for the November semi-annual interest payment the Company will use the October average daily closing price of the Common Stock in order to determine the conversion price. All other terms and conditions, including interest rate and maturity date will remain the same.

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

CORPORATE INFORMATION

Officers

John N. Hatsopoulos
Chief Executive Officer

Barry J. Sanders
President and Chief Operating Officer

Anthony S. Loumidis
Chief Financial Officer and Treasurer

Directors

Charles T. Maxwell*
Chairman of American DG Energy Inc.,
Senior Energy Analyst of Weeden & Co.

John N. Hatsopoulos
Founder and Chief Executive Officer of
American DG Energy Inc.

George N. Hatsopoulos**
Founder of American DG Energy Inc.

Francis A. Mlynarczyk, Jr.
Chief Executive Officer of Scarsdale Equities LLC

Deanna M. Petersen
Vice President, Business Development of Shire
Human Genetic Therapies

Christine M. Klaskin
Vice President, Finance of Agenus Inc.

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* Assumed the position of Chairman of the Board on April 2, 2012
** Resigned as Chairman of the Board on April 2, 2012

Corporate Address

American DG Energy Inc.
45 First Avenue
Waltham, Massachusetts 02451

Independent Auditors

McGladrey & Pullen, LLP
80 City Square
Boston, Massachusetts 02129

Counsel

Sullivan & Worcester LLP
One Post Office Square
Boston, Massachusetts 02109

Transfer Agent

Continental Stock Transfer & Trust Company
17 Battery Place - 8th Floor
New York, NY 10004

Stock Market Information

American DG Energy Inc.'s common stock trades on the NYSE Amex under the symbol "ADGE".

Annual Meeting

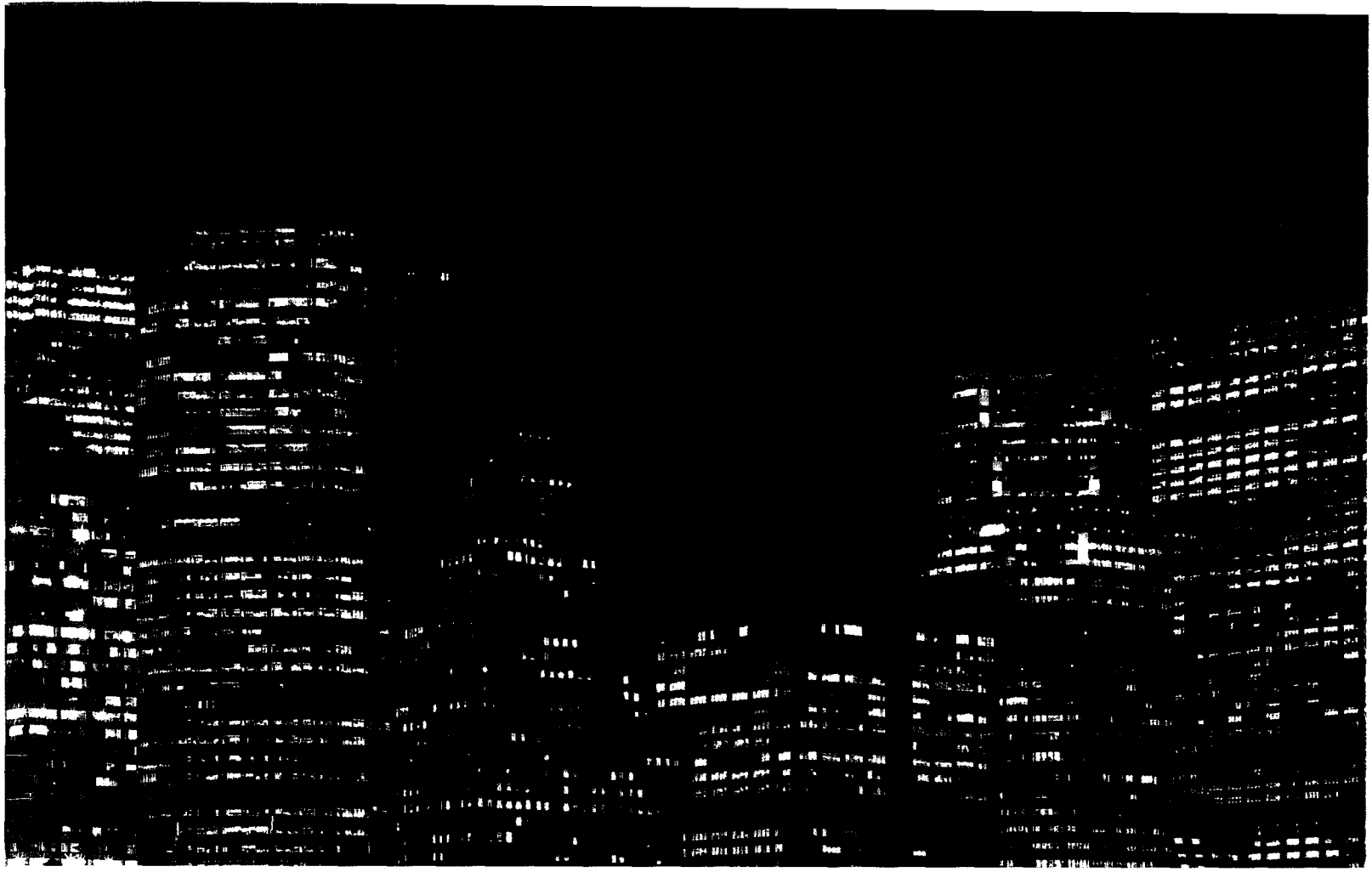
The Annual Meeting of Stockholders will be held at 1:00 p.m., local time, on Thursday, May 24, 2012, at our offices in Waltham, Massachusetts.

Annual Report/Form 10-K

The Company's Annual Report and Form 10-K (without exhibits) is available free of charge by writing to the Company at either address set forth above. You can also obtain a copy of the filing by going to the following website: http://www.sec.gov.

Website

www.americandg.com



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