

U.S. 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, 2014

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission File No.: 0-49629

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

(Exact name of Registrant as specified in its charter)

Delaware
**(State or other jurisdiction of
incorporation or organization)**

33-0933072
**(IRS Employer
Identification Number)**

25242 Arctic Ocean Drive, Lake Forest, CA 92630
(Address of principal executive offices, including zip code)
(949) 399-4500

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

None
Securities registered pursuant to Section 12(g) of the Act:
Common Stock, \$0.02 par value per share

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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to rule 405 of the Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or 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 Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company (as defined in Exchange Act Rule 12b-2).

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, 2014, the aggregate market value of the registrant's voting and non-voting common equity held by non-affiliates was \$132,264,562.

As of March 13, 2015, the registrant had outstanding 27,878,545 shares of common stock.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

All statements included in this report and the documents incorporated herein by reference, other than statements of historical fact, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended. Forward-looking statements can generally be identified by words such as “may,” “could,” “will,” “should,” “assume,” “expect,” “anticipate,” “plan,” “intend,” “believe,” “predict,” “estimate,” “forecast,” “outlook,” “potential,” or “continue,” or the negative of these terms, and other comparable terminology. Examples of forward-looking statements made herein and in the documents incorporated by reference herein include, but are not limited to, statements regarding:

- our belief that our total revenues in 2015 will increase by 40% to 50% over total revenues for 2014;
- our belief that certain start up costs will be significantly lower in the future and our gross margins will exceed 20% in future periods once our systems strategy is fully implemented;
- our belief that our liquidity is sufficient to cover our existing operations and obligations through at least December 31, 2015;
- our belief that we can make dependable estimates of the revenue and costs applicable to the various stages of a contract;
- our expectations regarding 2015 financial performance and results including results from operations for our Fuel Storage & Systems segment;
- our belief that we will be able to raise additional capital, if necessary, to repay debt, fund our future operations and to support our growth plans as required over the next twelve months and beyond;
- our belief that our current operating plan and the shift in our business strategy will allow us to achieve profitability in the future;
- our estimation of the amount of capital we will need to invest in equipment and infrastructure;
- our belief that the facilities in Lake Forest, California are adequate for our current and expected product manufacturing operations and original equipment manufacturer (“OEM”) development programs;
- our belief that our outstanding receivable from Advanced Green Innovations and its affiliates is fully realizable;
- our expectations of the level of growth in the natural gas, hybrid, plug-in hybrid and fuel cell and alternative fuel industries;
- our belief as to the number of complete compressed natural gas (“CNG”) systems we would be able to manufacture and deliver on an annual basis;
- our expectation that shipments of our CNG fuel storage systems will grow;
- our expectation that engineering services related to the plug-in electric vehicle systems software development program with Fisker Auto Group and the new hydrogen tank development program with an automotive OEM alliance will increase;
- our belief that the new product offerings, sales, marketing and training efforts over the last twelve months will lead to increased sales, will strengthen our market position and help in furthering the CNG adoption rate;
- our expectations regarding our significant customers and customer mix for the near term;
- our expectation that our overall gross profit and margins on net product sales will increase in 2015;
- our expectations regarding interest expense, internally funded research and development, selling, general and administrative, and Corporate segment expenses;

- our intention to focus our product development efforts on expanding our CNG storage and fuel systems product offering and advancing our CNG storage and fuel system solutions technologies to further improve performance, weight, and cost;
- our expectation that the U.S., state and local governments will continue to support the advancement of alternative fuel and renewable energy technologies through loans, grants and tax credits;
- our belief that the price of natural gas will stay relatively low for the foreseeable future, which we expect will continue to drive demand for our CNG tanks and fuel systems;
- our belief that we are adequately insured for any products liability claims or product recalls;
- our belief that natural gas is the most cost-effective fuel available on the market today and that this trend will continue for the foreseeable future;
- our belief that as the market adjusts to the underlying economic benefits of natural gas there could be opportunities for the use of CNG in passenger vehicles;
- our expectation that the trucking industry will continue to transition a greater percentage of their fleet vehicles to run on natural gas and that such transition will generate increased demand for our CNG products;
- our belief that there is significant and immediate opportunity for us in the CNG vehicle market;
- our belief that a passenger CNG vehicle platform we are working on with an OEM will be commercially available beginning in 2016;
- our belief that we will be able to sell the remaining assets of Schneider Power within our expected time frame;
- our belief that our existing engineering contracts will lead to future sales of our storage products and integrated systems;

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- our belief that our business decision and strategy to supply complete CNG systems direct to the OEMs and fleets will create greater long term value for our stockholders;
- our belief that we have a competitive advantage over our competitors;
- our expectation that we will face increased competition in the future as new competitors enter the CNG market and advanced technologies become available;
- the impact that new accounting pronouncements will have on our financial statements;
- our expectation that we will prevail on any appeal filed by Iroquois;

- our expectation that the level of gains or losses on derivative instruments will be immaterial in future periods; and
- our expectation that the market price of our common stock will continue to fluctuate significantly.

Although we believe the expectations and intentions reflected in our forward-looking statements are reasonable, we cannot assure you that these expectations and intentions will prove to be correct. Various risks and other factors, including those identified in this report under the “Risk Factors” section and those included in our other public filings that are incorporated herein by reference, could cause actual results, and actual events that occur, to differ materially from those contemplated by the forward looking statements.

These forward-looking statements represent our estimates and assumptions only as of the date made. We undertake no duty to update these forward-looking statements after the date of this report, except as required by law, even though our situation may change in the future. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. Business.

Background

Unless the context otherwise requires, “we,” “our,” “us,” “Quantum” and similar expressions refers to Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries.

We were formed as a Delaware corporation in October 2000, and became a publicly traded company on July 23, 2002. Our common stock trades on The Nasdaq Capital Market under the symbol “QTWW.” Our principal office is located in Lake Forest, California.

Company Overview

We are a leader in the innovation, development and production of compressed natural gas (CNG) fuel storage tanks and packaged fuel storage systems and the integration of vehicle system technologies, including engine and vehicle control systems and drivetrains.

We produce one of the most innovative, advanced and light-weight compressed natural gas (CNG) storage tanks in the world, and supply these tanks, in addition to fully-integrated natural gas storage systems, to truck and automotive original equipment manufacturers (OEM) and aftermarket and OEM truck integrators. We also provide low emission and fast-to-market solutions to support the integration and production of natural gas and hydrogen fuel storage systems, hybrid technologies and refueling systems and dispensers.

We classify our business operations into three reporting segments: Fuel Storage & Systems, Renewable Energy and Corporate. The Renewable Energy business segment, consisting entirely of the operations of Schneider Power Inc. (Schneider Power), is classified as discontinued operations as discussed further below.

Fuel Storage & Systems Segment

Our Fuel Storage & Systems segment generates revenues from two sources: product sales and contract services. Product sales are derived primarily from the sale of Type IV high pressure compressed natural gas (CNG) storage tanks and packaged fuel storage modules and systems for a variety of heavy, medium and light-duty trucks and passenger vehicles. Contract services revenue is generated by providing engineering design and support to Original Equipment Manufacturers (OEMs), entities specializing in natural gas retrofits and material science, governmental agencies and other customers, so that our fuel storage systems and advanced propulsion systems integrate and operate with our customers' CNG, hybrid or fuel cell applications.

Our products and services are designed to offer our customers a clean and cost-effective alternative to gasoline and diesel powered vehicles, which, in turn, enables our customers to benefit from significantly lower fuel prices, contribute to a cleaner environment, meet sustainability and average fuel economy mandates, and help our country reduce its dependence on foreign oil. The primary market for our CNG tanks and systems is currently heavy, medium and light-duty trucks. We sell our products and services direct to vehicle level OEMs, system integrators for OEM level applications, fleets and through aftermarket integrators.

The cost savings offered to fleets by using natural gas as a fuel compared to gasoline or diesel is significant and compelling. Natural gas is the cheapest transportation fuel available on the market today and we expect the trucking industry to continue to transition a greater percentage of their fleet vehicles to run on natural gas systems due to the current favorable economics of natural gas. As the market continues to adjust to the underlying economic benefits of natural gas, we believe there will be substantial opportunities in the passenger vehicle market.

We offer a variety of packaged fuel storage systems, including our Q-Cab^{LITE} and Q-Rail^{LITE}, both of which are pre-assembled, quality tested and fully-validated CNG storage modules for quick integration onto a variety of vehicle platforms. Our CNG packaged storage systems are comprised of high pressure Type IV tanks and fuel delivery regulation and control systems designed to improve efficiency, enhance power output, and reduce harmful emissions. Our integrated and packaged systems typically incorporate our Q-Lite[®] line of composite tanks and leverage our expertise in safety-critical structural design, high strength materials and topology optimization to provide intelligent lightweight systems that maximize on-board fuel storage and contribute to superior fuel economy, handling and low emission performance. Our CNG packaged fuel systems for heavy duty truck applications are also designed to maximize range, with our largest systems providing on-board CNG fuel storage for Class 8 trucks of up to 216 diesel gallon equivalents.

Our Q-Lite tanks are capable of storage at up to 10,000 pounds per square inch (psi). Due to the lightweight nature of our storage tanks, less structure for mounting support is required, thereby reducing the overall storage system weight and increasing available payload. In addition, our large volume tanks maximize on-board storage capacity.

Our CNG tanks have been tested for compliance with the U.S. industry standard CSA NGV2 and in some cases to the Canadian CSA B51 Part II standard and to the United Nations ECE Regulation No. 110. Our tanks meet the U.S. Federal Motor Vehicles Safety Standard FMVSS 304. Our tanks are available for sale in the United States and certain tank models are available for sale in Europe, Canada, Asia, and Australia.

In addition to our CNG and hydrogen storage systems, we design, develop and supply hybrid and plug-in electric vehicle (PHEV) systems, which include complete powertrain systems or sub-systems and components and are designed to improve vehicle fuel economy and performance, leverage existing gas station infrastructure, and utilize home-based battery recharging. Our proprietary software and control systems are integrated into base vehicle components such as the engine, generator, motor, inverters, battery system, power converters, and charger to provide customized hybrid and PHEV drive-train technologies and systems and can be packaged utilizing different designs, technologies and subsystems.

On November 3, 2014, we announced that we had recently entered into an agreement with Fisker Automotive and Technologies Group LLC ("Fisker Auto Group") pursuant to which we will license our plug-in hybrid control software to Fisker Auto Group and, in return, receive an initial payment of \$2.0 million in November 2014, and a second payment of \$2.0 million on or before October 27, 2015. Under these terms, the software license provided to Fisker Auto Group will support Fisker Auto Group's re-launch of the Karma vehicle and, upon our receipt of the second \$2.0 million installment, the license granted to Fisker Auto Group will be expanded to include use on Fisker Auto Group's planned Atlantic vehicle line. The agreement also gives Fisker Auto Group the option to acquire joint-ownership of the hybrid control software for the Karma, Atlantic and future platforms for additional consideration on or before October 27, 2016. In addition, the agreement provides that we will be Fisker Auto Group's exclusive software development partner until at least such time that Fisker Auto Group exercises its option to acquire joint-ownership of the hybrid control software, including two specific agreed upon projects that comprise approximately \$1.35 million of software development services to be provided to Fisker Auto Group prior to October 27, 2015.

Our Renewable Energy segment consists solely of the business operations of our wholly-owned subsidiary, Schneider Power, which we acquired on April 16, 2010. Schneider Power, previously headquartered in Toronto, Ontario, Canada, and now administered out of our Lake Forest, California facility beginning in January 2014, is an independent wind power producer and holder of interests in certain renewable energy projects. We committed to a plan to sell the assets and operations of Schneider Power in 2012, have completed sales of certain assets of Schneider Power through December 31, 2014 and are actively pursuing the sale of all of the remaining Schneider Power assets, including the 10.0 megawatt (MW) Zephyr wind farm operating asset. As a result of these actions and our expectations for a completion of a sale of the remaining assets and operations within the next year, we report the historical activities and balances of Schneider Power as discontinued operations held for sale.

Corporate Segment

Our Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel Storage & Systems or Renewable Energy business segments. Corporate expenses consist primarily of personnel costs, share-based compensation costs and related general and administrative costs for executive, finance, legal, human resources, investor relations, and our board of directors.

Products and Services

All of our products are designed, tested and validated in accordance with our own internal requirements, as well as tested for compliance to national and international industry standards under third-party approval by TÜV and verified for conformance to regulatory codes, including the U.S. Federal Motor Vehicles Safety Standard FMVSS 304.

Our products and services include:

Products:

High pressure gaseous fuel tanks. Our Q-Lite tanks are advanced composite, ultra-lightweight tanks that provide efficient storage of compressed natural gas or hydrogen at pressures up to 10,000 psi (1000 bar). We carry in stock several different tank sizes ranging in capacity from 234 liters to 603 liters and have the expertise and capability to

design specific tank sizes to accommodate our customer's needs. Our product line includes tanks that can be strap-mounted or neck-mounted depending upon our customer's required application.

Packaged fuel system modules. Our Q-Cab^{LITE} and Q-Rail^{LITE} modules are pre-assembled, quality tested and fully validated packaged fuel storage modules, which incorporate up to 3 high pressure gaseous tanks with fuel delivery regulation and control systems. These modules are designed for efficient integration onto a customer's vehicle platform.

Gaseous fuel electronic vehicle control systems and software. Our proprietary software is incorporated into certain of our alternative fuel systems. Our software is OEM level and incorporates torque security features per ISO 26262 in a Spice Level 3 compliant package. These control systems monitor and optimize electrical control strategies and/or gaseous fuel flow to drive systems to meet our customer's and regulatory requirements.

Hybrid control & motor control software systems. Our hybrid control software systems optimize the operation of all hybrid and PHEV subsystems including the engine, generator, motor, inverters, battery system, power converters, and charger to maximize fuel economy while minimizing emissions.

Inverters and Motors. We provide customization of inverters and a variety of motors as an integral subsystem to our drive systems. The inverters are very efficient and compact devices which have been specified and/or designed by us. Our drive systems use primarily Interior Permanent Magnet motors due to their substantially higher efficiency, especially at low speeds. For products not available off-the-shelf, we will have them contract manufactured to meet product or customer specifications.

Engine/Generator and Fuel Cell Power. We provide power generating systems for use as a prime-mover or range extender. We optimize engines to operate at high efficiency and with low emissions on conventional or alternative fuels. We develop specifications and contract production of customized generators to maximize vehicle efficiency. We also have experience integrating fuel cells and hydrogen storage and fuel delivery systems into vehicle applications.

Services:

Fuel Storage and System Design and Validation. We design, develop, engineer and validate complete fuel storage systems for natural gas vehicle applications ranging from passenger vehicles to heavy duty trucks. We also integrate electric motors, inverters, generators, and electronic vehicle control components into hybrid and PHEVs. Further, we employ rapid prototyping techniques, which accelerate the iterative design process and result in a more accurate and high performance design.

Testing and Validation. To increase the likelihood of high success rates at the system level, we perform component, subsystem and system testing and validation. We have test equipment including engine and chassis dynamometers to test and validate most automotive devices. These procedures must satisfy our own internal requirements, customer-specific requirements and industry standards. If no suitable procedures exist, we generate requirements for the customer.

Certification and Compliance. Our regulatory and certification engineers endeavor to implement the latest emissions and safety regulations in efforts to ensure the proper certification and ongoing compliance of our products and our business. We certify complete vehicles in our CARB and EPA certified test lab.

Production Engineering and Manufacturing Process Development. We provide complete production engineering and manufacturing process development for our limited volume production process as a tier-one OEM automotive supplier and for certain military applications.

Vehicle Level Assembly. We develop and manage the assembly process for integration of our systems into end products at our or our customer's facility for low to high volume applications. We also build complete concept vehicles.

Training. We develop comprehensive technical training for customers that sell and service our products as well as for those that use our products.

Service and Warranty. We have extensive capabilities in developing service procedures, diagnostics, tools, and complete repair/maintenance programs for OEMs. We also provide technical support over the telephone or at customer sites to resolve technical issues.

Business Strategy

Our strategy is to leverage our CNG storage systems, tier I automotive OEM supplier experience, our proprietary technologies and products and our capabilities in gaseous fuel storage and fuel system integration and vehicle level assembly in order to be an industry leader in the innovation, development, production and integration of lightweight CNG, fuel storage systems. Our business strategy includes:

- Focusing our efforts on natural gas vehicle programs with short-term, high-volume commercialization opportunities.
- Advancing our market position as a leader in lightweight tank technology through improved product branding and enhanced market profile as a “one-stop-shop” for complete CNG storage system solutions.
- Pursuing existing and new opportunities for our CNG storage and fuel systems solutions in the passenger vehicle and light, medium and heavy duty truck markets.
- Developing our existing relationships and creating new relationships with OEMs, fleets and other CNG market participants to support the delivery of integrated solutions.

Competition

We face competition from a number of Type IV tank manufacturers and CNG storage system providers. Our largest CNG storage system competitor is Agility Fuel Systems. In light of the worldwide growth in demand for CNG fuel systems, we expect new competitors to enter into the market. In addition to overall pricing, the principal competitive factors in the markets in which we operate include product features, specifically size and weight, relative price and performance, product quality and reliability, design innovation, and service and support.

We believe that our depth of experience in gaseous fuel storage and as an automotive Tier 1 system integrator, our industry-leading lightweight design and the optimized structural mounting and increased driving range provided by tanks together with our systematic approach to vehicle integration, testing and validation capabilities and established engineering processes provide us with a competitive advantage.

With respect to our hybrid and PHEV fuel systems, we believe that our competitive advantage over current and potential future competitors is our software development, technology portfolio and integration expertise derived from many years of experience with advanced propulsion systems combined with our belief that we can bring a new system to market faster than our competitors.

Raw Materials

With respect to our storage tanks, carbon fiber represents the largest component cost. We currently purchase our carbon fiber from multiple sources, including Toray Industries, Inc. There are a number of carbon fiber suppliers in the marketplace and we do not expect shortage of this raw material in the future based on announced expansion plans and industry reports.

Customers

A large percentage of our revenue is typically derived from a small number of customers and we expect this trend to continue for the foreseeable future. Agility Fuel Systems comprised 28% and 45%, Ryder System, Inc. and its affiliates comprised 12% and 0%, General Motors comprised 11% and 8%, and Advanced Green Innovations, LLC and its affiliates comprised 9% and 12%, of the total consolidated revenue for continuing operations reported for the years ended December 31, 2014 and 2013, respectively.

Backlog

At December 31, 2014, our total product backlog was \$17.8 million, which is primarily associated with CNG fuel storage tanks and systems.

Intellectual Property

We rely primarily on patent and trade secret laws to protect our intellectual property rights. Although we recognize the importance of patent and trade secret laws and, when appropriate, seek the advantages and benefits these laws offer, we believe that our growth and future success will be more dependent on factors such as the knowledge, experience and expertise of our

personnel, new product introductions, continued emphasis on innovation, research and development and creation of “know-how.” We currently have patents that have been issued or are pending in the United States, Canada, Europe and/or Asia. Although the continued development and protection of our intellectual property is important to our future success, the loss of any one particular patent would not have a material adverse affect on our business.

Safety, Regulation, and Product Certification

The manufacture, distribution and sale of our products are subject to governmental regulations in the United States at the federal, state and local levels. The most extensive regulations are promulgated under the National Traffic and Motor Vehicle Safety Act, which, among other things, empowers the National Highway Traffic Safety Administration (NHTSA) to require a manufacturer to remedy certain “defects related to motor vehicle safety” or vehicles that fail to conform to all applicable federal motor vehicle safety standards.

Federal Motor Vehicle Safety Standards are promulgated by the NHTSA. Many of our products are affected by these standards. We engage various testing companies, which also perform testing for NHTSA, to test certain of our products. NHTSA can require automotive manufacturers to recall products. We have not experienced any material recalls.

Like other automotive OEMs and manufacturers of automotive component parts, we may be subject to claims that our products caused or contributed to damage or injury sustained in vehicle accidents or may be required to recall products deemed to contain defects related to motor vehicle safety. We believe that we are adequately insured for any claims. However, any such claims in excess of our insurance coverage or material product recall expenses could adversely affect our financial condition and results of operations. Promulgation of additional safety standards in the future could require us to incur additional testing and engineering expenses that could adversely affect our results of operations.

We must obtain emission compliance certification from the Environmental Protection Agency (EPA) to introduce vehicles or engines into commerce in the United States, and from the California Air Resources Board to introduce vehicles or engines into commerce in California. Certification requires that each vehicle or engine meet specific component, subsystem and vehicle-level durability, emission, evaporative, and idle tests. Both federal and state authorities have various environmental control standards relating to air, water and noise pollution that affect our business and operations.

Furthermore, we strive to meet stringent industry standards set by industry and standards associations, codes set by various regulatory bodies and industry practices, including the U.S. Department of Transportation Federal Motor Vehicle Safety Standards, the California Air Resources Board, the Environmental Protection Agency, the National Fire Protection Association, United Nations Economic Commission for Europe (UNECE), Canadian Registration Authorities, NGV America, European Integrated Hydrogen Project, Kouatsugasu Hoan Kyokai, Underwriters Laboratories, the International Standards Organization, the Society of Automotive Engineers and CSA America. Compliance to standards and jurisdictional approvals enhance the acceptability of our products in the domestic and international marketplace.

Our international sales are subject to foreign tariffs and taxes, changes in which are difficult to predict and which can adversely affect sales. Our products must also comply with government safety standards imposed in our foreign markets.

Research and Product Development

Our targeted research and development activities in the near term are as follows:

CNG Tank Advancements-designing and engineering derivative composite pressure vessels utilizing new and lower cost materials, processes and other advancements and economies of scope to drive costs out of the storage system, provide alternative light-weight solutions and address extended range.

Packaged Fuel System Module Advancements-designing and engineering next generation fuel system modules that reduce weight, enhance fuel storage packaging efficiencies, and reduce costs of the overall system.

Vehicle Control Systems, Electronic Controls and Software Systems-designing and optimizing control systems and strategies to maximize vehicle performance and range, including engine control design and selection, engine modeling, calibration and software design for engine and emission controls.

Advanced Emissions testing-performing emissions and certification testing on vehicles that utilize California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) approved advanced technology to test low emission vehicles.

Component and Subsystem Test Facilities-extended vibration, shock loads and accelerations, extreme temperature exposure from -85 °F to 392 °F, thermal shock, cyclic corrosion, extended salt, fog, humidity and dryness cycling, severe acid and alkali corrosion, flow simulations, and pneumatic leak checks.

Employees

As of March 13, 2015, we had 169 full-time employees and 3 part-time employees. During peak production periods, we may increase our work force. Historically, the available labor force has been adequate to meet such periodic requirements. None of our employees are represented by a collective bargaining agreement.

Financial Information about Segments, Customer Concentrations and Geographic Areas

Additional information regarding our business segments, certain customer concentrations and geographic areas where we have revenues is contained in Notes 14 and 15 to our Consolidated Financial Statements in Part IV, Item 15(a)(1) of this Annual Report.

Reverse Stock Split

On July 30, 2013, we implemented a reverse stock split pursuant to which all classes of issued and outstanding shares of our common stock at the close of business on such date were combined and reconstituted into a smaller number of shares of common stock in a ratio of 1 share of common stock for every 4 shares of common stock. Concurrently, our authorized shares of common stock were reduced proportionately from 150,000,000 to 37,500,000, of which 25,000 shares were designated as Series B non-voting common stock. The reverse stock split did not affect our 20,000,000 shares of authorized

preferred stock. The share information contained within this report, including the accompanying consolidated financial statements and footnotes, have been retroactively adjusted to reflect the effects of the reverse stock split.

Certificate of Incorporation

On February 26, 2014, our certificate of incorporation was amended to retire the 25,000 authorized shares of Series B common stock and on May 16, 2014 our certificate of incorporation was further amended to increase the number of shares of common stock \$0.02 par value, we are authorized to issue to 50,000,000. We are also authorized to issue 20,000,000 shares of preferred stock.

Available Information

We make our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and all amendments to these reports available free of charge on our corporate website as soon as reasonably practicable after such reports are filed with, or furnished to, the SEC. Our corporate website is located at *www.qtw.com*. None of the information contained on our website is intended to be part of this report or incorporated by reference herein.

You may also read and copy materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington DC 20549. Information on the operation of the Public Reference Room is available by calling the SEC at 1-800-SEC-0330. The SEC maintains a web site that contains reports, proxy statements and other information we file with the SEC. The address of the SEC's web site is *www.sec.gov*.

Item 1A. Risk Factors.

This Annual Report, including the Management's Discussion and Analysis of Financial Condition and Results of Operations, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. We face a number of risks and uncertainties that could cause actual results or events to differ materially from those contained in any forward-looking statement. These risks and uncertainties should be considered in evaluating forward-looking statements and undue reliance should not be placed on these forward-looking statements, which apply only as of the date of this Annual Report. We undertake no obligation to release publicly the result of any revisions to these forward-looking statements that may be made to reflect events or circumstances in the future or to reflect the occurrence of unanticipated events. We discuss all known material risks to our business below. The risks and uncertainties described are not the only ones facing us. Additional risks and uncertainties may also adversely impair our business operations. If any of the following risks actually occur, our business, our financial condition or our results of operations could suffer significantly.

Risks Related to Liquidity and Capital Resources

We have a history of operating losses and negative cash flows and we may need to raise additional funds to finance our operations.

We have a history of operating losses and negative operating cash flows. We incurred net losses from continuing operations before income taxes of \$14.5 million and \$20.0 million for the fiscal years ended December 31, 2014 and 2013, respectively.

We have significantly improved our liquidity position over the past couple of months and believe that we have sufficient liquidity to cover existing operations and obligations through at least December 31, 2015, and a long-term strategy in place that will allow us to operate profitably in the future. However, if we fail to execute our strategy or if there is a change in the market conditions or any other assumptions we used in formulating our liquidity analysis and business strategy, our liquidity analysis may not be accurate and our long-term strategy may not be successful in achieving profitability. As a result, investors could lose confidence in our company and the value of our common stock could decline.

We have a substantial amount of indebtedness. If we are unable to repay our indebtedness or refinance or extend such indebtedness, it would have a material adverse effect on our financial condition and ability to continue as a going concern.

As of December 31, 2014, we had approximately \$16.9 million of principal and interest owing under our debt obligations related to our continuing operations and \$19.6 million in debt financing associated with the discontinued operations of Schneider Power's 10.0 MW Zephyr wind farm that is classified as held for sale. Our debt related to our continuing operations includes \$1.6 million owed to a finance company that is secured by specific equipment assets, \$4.5 million owed to our senior secured lender, which is secured by substantially all of our assets used in continuing operations, and \$10.7 million owed to convertible note holders that have a second lien position on substantially all of our assets used in continuing operations.

If we do not have sufficient capital to repay these obligations when they become due or if we cannot otherwise refinance these debt obligations prior to their maturity, it would have a material adverse effect on our business, our ability to raise capital in the future and our ability to continue as a going concern. Further, if we were to default on the secured debt, the lenders would have the right as secured creditors to foreclose on the assets securing the debt.

Our revolving line of credit facility with our senior secured lender contains certain affirmative and negative covenants which could restrict the manner in which we conduct business and, if we fail to comply with such covenants, it could restrict our ability to access the full amount available under the credit facility and result in the acceleration of the debt extended, if any, pursuant to such credit facility.

Our credit facility with our senior secured lender, as last amended on February 10, 2015, provides us with a \$7.5 million line of credit and is secured by substantially all of the assets used in our continuing operations, contains certain financial covenants and other restrictions applicable to us which could reduce our flexibility in conducting our operations by limiting our ability to borrow money and may create a risk of default on our debt if we cannot continue to satisfy these covenants.

If we default in any of the affirmative or negative covenants applicable to us or otherwise default in the credit facility, the lender could, among other things, declare a default, accelerate the maturity date of any outstanding indebtedness and, if we are unable to repay, exercise its rights under the credit facility to, among other things, foreclose on our assets.

Risks Related to Our Business

Risks Related to our Fuel Storage and Systems Segment

We are dependent on a limited number of customers.

A large percentage of our revenue is typically derived from a small number of customers. Revenues from our largest customer comprised 28% and 45% of our total revenues for the years ended December 31, 2014 and 2013, respectively, and revenues from our top three customers comprised 51% and 66% of our total revenues for the year ended December 31, 2014 and 2013, respectively. We expect this trend to continue for the foreseeable future. In the event there is an unfavorable change in our business relationship with our significant customers, it could have a material adverse effect on our business and financial results.

Our business plan is focused on CNG and our expectations regarding revenue growth for calendar 2015 is based on a number of assumptions, which if incorrect, would have a material effect on our actual revenues and our business.

Our business plan for calendar 2015 is highly focused and dependent on CNG and contemplates that our revenues from CNG fuel storage tanks and fuel module systems will increase significantly from historical levels, and our business strategy contemplates continued growth in the CNG vehicle segment. We are currently estimating that our total revenue for 2015 will exceed our total revenue for 2014 by approximately 40% to 50%. We base our estimate for total revenue on a number of

assumptions including, without limitation, that market growth for CNG trucks and demand for our CNG fuel storage products will continue to increase, that our relationships with our customers will continue for the foreseeable future, that the cost of natural gas will continue to be lower than gasoline and diesel by an amount that justifies conversion to CNG, the decision by fleet managers to switch to CNG and whether we can maintain a competitive advantage over our competitors. In the event that any of our assumptions are inaccurate, it could have a material effect on our business plan and projected revenues for calendar 2015.

Fuel price differentials are difficult to predict and may be less favorable in the future. If the price of natural gas does not remain sufficiently below the prices of gasoline and diesel, potential customers will have less incentive to purchase natural gas vehicles, which would limit our growth.

The growth of the natural gas vehicle market, CNG adoption rates, and our ability to grow the business depends in large part on the price differential between natural gas, diesel and gasoline fuels. Natural gas vehicles cost more than comparable gasoline or diesel powered vehicles because the components needed for a vehicle to use natural gas add to a vehicle's base cost. If the price of natural gas does not remain sufficiently below the prices of gasoline and diesel, operators may delay the purchase of natural gas vehicles or decide not to convert their existing vehicles to run on natural gas because of a perceived inability to recover the additional costs of acquiring or converting to natural gas vehicles in a timely manner. Natural gas has generally been, and currently is, less expensive than diesel fuel in many jurisdictions; however, the price differential has decreased over the past several months. The price differential is affected by many factors, including changes in domestic and foreign supplies of natural gas and crude oil, availability of shale gas, domestic storage levels, pipeline transportation capacity for natural gas, refining capacity for crude oil, weather conditions, level of consumer demand, economic conditions, and domestic and foreign government regulations (including, without limitation, excise and fuel tax policies) and political conditions. There can be no assurance that natural gas will remain less expensive than diesel and gasoline fuels. Any decrease in the cost savings offered by the use of natural gas vehicles could result in fewer purchases of or conversions to natural gas vehicles, which would cause our customer base and our sales of fuel storage systems and services to decrease and our business to suffer.

Advanced Green Innovations, LLC ("AGI") and its affiliate ZHRO Solutions, LLC ("ZHRO") recent default in the terms of a Debt Repayment Agreement could materially affect our business and financial results.

AGI, and its affiliate, ZHRO owe us approximately \$2.8 million for engineering, design and development services as of December 31, 2014, of which \$2.2 million was invoiced by us through October 3, 2014, and \$0.6 million represented unbilled receivables as of October 3, 2014. On December 11, 2014, we, AGI, ZHRO and their affiliate, Advanced Green Technologies, LLC ("AGT"), entered into a Debt Repayment Agreement and Pledge Agreement with respect to the \$2.2 million of billed receivables. AGI and ZHRO are currently in default of the terms of the Debt Repayment Agreement due to their failure to timely make the \$300,000 payment due on December 25, 2014, the \$200,000 payment due on January 31, 2015, and the \$200,000 payment due on February 28, 2015. To date, AGI and ZHRO have paid us \$150,000 of the \$700,000 due under the Debt Repayment Agreement.

While we continue to believe that AGI will be able to raise sufficient capital to continue their operations and pay the amounts owed to us or that we will be able to recover all or a substantial portion of the amount owed to us by AGI and ZHRO from the collateral securing the obligation, if they are unsuccessful in raising sufficient capital or if we are unable to sell or otherwise realize an amount on the collateral sufficient to repay the amount owed to us, we may have to specifically reserve and/or write-off amounts owed to us if we determine in the future that the amounts may not be fully realizable and such write-off would have a material impact on our liquidity. The collateral that we received to secure AGI's and ZHRO's performance of their obligations under the Debt Repayment Agreement is comprised of all of AGI's and AGT's ownership interests in East Camelback, LLC, consisting of 510 voting units (51.0%), 474 non-voting units and 47.5% of the participation rights in East Camelback, LLC. East Camelback, LLC indirectly owns 100% of a commercial building, consisting of approximately 23,700 square feet of office space, located in Phoenix, Arizona. Given the nature of the collateral, if we foreclose on the collateral, we cannot provide any assurance of when we would be able to sell or otherwise monetize the foreclosed collateral or how much we would be able to realize upon the sale of such collateral. In addition, if AGI or ZHRO were to become subject to bankruptcy proceedings, our preference in the collateral could be avoided, and we could lose the benefit of the security on the collateral.

If Iroquois Master Fund's appeal is successful, we may have to pay them additional damages and legal fees.

On December 15, 2014, Iroquois Master Fund ("Iroquois") filed a Notice of Appeal with the United States Court of Appeals for the Second Circuit from the judgment entered by the United States District Court for the Southern District of New York. Although we believe that we will prevail on appeal, we can provide no assurance that the Second Circuit will uphold District Court's judgment. If the Second Circuit were to reverse the District Court's decision, then we may have to pay Iroquois additional damages and reimburse them for their reasonable attorney fees incurred in connection with the appeal.

We depend on third-party suppliers for the supply of materials and components used in our products and storage systems, some of which are single sourced. An interruption in this supply or switching to an alternative material or component could adversely affect our ability to deliver our storage systems and tanks.

We depend on third-party suppliers for the supply of materials and components. Certain of these suppliers are single source. Any significant change in a material or component could require us to revalidate a tank or storage system which would cause delays due to re-validation or re-certification of the storage system. In the event these delays are lengthy and that the cost of these materials and/or components increase or our suppliers experience production delays or constraints, it could have a material adverse affect on our business and financial results.

Our ability to design and manufacture fuel systems that can be integrated into vehicle platforms is critical to our business.

We are currently manufacturing, integrating or developing CNG fuel storage systems for production vehicles and aftermarket programs. These CNG fuel storage systems are engineered to meet strict design, performance and packaging requirements of our customers. Customers for these systems require that these products meet either their strict design standards or original equipment manufacturer level standards that can vary by jurisdiction. Compliance with these requirements has resulted in increased development, manufacturing, warranty and administrative costs. A significant increase in these costs could adversely affect our business, results of operations and financial condition. If we fail to meet original equipment manufacturer or customer specifications on a timely basis, our existing or future relationships with our original equipment manufacturers and other customers may be harmed, which would have a material adverse effect on our business, results of operations and financial condition.

A mass market for our CNG systems may never develop or may take longer to develop than anticipated.

CNG systems represent emerging technologies, and we do not know whether users will adopt these technologies on a large scale or whether original equipment manufacturers will incorporate these technologies into their products. In particular, if a mass market fails to develop, or develops more slowly than anticipated, for CNG and other alternative fuel propulsion systems in vehicle applications, we may be unable to recover our expenditures to develop our fuel systems and may be unable to achieve or maintain profitability, any of which could negatively impact our business. Many factors that are beyond our control may have a negative effect on the development of a mass market for CNG and our fuel systems for CNG applications.

These factors include the following:

- cost competitiveness, especially with fluctuating oil and natural gas prices;
- consumer acceptance of CNG fuel products;
- government funding and support for the development of CNG and related fueling infrastructure;
- consumer adoption levels of CNG compared to liquid natural gas (LNG) as a preferred natural gas fuel choice;
- the willingness of original equipment manufacturers and after-market integrators and customers to replace current technology;
- consumer perceptions of CNG;
- regulatory requirements; and
- emergence of newer, breakthrough technologies and products within the vehicle industry.

Evolving customer design requirements, product specifications and testing procedures could cause order delays or cancellations.

We have experienced delays in shipping our products in the past as a result of changing customer specifications and testing procedures. Due to the dynamic nature of the technologies used in our products, changes in specifications are common and may result in delayed shipments, order cancellations or higher production costs. Evolving design requirements or product specifications may adversely affect our business or financial results.

We have limited experience manufacturing fuel systems on a large scale basis.

We have limited experience manufacturing CNG and other alternative fuel systems in high volumes. In order to produce our CNG and other alternative fuel propulsion systems at affordable prices on a large scale basis, we will have to continue to enhance and automate our manufacturing processes. We do not know whether we, or our suppliers, will be able to develop efficient, automated, low-cost manufacturing capability and processes that will enable us to meet the quality, price, engineering, design and production standards, or production volumes required to successfully mass market our products. Even if we, or our suppliers, are successful in developing our high volume manufacturing capability and processes, we do not know whether we will be able to do so in time to meet our product commercialization schedules or to satisfy the requirements of our customers. Our failure to develop such manufacturing processes and capabilities could have a material adverse effect on our business, results of operations and financial condition.

We may not meet our product development and commercialization milestones.

We have certain product development programs that are in the pre-commercial stage. The success of each product development program is highly dependent on our correct interpretation of commercial market requirements, and our translation of those requirements into applicable product specifications and appropriate development milestones. If we have misinterpreted market requirements, or if the requirements of the market change, we may develop a product that does not meet the cost and performance requirements for a successful commercial product. In addition, if we do not meet the required development milestones, our commercialization schedules could be delayed, which could result in potential purchasers of these products declining to purchase additional systems or choosing to purchase alternative technologies. Delayed commercialization schedules may also impact our cash flow, which could require increased funding.

We may be subject to warranty claims, and our provision for warranty costs may not be sufficient.

We may be subject to increased warranty claims for our products due to increased levels of our products that are in use and subject to existing warranty provisions and due to longer warranty periods. In response to consumer demand, vehicle manufacturers have been providing, and may continue to provide, increasingly longer warranty periods for their products. As a consequence, these manufacturers may require their suppliers, such as us, to provide correspondingly longer product warranties. As a result, we could incur substantially greater warranty claims in the future.

Our business may be subject to product liability claims or product recalls, which could be expensive and could result in a diversion of management's attention.

The automotive industry experiences significant product liability claims. As a supplier of products and systems to automotive original equipment manufacturers and aftermarket system integrators, we face an inherent business risk of exposure to product liability claims in the event that our products, or the equipment into which our products are incorporated, malfunction and result in personal injury or death. We may be named in product liability claims even if there is no evidence that our systems or components caused the accidents. Product liability claims could result in significant losses as a result of expenses incurred in defending claims or the award of damages. The sale of systems and components for the transportation industry entails a high risk of these claims. In addition, we may be required to participate in recalls involving these systems if any of our systems prove to be defective, or we may voluntarily initiate a recall or make payments related to such claims as a result of various industry or business practices or the need to maintain good customer relationships. Our other products may also be subject to product liability claims or recalls. We cannot assure you that our product liability insurance will be sufficient to cover all product liability claims, that such claims will not exceed our insurance coverage limits or that such insurance will continue to be available on commercially reasonable terms, if at all. Any product liability claim brought against us could have a material adverse effect on our reputation and business.

Our business may become subject to stricter product certification regulations, which may impair our ability to market and sell our products.

We must meet product certification requirements from regulated agencies such as NGV2 and other governmental agencies, such as the U.S. Environmental Protection Agency and the California Air Resources Board, and comply with requirements from the U.S. Department of Transportation, in order to sell certain of our products in the United States and internationally. A significant portion of our future sales will depend upon sales of fuel system products that are certified to meet existing on-board fuel storage safety codes and standards. We cannot assure you that our products will continue to meet these specifications and standards. The failure to comply with these certification and safety requirements and standards could result in the recall of our products or in civil or criminal penalties.

Any new government regulation that affects our advanced fuel technologies, whether at the foreign, federal, state or local level, including any regulations relating to installation and servicing of these systems, may increase our costs and the price of our systems. As a result, these regulations may have a negative impact on our business, results of operations and financial condition.

Changes in environmental policies could hurt the market for our products and our renewable energy projects.

The market for natural gas, plug-in electric hybrid, fuel cell, hybrid and other forms of alternative fuel vehicles and equipment and the demand for our products are driven, to a significant degree, by local, state and federal regulations that relate to air quality, greenhouse gases and pollutants, and that require the purchase of motor vehicles and equipment operating on alternative fuels or fuel cells. Similarly, foreign governmental regulations also affect our international business. These laws and regulations may change, which could result in transportation or equipment manufacturers abandoning or delaying their interest in alternative fuel and fuel cell powered vehicles or equipment. In addition, a failure by authorities to enforce current domestic and foreign laws or to adopt additional environmental laws could limit the demand for our products.

Although many governments have identified as a significant priority the development of alternative energy sources, and fuel cells in particular, we cannot assure you that governments will not change their priorities or that any change they make would not materially affect our revenue or the development of our products.

Failure to comply with applicable environmental and other laws and regulations could adversely affect our business and harm our results of operations.

We use hazardous materials in our research and development and manufacturing processes, and as a result are subject to federal, state, local and foreign regulations governing the use, storage, handling and disposal of these materials and hazardous waste products that we generate. Although we believe that our procedures for using, handling, storing and disposing of hazardous materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from hazardous materials and we may incur liability as a result of any such contamination or injury. In the event of an accident, including a discharge of hazardous materials into the environment, we could be held liable for damages or penalized with fines, and the liability could exceed our insurance and other resources. We have also incurred and may continue to incur expenses related to compliance with environmental laws. Such future expenses or liability could have a significant negative impact on our business, financial condition and results of operations. Further, we cannot assure you that the cost of complying with these laws and regulations will not materially increase in the future.

We are also subject to various other federal, state, local and foreign laws and regulations. Failure to comply with applicable laws and regulations, including new or revised safety or environmental standards, could give rise to significant liability and require us to incur substantial expenses and could materially harm our results of operations.

We currently face, and will continue to face, significant competition, which could materially and adversely affect us.

We currently compete with companies that have or may have greater economic resources, name recognition, larger customer bases, broader global reach and a wider array of product lines. We are also subject to competition from other alternative fuels and alternative fuel technologies, including liquefied natural gas (LNG), synthetic fuel, methanol, ethanol, hydraulic hybrid, hybrid, hybrid electric and fuel cells, and we cannot assure you that such technologies will not be favored over gaseous fuel technologies in the future. We also cannot assure you that our competitors will not create new and improved innovative gaseous fuel technologies. Increases in the market for alternative fuel vehicles may cause automobile or engine manufacturers to develop and produce their own fuel conversion or fuel management equipment rather than purchasing the equipment from suppliers such as us or to employ competing technologies. Further, greater acceptance of alternative fuel engines may result in new competitors. Should any of these events occur, either alone or in combination, the total potential demand for, and pricing of, our products could be negatively affected and cause us to lose business, which could materially and adversely affect us.

New competitors and new technologies are emerging and could negatively impact our market sure and prospects for future business.

New emerging competitors and developments in technology may negatively affect the development or sale of some or all of our products or make our products obsolete. A range of other technologies could compete with and/or replace our CNG, hydrogen and hybrid electric products and technologies. Our success depends upon our ability to design, develop and market new or modified CNG and hydrogen products and systems. Our inability to enhance existing products in a timely manner or to develop and introduce new products that incorporate new technologies, conform to increasingly stringent emission standards and performance requirements and achieve market acceptance in a timely manner could negatively impact our competitive position. New product development or modification is costly, involves significant research, development, time and expense and may not necessarily result in the successful commercialization of any new products.

Risks Related to Investments and our Renewable Energy Segment

We may be unable to effectuate a sale of Schneider Power assets in a timely manner or receive consideration that exceeds the carrying value of the assets that are currently held for sale.

On August 9, 2012, we committed to a formal plan to sell the assets and operations of our Schneider Power business and initiated steps to locate a buyer. We cannot provide any assurance that we will be successful in selling the assets or operations for a price in excess of the carrying value of the assets that are currently classified as “held for sale,” if at all. For the year ended December 31, 2014, we recognized \$0.9 million of impairment charges related to Schneider Power’s assets that are held for sale. In the event we are unable to sell Schneider Power for a price at least equal to the remaining carrying value of the assets, then we will have to record additional charges and the amount of the charges could be material.

Our Renewable Energy business segment has a substantial amount of debt and Schneider Power has pledged all of its ownership interests in Zephyr Farms Limited to secure project related debt.

The \$19.6 million in project debt financing associated with the discontinued operations of Schneider Power that is classified as held for sale represents term debt principal and accrued interest owed by Zephyr Farms Limited, our indirect wholly-owned subsidiary, to Samsung Heavy Industries Ltd (The Samsung Debt). The Samsung Debt is secured by substantially all of Zephyr Farm Limited’s assets and guaranteed by Schneider Power, the parent company of Zephyr Farms Limited, pursuant to the terms of a limited nonrecourse guarantee. Schneider Power’s guarantee of the Samsung Debt is secured by a pledge of all of the shares of Zephyr Farms Limited pursuant to the terms of a Pledge Agreement. If the Zephyr Wind Farm does not generate sufficient revenue and cash flow to service the Samsung Debt, Samsung would have the rights of a secured creditor to foreclose on the project assets and/or take ownership of the project. If Zephyr Farms Limited were to default on the Samsung Debt and Samsung were to exercise its rights as a secured creditor, it would have a material adverse effect on Schneider Power and our Renewable Energy business segment.

Schneider Power's 10.0 MW Zephyr Wind Farm could generate less return than anticipated.

We have experienced delays and difficulties in bringing the Zephyr Wind Farm project’s energy generation capabilities up to full utilization. If difficulties are encountered in the future, the levels of energy generated over the expected life of the project’s assets could be significantly less than expected, the operating results of the renewable energy segment could be negatively impacted, our ability to meet or restructure the Samsung Debt could be impaired, and we may not be able to realize the level of proceeds that we anticipate from a sale of the Zephyr Wind Farm.

Other Risks Related to Our Business

We depend on our intellectual property, and our failure to protect that intellectual property could adversely affect our future growth and success.

Our failure to protect our existing intellectual property rights could result in the loss of our competitive advantage or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation, and/or be enjoined from using such intellectual property.

We have not conducted formal evaluations to confirm that our technology and products do not or will not infringe upon the intellectual property rights of third parties. As a result, we cannot be certain that our technology and products do not or will not infringe upon the intellectual property rights of third parties. If infringement were to occur, our development, manufacturing, sales and distribution of such technology or products may be disrupted.

We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. Our patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, we cannot assure you that any of the patents we have filed or other patents that third parties license to us will not be invalidated, circumvented, challenged, rendered unenforceable, or licensed to others or that any of our pending or future patent applications will be issued with the breadth of claim coverage we seek, if issued at all.

Effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in certain foreign countries. For instance, it may be difficult for us to enforce certain of our intellectual property rights against third parties who may have inappropriately acquired interests in our intellectual property rights by filing unauthorized trademark applications in foreign countries to register our marks because of their familiarity with our business in the United States.

Some of our proprietary intellectual property is not protected by any patent, copyright or patent or copyright applications, and, despite our precautions, it may be possible for third parties to obtain and use such intellectual property without authorization. We have generally sought to protect such proprietary intellectual property in part by confidentiality agreements and, if applicable, inventors' rights agreements with strategic partners and employees, although such agreements have not been put in place in every instance. We cannot guarantee that these agreements adequately protect our trade secrets and other intellectual property or proprietary rights. In addition, we cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that such persons or institutions will not assert rights to intellectual property arising out of these relationships. Furthermore, the steps we have taken and may take in the future may not prevent

misappropriation of our solutions or technologies, particularly in respect of officers and employees who are no longer employed by us or in foreign countries where laws or law enforcement practices may not protect our proprietary rights as fully as in the United States.

Our business could suffer if we fail to attract and maintain key personnel.

Our future depends, in part, on our ability to attract and retain key personnel, including engineers, technicians, machinists and management personnel. For example, our research and development efforts depend on hiring and retaining qualified engineers. Competition for highly skilled engineers is extremely intense, and we may experience difficulty in identifying and hiring qualified engineers in many areas of our business. Our future also depends on the continued contributions of our executive officers and other key management and technical personnel, each of whom would be difficult to replace. The loss of the services of one or more of our senior executive officers or key personnel, or the inability to continue to attract qualified personnel, could delay product development cycles or otherwise materially harm our business, results of operations and financial condition.

Our insurance may not be sufficient.

We carry insurance that we consider adequate in regard to the nature of the covered risks and the costs of coverage. We are not fully insured against all possible risks, nor are all such risks insurable. ***If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, and current and potential stockholders may lose confidence in our financial reporting.***

We are required by the SEC to establish and maintain adequate internal control over financial reporting that provides reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses in those internal controls.

Any failure to maintain adequate internal controls could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis as required by the SEC and the NASDAQ Capital Market, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Ineffective 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 stock.

Risks Related to our Common Stock

Kevin Douglas and his affiliates could have significant voting power and may take actions that may not be in the best interest of our other stockholders.

As of March 13, 2015, Kevin Douglas and his affiliates (the “Douglas Family”) held convertible notes and warrants entitling them to purchase up to 7,298,575 shares of our common stock (without taking into account any beneficial ownership limitations provisions contained in the convertible notes and warrants held by the Douglas Family), which represents approximately 20.7% on an "as-if converted" basis and 17.8% of our common stock on a fully diluted basis. The conversion price for the convertible notes is \$2.3824 per share and the exercise price for the warrants is \$2.30 per share. If the Douglas Family were to convert its convertible notes and/or exercise its warrants, it would have the ability to exert substantial influence over all matters requiring approval by our stockholders, including the election and removal of directors and any proposed merger, consolidation or sale of all or substantially all of our assets and other corporate transactions. This concentration of control could be disadvantageous to other stockholders with interests different from those of the Douglas Family. In addition, this significant concentration of share ownership may adversely affect the trading price for our common stock because investors may perceive disadvantages in owning stock in companies with stockholders that have the ability to exercise significant control.

Our stockholders are subject to significant dilution upon the occurrence of certain events which could result in a decrease in our stock price.

As of March 13, 2015, we had 4,396,823 shares reserved for issuance upon the conversion of convertible notes with a conversion price of \$2.3824 per share, 451,976 shares reserved for issuance upon the exercise of outstanding options with exercise prices ranging from \$2.23 to \$178.40 per share and 8,327,405 shares reserved for issuance upon the exercise of warrants with exercise prices ranging from \$2.30 to \$154.40 per share, respectively. The issuance of shares upon conversion of the convertible notes exercise of the warrants and/or options will be dilutive to our stockholders, and any sales of such shares could have a material adverse effect on the market for our common stock and the market price of our common stock.

The market price and trading volume of our common stock may be volatile.

The market price and trading volume of our common stock has been volatile. We expect that the market price of our common stock will continue to fluctuate significantly for many reasons, including in response to the risk factors described in this report or for reasons unrelated to our specific performance. In recent years, the stock market has experienced extreme price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the market price and trading volume of our common stock. Prices for our common stock may also be influenced by the depth and liquidity of the market for our common stock, investor perceptions about us and our business, our future financial results, the absence of cash dividends on our common stock and general economic and market conditions. In the past, securities class action litigation has often been instituted against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and could divert our management and other resources.

Because we do not expect to pay dividends on our common stock in the foreseeable future, you must rely on stock appreciation for any return on your investment.

We have paid no cash dividends on our common stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends on our common stock in the foreseeable future, and payment of cash dividends on our common stock, if any, will also depend on our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our board of directors. Furthermore, pursuant to the terms of our credit facility, as amended, with our senior secured lender we are prohibited from declaring or making any dividends as long as the credit facility remains in effect. Accordingly, the success of your investment in our common stock will likely depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which you purchased your shares, and you may not realize a return on your investment in our securities.

Provisions of Delaware law and of our Amended and Restated Certificate of Incorporation and Bylaws may make a takeover or change in control more difficult.

Provisions in our Amended and Restated Certificate of Incorporation and Bylaws, and of Delaware corporate law, may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt that our management and board of directors oppose. Public stockholders that might desire to participate in one of these transactions may not have an opportunity to do so. Our Amended and Restated Certificate of Incorporation and Bylaws provide for the following:

- a staggered board of directors, which makes it difficult for stockholders to change the composition of the board of directors in any one year;

- the exclusive right of the board of directors to change the number of directors and fill vacancies on the board of directors, which could make it more difficult for a third party to obtain control of the board of directors;
- authorizing the issuance of preferred stock which can be created and issued by the board of directors without prior stockholder approval, commonly referred to as “blank check” preferred stock, with rights senior to those of our common stock, which could make it more difficult or expensive for a third party to obtain voting control of us;
- advance notice requirements for director nominations or other proposals at stockholder meetings;
- prohibiting stockholder action by written consent, which could delay a third party from pursuing an acquisition; and
- requiring the affirmative vote of holders of at least two-thirds of our outstanding voting stock to amend certain provisions in our Amended and Restated Certificate of Incorporation and Bylaws, and requiring the affirmative vote of 80% of our outstanding voting stock to amend certain other provisions of our Amended and Restated Certificate of Incorporation and Bylaws, which could make it more difficult for a third party to remove the provisions we have included to prevent or delay a change of control.

Item 1B. Unresolved Staff Comments.

Not Applicable.

Item 2. Properties.

As of March 13, 2015, our corporate operations, manufacturing, assembly, design, testing, and research and development is conducted in leased facilities with a combined square footage of approximately 156,000, which is located at our campus in

Lake Forest, California. The facility leases are scheduled to begin expiring on May 31, 2018; however, we have the option to extend the lease until at least May 31, 2020 for one of the buildings and until May 31, 2025 for the remaining two buildings.

We design and produce our lightweight high pressure gaseous storage tanks for CNG and hydrogen applications and our fuel storage modules for CNG applications in our Lake Forest advanced technology center. We also design and integrate alternative fuel storage and systems into heavy- and medium-duty truck applications and passenger vehicles and conduct research and development in the center for hybrid technologies, production of systems and technologies that enable the use of gaseous fuels in internal combustion engines and fuel cells, including CNG and hydrogen systems integration, validation and certification for concept, prototype and production vehicles. The center additionally conducts research and development of advanced fuel delivery and electronic control systems for light- and medium-duty OEM alternative fuel vehicles and for fuel cell applications, including transportation.

We believe our facilities in Lake Forest, California, are presently adequate for our current and expected product manufacturing operations and OEM development programs at least through 2015; however, we may need to expand our operations beyond our current facilities in the future. If we require additional facilities, we believe we will be able to obtain suitable space on commercially reasonable terms.

Item 3. Legal Proceedings.

Management and our legal counsel periodically review the probable outcome of pending proceedings and the costs reasonably expected to be incurred. We accrue for these costs when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

On June 6, 2013, Iroquois Master Fund Ltd (Iroquois) filed suit against us in the United States District Court for the Southern District of New York (the Complaint). In the Complaint, Iroquois asserted that the registered direct offering we completed on May 16, 2013 triggered the full-ratchet anti dilution reset provision contained in its October 2006 Warrant contract and, as a result, the exercise price of its October 2006 Warrant should have been adjusted downward to \$0.932 and the number of shares underlying its October 2006 Warrant proportionately increased. Although we did adjust the exercise price to \$1.5142 effective as of August 2, 2013 and increased the number of warrants pursuant to our interpretation of the applicable provisions of the October 2006 Warrant, Iroquois claimed that we were in breach of the warrant contract due to our refusal to honor the lower exercise price and higher number of shares claimed by Iroquois.

In connection with the Complaint, Iroquois asserted that it was entitled to either (i) monetary damages (which Iroquois estimated to be approximately \$4.1 million as of November 4, 2013) or (ii) in the alternative, either (a) specific performance in the form of delivery by us of 810,805 October 2006 Warrants exercisable at \$0.932 per share with equitable modifications to the terms of the October 2006 Warrants to compensate Iroquois for the alleged delay in issuance, plus the return of \$542,564 Iroquois claims it overpaid when it exercised its October 2006 Warrants, or (b) 852,220 shares of our common stock. Iroquois also requested interest at 9% per annum on any monetary award and recovery of its attorney’s fees and other related expenses, if successful.

A bench trial was held on May 20 and 21, 2014. On May 23, 2014, the Court concluded that a reset did occur on May 16, 2013, but rejected Iroquois’s position with respect to the appropriate reset price. The Court determined that the exercise price of the October 2006 Warrant should have been reset to \$1.4284 on May 16, 2013, and reset again to \$1.2488 on August 2, 2013, the date the holder of the May 2013 Warrant exercised the Exchange Feature contained in the May 2013 Warrant.

On June 17, 2014, the Court issued its Decision and Order, wherein the Court denied Iroquois’ request for specific performance damages but did grant Iroquois’ request for monetary damages, prejudgment interest and attorney’s fees. The total amount that we have incurred in connection with the Iroquois litigation is \$1,813,206, consisting of (i) \$1,015,440 in monetary damages, (ii) \$704,857 in legal fees and other expenses and (iii) \$92,909 in interest related expenses. We recorded these amounts in our consolidated statements of operations and comprehensive loss during 2014 which are included in the other expenses and interest expense classifications. On September 3, 2014, we paid the monetary damages and interest and on January 23, 2015 we paid the legal fees and other expenses.

On December 15, 2014, Iroquois Master Fund (“Iroquois”) filed a Notice of Appeal with the United States Court of Appeals for the Second Circuit from the judgment entered by the United States District Court for the Southern District of New York. Although we believe that we will prevail on appeal, we can provide no assurance that the Second Circuit will uphold District Court’s judgment. If the Second Circuit were to reverse the District Court’s decision, then we may have to pay Iroquois additional damages and reimburse them for their reasonable attorney fees incurred in connection with the appeal.

Item 4. Not Applicable.

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

Our common stock trades on the NASDAQ Capital Market under the symbol “QTWW”. Our Series B common stock, which was retired on December 31, 2013, was not publicly traded. The table below sets forth the high and low daily sales prices for our common stock as reported on the NASDAQ Capital Market for the periods indicated.

	High	Low
2014		
Fourth Quarter	\$ 4.45	\$ 1.75
Third Quarter	6.13	3.41
Second Quarter	10.09	2.99
First Quarter	11.25	6.85
2013		
Fourth Quarter	\$ 8.36	\$ 3.20
Third Quarter	3.39	1.85
Second Quarter	2.92	2.00
First Quarter	3.20	2.40

On March 13, 2015, the last reported sale price for our common stock as reported by the Nasdaq Capital Market was \$2.55 per share and there were approximately 204 holders of record of our common stock.

Dividend Rights and Other Stockholder Matters

We have not paid any dividends in the past, and we do not anticipate paying any dividends on our common stock in the foreseeable future because we expect to retain our future earnings for use in the operation and expansion of our business. Our payment and amount of dividends, however, will be subject to the discretion of our board of directors and will depend, among other things, upon our results of operations, financial condition, cash requirements, future prospects, and other factors that may be considered relevant by our board of directors.

We did not repurchase any securities during the quarter ended December 31, 2014.

Recent Sales of Unregistered Securities Related to Cashless Exercises Include:

Warrant Issuance Date	Exercise Price Per Share	Warrants Exercised	Shares Issued
October 27, 2006	\$1.5142	(48,466)	39,839
June 22, 2012	\$3.40	(470,732)	285,023
July 25, 2012	\$3.56	(56,692)	32,290
Totals		(575,890)	357,152

Equity Compensation Plan Information

The following table sets forth information about shares of our common stock that may be issued upon exercise or vesting of options, warrants and other rights under all of our equity compensation plans as of December 31, 2014:

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
Equity Compensation Plans Approved by Security Holders	455,850	\$8.60	202,300 (1)
Equity Compensation Plans Not Approved by Security Holders	—	—	—
Total	455,850	\$8.60	202,300

(1) Represents shares available for issuance under our 2011 Stock Incentive Plan as of December 31, 2014. The 2011 Stock Incentive Plan contains an “evergreen” provision under which the number of shares available for grant under the 2011 Stock Incentive Plan will increase annually by an amount equal to the lesser of (x) 125,000 shares, (y) 3.0% of the number of shares outstanding as of such first day of each year or (z) a lesser number of shares determined by our Board of Directors.

Item 6. Selected Financial Data.

Information required by Item 301 of Regulation S-K relating to selected financial data is not required by a smaller reporting company.

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

The following Management’s Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this Annual Report. This discussion contains forward-looking statements, which generally include the plans and objectives of management for future operations, estimates or projections of future economic performance, and our current beliefs regarding revenues, profits and losses, capital resources and liquidity. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various risks and uncertainties, including those set forth under the “Risk Factors” section and elsewhere in this Annual Report.

BUSINESS OVERVIEW

We are a leader in the innovation, development and production of compressed natural gas (CNG) fuel storage tanks and packaged fuel storage systems and the integration of vehicle system technologies including engine and vehicle control systems and drivetrains.

We produce advanced light-weight CNG fuel storage tanks and supply these tanks, in addition to fully-integrated CNG fuel storage systems, to truck and automotive fleets, OEMs, integrators and aftermarket. Our high-pressure CNG and hydrogen storage tanks using advanced composite technology are capable of storage at up to 10,000 pounds per square inch (psi). We also provide low emission and fast-to-market solutions to support the integration and production of natural gas and hydrogen fuel storage systems, hybrid technologies and refueling systems and dispensers.

Our customer base includes OEMs, aftermarket and OEM truck integrators, fleets, a material science company, and other governmental entities and agencies.

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FINANCIAL OPERATIONS OVERVIEW

We classify our business operations into three reporting segments: Fuel Storage & Systems, Renewable Energy and Corporate. The Renewable Energy business segment, consisting entirely of the operations of Schneider Power, is being held for sale and as such, is classified as discontinued operations as discussed further below.

In managing our business, our management uses several financial and non-financial factors to analyze our performance. Financial factors include forecast to actual comparisons, analysis of revenue and cost trends, manufacturing and project analyses, backlog of customer programs, and changes in levels of working capital. Non-financial factors include assessing the extent to which production and current development programs are progressing in terms of timing and deliverables and the success to which our systems are interfacing with our customers' vehicle applications. We also assess the degree to which we secure product orders, additional programs or new programs from our current or new customers and the level of government funding we receive for gaseous storage systems and propulsion systems. We also evaluate the number of units shipped as part of current and new programs and evaluate the operations of our subsidiary, Schneider Power.

Non-financial factors for the Renewable Energy business segment include electrical generation and wind analysis results, land ownership agreements, interconnections to the grid, power purchase agreements and other project metrics framing the underlying economics of a renewable energy farm.

We expense all internal research and development when incurred. We will continue to require significant research and development expenditures over the next several years in order to increase the commercialization of our products for natural gas, hybrid, hydrogen fuel cell and other alternative fuel applications.

The chief operating decision maker allocates resources and tracks performance by the reporting segments. We evaluate performance based on profit or loss from operations before interest, non-operating income and expenses, and income taxes.

EXECUTIVE OVERVIEW AND OUTLOOK

We are a leader in the innovation, development and production of compressed natural gas (CNG) fuel storage tanks and packaged fuel storage systems and the integration of vehicle system technologies, including engine and vehicle control systems and drivetrains.

We produce innovative, advanced and light-weight compressed natural gas (CNG) storage tanks, and supply these tanks, in addition to fully-integrated natural gas storage systems, to truck and automotive original equipment manufacturers (OEM) and aftermarket and OEM truck integrators. We also provide low emission and fast-to-market solutions to support the integration and production of natural gas and hydrogen fuel storage systems, hybrid technologies and refueling systems and dispensers.

We classify our business operations into three reporting segments: Fuel Storage & Systems, Renewable Energy and Corporate. The Renewable Energy business segment, consisting entirely of the operations of Schneider Power Inc. (Schneider Power), is classified as discontinued operations as discussed further below.

- **Fuel Storage & Systems.** Our Fuel Storage & Systems segment generates revenues from two sources: product sales and contract services. Product sales are derived primarily from the sale of storage tanks and packaged fuel storage modules and systems for a variety of heavy, medium and light-duty trucks and passenger vehicles. This segment produces advanced light-weight CNG storage tanks and supplies these tanks, in addition to fully-integrated natural gas storage modules and systems, to truck and automotive Original Equipment Manufacturers (OEMs), fleets, dealerships and aftermarket and OEM truck integrators. Our high-pressure CNG and hydrogen storage tanks use advanced composite technology and are capable of storage at up to 10,000 pounds per square inch (psi). Contract services revenue is generated by providing engineering design and support to OEMs and other customers specializing in natural gas retrofits and material science, governmental agencies

and other customers, so that our fuel systems and advanced propulsion systems integrate and operate with our customers CNG, hybrid or fuel cell applications. For hybrid and plug-in electric vehicle (PHEV) applications, we provide powertrain engineering, electronic control, software strategies and system integration. We also design, engineer and manufacture refueling systems and dispensers.

- **Renewable Energy.** Our Renewable Energy segment consists solely of the business operations of our wholly-owned subsidiary, Schneider Power. Schneider Power is an independent wind power producer and holder of interests in certain renewable energy projects. We committed to a plan to sell the assets and operations of Schneider Power in 2012. On May 13, 2013, we completed the sale of Schneider Power's 1.6 megawatt (MW) Providence Bay wind farm. On May 29, 2013, we announced that we had entered into definitive agreements for the sale of the 10.0 MW

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Trout Creek development project, which sale will occur in two phases. The closing for the first phase, which resulted in the sale of a majority interest in the Trout Creek wind farm project, occurred on September 18, 2013. The sale of the remaining interest in the Trout Creek wind farm project is expected to be completed near the end of 2015, subject to the project achieving commercial operation. On December 13, 2013 we completed the sale of certain assets of three of our pipeline projects - Dymond Solar, New Liskeard and Crystall Falls. Should any of these projects achieve commercial operation in the future, we will be entitled to an 'earnout' for that project. We are also actively pursuing the sale of other Schneider Power assets, including the 10.0 MW Zephyr wind farm operating asset which represents a substantial portion of the remaining assets and liabilities of Schneider Power as of December 31, 2014. As a result of these actions and our expectations for a completion of a sale of the business within the next year, we report the historical activities and balances of Schneider Power as discontinued operations held for sale.

- **Corporate.** The Corporate segment consists solely of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel Storage & Systems or Renewable Energy business segments. Corporate expenses consist primarily of personnel costs, share-based compensation costs and related general and administrative costs for executive, finance, legal, human resources, investor relations, and our board of directors.

In May 2014, we announced a shift in our strategic direction from a CNG tank product platform to a complete CNG fuel storage systems platform. During the second half of 2014, we spent a significant amount of human and financial resources on production build-out, product commercialization and customer expansion - all areas that needed to be immediately addressed in order for us to establish a solid foundation on which our systems platform strategy can thrive.

While we anticipated that the shift in our business strategy would likely have some negative short term effects on our financial results, primarily due to damaging our relationship with our largest customer due to the competitive nature of our systems platform and their subsequent entry into a joint venture with a competing tank supplier, the progress we made in implementing our systems strategy during the second half of 2014 has solidified our belief that the shift in strategy was the proper decision for our long-term sustainability and creation of stockholder value.

Examples of the progress we made in implementing this new strategy in 2014 include:

- Since May 2014, our customer base and customer diversification has grown significantly;

- During the second half of 2014, we believe that we quickly gained material market share for CNG storage systems for the heavy duty truck market;

- In the second half of 2014, we commercialized new storage system products, including our Q- Cab^{LITE} and Q-Rail^{LITE} CNG systems;

- In May, we announced that we had entered into a long-term supply agreement for complete CNG systems with Ryder Systems, Inc., a Fortune 500 commercial transportation company;
 - In September, we announced that we had entered into a strategic alliance with Mainstay Fuel Technologies for 21" back-of-cab CNG modules to support a broader array of systems for our growing customer base;
 - We also entered into marketing and supply arrangements with industry participants to provide complete CNG systems; and
 - We completed the expansion of our tank production facility and a production assembly facility for our CNG systems at our Lake Forest, CA campus.
- As indicated above, we made significant progress in introducing and commercializing storage systems, growing our customer base and gaining market share during the second half of 2014. We expect this trend to continue in 2015. Generally, our revenues were also impacted by the adoption rate for natural gas trucks during 2014 being lower than predicted. The primary factor contributing to the lower than anticipated adoption rate was the fact many fleets were buying limited units in order to test CNG systems on their trucks and the order quantities per fleet were lower than expected. The recent decrease in diesel fuel costs and the instability of the diesel to CNG fuel price spread has started to negatively impact fleet decisions on units as well as their overall commitment to natural gas vehicles in the short-term. Despite the adoption rate in 2014 being lower than predicted, we are encouraged by the fact that natural gas truck sales grew approximately 20 percent in 2014 and we expect that our product offerings, sales, marketing, and training efforts will lead to increased sales and market share in 2015.
- From a system cost perspective, and in an effort to provide our customers with the highest quality, most fuel efficient CNG systems available on the market, we incurred significant costs and expenses during the second half of 2014 related to testing, validation, production set up, supply chain management, training and servicing of our CNG modules. As a result, our cost of goods sold and gross margins were negatively affected. We expect many of these start-up related costs will be significantly lower in future periods and, in turn, result in higher gross margins.

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RESULTS OF OPERATIONS

Year Ended December 31, 2014 Compared with the Year Ended December 31, 2013

The following table provides operating results of continuing operations:

	<u>2014</u>	<u>2013</u>	<u>\$</u>	<u>Change</u>	<u>%</u>
<u>Revenues</u>					
Fuel Storage & Systems:					
Net product sales	\$ 25,785,837	\$ 22,943,639	\$ 2,842,198		12%
Contract services	8,317,157	8,960,051	(642,894)		(7)%
Total revenues	<u>\$ 34,102,994</u>	<u>\$ 31,903,690</u>	<u>\$ 2,199,304</u>		7%

<u>Cost of Revenues</u>					
Fuel Storage & Systems:					
Cost of product sales	\$	23,743,646	\$	16,261,662	\$ 7,481,984 46%
Cost of contract services		5,220,844		5,296,499	(75,655) (1)%
Total cost of revenues	\$	28,964,490	\$	21,558,161	\$ 7,406,329 34%
<u>Gross Margin</u>					
Fuel Storage & Systems:					
Net product sales	\$	2,042,191	\$	6,681,977	\$ (4,639,786) (69)%
Contract services		3,096,313		3,663,552	(567,239) (15)%
Total gross margin	\$	5,138,504	\$	10,345,529	\$ (5,207,025) (50)%
<u>Operating Expenses</u>					
Fuel Storage & Systems:					
Research and development	\$	7,616,018	\$	5,996,414	\$ 1,619,604 27%
Selling, general and administrative		3,405,513		4,244,781	(839,268) (20)%
Total		11,021,531		10,241,195	780,336 8%
Corporate:					
Selling, general and administrative		6,832,741		6,841,239	(8,498) —%
Total operating expenses	\$	17,854,272	\$	17,082,434	\$ 771,838 5%
<u>Operating Income (Loss)</u>					
Fuel Storage & Systems	\$	(5,883,027)	\$	104,334	\$ (5,987,361) *
Corporate		(6,832,741)		(6,841,239)	8,498 —%
Total operating loss	\$	(12,715,768)	\$	(6,736,905)	\$ (5,978,863) 89%

* Percentage not meaningful.

Fuel Storage & Systems Segment

Product Sales and Gross Margins

In May 2014, we shifted our strategic direction from selling stand-alone CNG tank products to a focus on selling complete CNG fuel storage modules and systems. Under this new strategy, we have experienced and are continuing to target significant revenue streams for sales of our back-of-cab and frame-rail mounted CNG fuel storage modules. Although the shift in business strategy was not void of challenges, we were able to quickly gain material market share for CNG storage systems for the heavy duty truck market in the second half of 2014 which, along with the start up of production and shipments of fuel systems for General Motors' CNG bi-fuel Chevy Impala passenger vehicle in September 2014, provided broad-based revenues that resulted in higher overall product sales in 2014 compared to 2013.

From a system cost perspective, we incurred significant costs and expenses during 2014 related to establishing our manufacturing capabilities to support our change in strategic direction. Specifically, cost of goods sold and gross margins during the current year were negatively impacted by initial start up costs and high build costs associated with setting up expanded manufacturing processes to produce new fuel storage module products. These costs included incremental expenses to set up new supply chains, establish new processes, acquire parts and materials at low volume pricing levels, and scrap out of parts that did not meet our internal quality standards or that result from enhanced designs. We expect these incremental expenses to decline in 2015 as we move past the initial stages of production and realize higher volume levels which, in turn, will favorably impact gross margins in future periods.

Contract Services and Gross Margins

Contract services revenue decreased in 2014 primarily due to slightly lower levels of engineering services related to aftermarket programs for CNG fuel storage system integration and a decrease in engineering activities associated with hydrogen programs. Included in CNG development activities in 2014 were \$3.2 million of engineering services provided to Advanced Green Innovations, LLC, and its affiliate, ZHRO Solutions LLC (collectively "AGI") under development contracts that began in the second quarter of 2013 for the design, development and validation of a complete packaged CNG fuel storage and delivery system for aftermarket use for heavy and medium-duty trucks. The anticipated completion date of the AGI system cannot be determined at this point due to customer initiated delays that caused us to suspend activities under the program in the fall of 2014; however, once completed, the system would enable diesel powered trucks to be converted to run on a dedicated CNG injection engine conversion system developed by AGI. In addition, we also recognized \$2.2 million of contract services in 2014 associated with development and certification activities for the General Motors Impala CNG bi-fuel system.

We expect engineering services and license fees related to a new PHEV software development program that we entered into with the Fisker Auto Group in November 2014 and a new hydrogen tank development program with an automotive OEM alliance that commenced in September 2014, to increase during 2015, which will offset anticipated declines in CNG fuel storage development programs resulting from the customer initiated delay of the AGI program and the transition of the General Motors' Impala development program to a production program.

Our customer funded development activities are reported as costs of contract services. Gross margins realized on contract services revenue in 2014 decreased compared to 2013 primarily due to a significant gain recognized in the fourth quarter of 2013 under the General Motors Impala program.

Total Revenues

Overall revenues for the Fuel Storage and Systems segment increased 7% in 2014 compared to 2013. Agility Fuel Systems, Ryder Systems and General Motors comprised 28%, 12%, and 11%, respectively, of the total Fuel Storage & Systems segment revenue in 2014. We anticipate that the cost of natural gas will continue to be lower than diesel by an amount that justifies natural gas vehicle adoption and that we will continue to gain market share in the heavy-duty truck market. Further, we estimate that our overall revenues will grow approximately 40% to 50% in 2015 compared to 2014 based on existing and anticipated orders from our growing customer base.

Research and Development

Internally funded research and development efforts relate primarily to our efforts to advance our CNG storage technologies by integrating and testing lighter materials, tank mounting fixtures and developing different size storage vessels to add to our existing product families. In addition, we incurred additional expenses during the second half of 2014 for design and validation of our CNG fuel module storage products.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the Fuel Storage & Systems segment decreased in 2014 as compared to the prior year. The decline was primarily due to lower charges for reserves related to uncollectible accounts receivables, facility consolidations and cost reduction initiatives that occurred in 2014.

CORPORATE

Corporate expenses reported for this segment reflect the general and administrative expenses that indirectly support Fuel Storage & Systems and Renewable Energy. General and administrative expenses of Corporate consist primarily of personnel costs, share-based compensation costs and related general and administrative costs for executives, finance, legal, human resources, investor relations and our board of directors.

The amount of Corporate expenses recognized in 2014 was similar to the levels incurred in 2013 and we anticipate that these costs will increase slightly in 2015.

Non-Reporting Segment Results

The following table provides non-reporting segment results:

	<u>2014</u>	<u>2013</u>	<u>Change</u>
Interest expense			
Contractual cash interest	\$ (824,198)	\$ (1,573,281)	\$ 749,083
Non-cash imputed interest	(1,226,962)	(3,303,841)	2,076,879
Fair value adjustments of derivative instruments, net	2,018,864	(8,421,268)	10,440,132
Other income (expenses), net	(1,736,206)	17,357	(1,753,563)
Total	<u>\$ (1,768,502)</u>	<u>\$ (13,281,033)</u>	<u>\$ 11,512,531</u>

Interest expense. Interest expense represents both cash payments based on stated contractual rates and non-cash imputed rates associated with equity-linked characteristics (e.g. warrants and debt principal conversion features), accelerated maturities and/or other contractual provisions of our debt securities. Contractual cash interest for calendar 2014 was primarily associated with borrowings under the bank line of credit and the equipment finance arrangement and non-cash imputed interest expense was primarily associated with convertible notes and warrants issued in September 2013. Contractual cash interest for calendar 2013 was primarily associated with borrowings under the bank line of credit, the equipment finance arrangement, and with bridge notes and warrants sold to investors during June and July of 2012. Non-cash interest costs for calendar 2013 included \$0.9 million associated with bridge notes and warrants sold to investors in January 2013, \$1.8 million associated with bridge notes and warrants sold to investors during June and July of 2012, and \$0.2 million associated with convertible notes and warrants sold to investors in September 2013. The January 2013 bridge notes were paid in full on July 1, 2013 and the June/July 2012 bridge notes were paid in full on September 19, 2013.

Fair value adjustments of derivative instruments. Derivative instruments consisted of embedded features contained within certain warrant contracts. Fair value adjustments of derivative instruments represent non-cash unrealized gains or losses. The share price of our common stock represents the primary underlying variable that impacts the value of the derivative instruments. The gains recognized during 2014 were primarily due to a \$2.6 million gain resulting from the expiration of the October 2006 Warrants in April 2014 and a decrease in our closing share price that decreased the fair value of the derivative instrument liabilities (\$7.80 at December 31, 2013 to \$2.09 at December 31, 2014). The losses recognized during 2013 were primarily due to the increase in our closing share price over the course of the year that increased the fair value of the derivative instrument liabilities and the triggering of an anti-dilution price reset provision contained in the October 2006 Warrants which reduced the exercise price and increased the number of shares underlying the warrants.

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Discontinued Operations

The following table provides the results of discontinued operations for Schneider Power:

	<u>2014</u>	<u>2013</u>	<u>\$</u>	<u>Change</u> <u>%</u>
<u>Schneider Power</u>				
Revenue:				
Net product sales	\$ 2,363,324	\$ 2,736,146	\$ (372,822)	(14)%
Costs and expenses:				
Cost of product sales	580,753	674,536	(93,783)	(14)%
Research and development	—	16,872	(16,872)	(100)%
Selling, general and administrative	158,970	998,959	(839,989)	(84)%
Impairment of long-lived operating assets	882,297	2,665,503	(1,783,206)	*
Loss on sale of assets	—	308,482	(308,482)	*
Total costs and expenses	1,622,020	4,664,352	(3,042,332)	(65)%
Operating income (loss)	741,304	(1,928,206)	2,669,510	(138)%
Interest expense, net	(1,255,567)	(1,410,560)	154,993	(11)%
Other income, net	76,529	227,846	(151,317)	(66)%
Loss before income taxes	(437,734)	(3,110,920)	2,673,186	(86)%
Income tax benefit	—	85,892	(85,892)	(100)%
Net loss from discontinued operations held for sale	\$ (437,734)	\$ (3,025,028)	\$ 2,587,294	(86)%

* Percentage not meaningful.

Discontinued Operations-Renewable Energy Segment Held For Sale

Our Renewable Energy segment consists solely of the business operations of Schneider Power.

We have committed to a formal plan to sell the business operations and/or assets of the renewable energy segment and have been actively seeking one or more buyers. Schneider Power, a wind farm operator and holder of interests in certain renewable energy development projects, represents the entire operations of our Renewable Energy business segment. To date, certain of the operations and assets have been sold and we are actively looking for buyers of the remaining operations and assets. As a result of our intent to sell the remaining assets of the business, the historical activities and balances of the Renewable Energy business segment are reported as discontinued operations held for sale in the accompanying consolidated financial information presented herein.

Net loss from discontinued operations, net of taxes, decreased during 2014 primarily due to lower impairment charges recognized. In 2014, we recognized \$0.9 million of impairment charges, of which \$0.4 million related to goodwill impairment and \$0.5 million related to intangible assets associated with SPI's development pipeline projects compared to \$2.7 million recognized in 2013, of which \$1.8 million related to goodwill associated with Zephyr, \$0.8 million related to assets associated with Schneider Power's development project pipeline and \$0.1 million related to property and equipment associated with the Providence Bay Wind Farm.

LIQUIDITY AND CAPITAL RESOURCES

Our historical operating results, capital resources and financial position, in combination with current projections and estimates, were considered in management's plan and intentions to fund our operations over a reasonable period of time, which we define in this report as the twelve month period ending December 31, 2015. For purposes of liquidity disclosures, we assess the likelihood that we have sufficient available working capital and other principal sources of liquidity to fund our operating activities and obligations as they become due and the likelihood that we will be able to maintain compliance with the required provisions contained within our debt instruments over the twelve month period.

As a measure of liquidity for our continuing operations, we had cash and cash equivalents of \$4.1 million, net working capital of \$5.5 million and the current ratio (ratio of current assets to current liabilities, excluding current derivative liabilities) was 1.27 at December 31, 2014. There are no contractual guarantees or obligations with respect to our continuing operations to fund potential capital needs or to service long-term debt and other liabilities of the discontinued operations of Schneider Power that are classified as held for sale.

During 2014, we completed our planned expansion of our tank production capacity and set up manufacturing and assembly operations for our fuel storage module systems. As of December 31, 2014, we had no material commitments for capital expenditures and we expect that our levels of spending for equipment and infrastructure in 2015 will decrease significantly compared to the 2014 levels.

On February 10, 2015, we amended our line of credit with Bridge Bank that, in part, increased the maximum availability under the line from \$5.0 million to \$7.5 million. As of March 13, 2015, outstanding advances under the line were \$4.5 million and advances are limited by our future levels of eligible accounts receivable and inventory.

On February 18, 2015, we completed an underwritten offering and received net proceeds of \$10.5 million.

We expect to fund our operations over the next year principally from our existing levels of working capital, which includes the net cash proceeds from the offering that we closed in February 2015, and the availability under our amended line of credit. The amount of capital that we will require over the next twelve months is dependent upon (i) our ability to meet our current operating plan, (ii) the timing of cash collections on existing receivables from AGI and its affiliates, and (iii) the success of our efforts to monetize the remaining assets of Schneider Power over the next year.

Based on our current operating plan and expectations, we believe we have sufficient available capital through at least December 31, 2015 to cover our existing operations and obligations. Our long-term future cash requirements will depend on numerous factors, including our revenue base, profit margins, product development activities, market acceptance of our products, future expansion plans and ability to control costs. If we require additional capital in the future, we believe that we can issue equity or debt securities to meet those capital needs; however, we cannot assure you that we will be able to secure additional capital on terms acceptable to us, or at all.

Cash Flow Activities

Our cash flows are reported on a consolidated basis and the activity reported includes both continuing operations and discontinued operations.

Net cash used in operating activities increased to \$16.2 million in 2014 as compared to net cash used of \$10.0 million in 2013. The net cash used is primarily due to operating losses of \$12.7 million, net of non-cash charges of \$2.2 million, and the cumulative impact of net changes in operating assets and liabilities (referred to as a "change in working capital") of \$3.4 million. The net cash used for working capital in 2014 is primarily the result of an increase in accounts receivable of \$3.0 million and an increase in inventory of \$3.9 million, partially offset by an increase in accounts payable of \$2.2 million and an increase in deferred revenue and other accrued liabilities of \$1.4 million. The increase in deferred revenue was mainly due to a \$2.0 million payment received from Fisker Auto Group in November 2014 under a software development and license agreement entered into during October 2014.

Net cash used in investing activities increased to \$6.1 million in 2014 as compared to net cash used of \$2.1 million in 2013. The increase in net cash used during 2014 is primarily due to higher capital expenditures for equipment purchases to expand our tank manufacturing and fuel module assembly capabilities. Investing activities in 2013 included combined net cash

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proceeds of \$1.1 million received in connection with Schneider Power's divestitures of the Providence Bay Wind Farm, the Trout Creek development project and three other development projects.

Net cash provided by financing activities increased to \$19.8 million in 2014 as compared to net cash provided of \$17.2 million in 2013. Net cash provided by financing activities in 2014 primarily consisted of net proceeds of \$15.3 million from the sale and issuance of common stock in connection with an underwritten public offering we completed in February 2014, \$5.1 million of proceeds received from warrant exercises, and \$0.7 million in additional net advances under our line of credit. Cash used in financing activities in 2014 primarily related to payments of \$0.9 million related to our equipment financing arrangement and \$0.6 million under the credit facility of our discontinued operations. Cash provided by financing activities in 2013 consisted principally of net proceeds of: (i) \$10.4 million from the sale of convertible notes in September 2013, (ii) \$6.0 million from warrant exercises, (iii) \$4.1 million from the sale of common stock under at-the-market offerings we conducted, (iv) \$2.7 million from the sale of common stock in connection with a registered direct offering in May 2013, (v) \$1.5 million from borrowings under a capital equipment financing arrangement, (vi) \$1.4 million from bridge notes issued in January 2013, and (vii) \$0.8 million from advances under a line of credit with a financial institution. Cash used in financing activities in 2013 primarily related to repayments of \$7.1 million of bridge notes issued in June/July 2012, \$1.6 million of bridge notes issued in January 2013 and \$0.8 million related to our equipment financing arrangement.

Capital Resources

From our inception, we have funded our operations and strategic investments primarily with proceeds from public and private offerings of our common stock and debt securities, and borrowings with financial institutions. Since January 1, 2013, we have completed the following capital transactions:

- During 2013, we received net proceeds of \$4,228,981 from two separate at-the-market offerings that were terminated in May 2013 and September 2013, respectively.
- In January 2013, we received gross proceeds of \$1,500,000 in connection with the issuance of \$1,800,000 of unsecured 0% nonconvertible promissory notes and warrants to accredited investors in a private placement transaction. The net amount received by us, after deducting placement agent fees and transaction expenses, was \$1,362,500.
- In May 2013, we completed a registered direct offering that yielded gross proceeds of \$3,000,000 from the sale of 1,229,508 shares of our common stock at a price of \$2.44 per share. The investor also received a warrant (the May 2013 Warrant) in connection with the transaction. We allocated \$1,604,000 of the proceeds from the transaction to the warrant that we classified as a derivative instrument as of the transaction date. The net amount received by us, after deducting placement agent fees and transaction expenses, was \$2,695,005. In August 2013, the investor exercised its warrant under a cashless exchange provision pursuant to which we issued 751,780 registered shares of common stock to the investor in cancellation of the warrant.
- In September 2013, we completed a private placement transaction in which we received gross proceeds of \$11,000,000 from the sale of convertible notes and warrants. The net amount received by us, after deducting placement agent fees and transaction expenses, was \$10,420,898. We used \$7,286,740 of the proceeds to repay in full the outstanding principal and accrued interest due under certain bridge notes issued in June and July 2012.
- During 2013 and 2014, we received cash proceeds of \$5,965,763 and \$5,122,285, respectively, from the exercise of outstanding warrants.
- In February 2014, we completed an underwritten public offering and received proceeds, net of underwriter discounts and other offering costs, of approximately \$15,300,000 from the sale and issuance of 2,357,500 shares of our common stock.
- In February 2015, we completed an underwritten offering and received proceeds, net of underwriter discounts and other estimated offering costs, of approximately \$10,500,000 from the sale and issuance of 4,600,000 shares of our common stock.

Debt

At December 31, 2014, we had approximately \$16.9 million of principal and interest owing under our debt obligations related to our continuing operations and \$19.6 million in debt financing associated with the discontinued operations of Schneider Power's 10.0 MW Zephyr wind farm that is classified as held for sale.

In May 2012, we executed a revolving asset based line of credit with a senior secured lender that provides us with the ability to draw up to \$7.5 million in working capital advances (as last amended in February 2015). The amount of advances that we can draw under the amended line of credit is dependent upon our levels of eligible accounts receivables and inventories and the line is set to expire on March 14, 2016. The amount is secured by substantially all of the assets used in our continuing operations. As of December 31, 2014, \$4.5 million of principal and accrued interest was outstanding under the line.

In November 2012, we entered into an equipment sale and leaseback financing arrangement that provided for a total of \$3,250,000 to finance the acquisition of certain equipment that we have employed in our continuing operations. The obligation is owed to a finance company and is secured by the specific equipment assets acquired under the arrangement. As of December 31, 2014, \$1.6 million of principal and accrued interest was outstanding under the arrangement.

In September 2013, we completed a private placement transaction in which we received gross proceeds of \$11,000,000 from the sale of convertible notes and warrants. The convertible note holders have a second lien position on substantially all of the assets used in our continuing operations. As of December 31, 2014, \$10.7 million of principal and accrued interest was outstanding under the notes.

Our outstanding debt obligations are more fully described in Note 8 of the Notes to the Consolidated Financial Statements of this Annual Report.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with US generally accepted accounting principles (US GAAP) and are included elsewhere in this Annual Report. We believe that the application of certain critical accounting policies, which are important to our financial position and results of operations, require significant judgments and estimates on the part of management. We evaluate our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Management considers an accounting estimate to be critical if:

- it requires assumptions to be made that were uncertain at the time the estimate was made; and
- changes in the estimate or different estimates that could have been selected could have a material impact on our results of operations or financial condition.

Our management has discussed the development and selection of these critical accounting policies and estimates with the audit committee of our board of directors, and the audit committee has reviewed the disclosure presented below relating to them. We believe the critical accounting policies described below affect the more significant judgments and estimates used in the preparation of our consolidated financial statements:

Revenue recognition for product sales. We generally manufacture products based on specific orders from customers. Revenue is recognized on product sales upon shipment or when the earnings process is complete and collectability is reasonably assured, which for product sales is generally upon shipment from our warehouse or shipment from warehouses of certain component suppliers that we have contractual relationships with. We include the costs of shipping and handling, when incurred, in cost of goods sold. In certain circumstances, customers pay one price for multiple products and services. For arrangements with multiple deliverables, revenue is recognized upon the delivery of the separate units based on their relative selling prices. Consideration from multiple element arrangements is allocated among the separate elements based on their relative fair values in accordance with Accounting Standards Update (ASU) No. 2009-13, “*Revenue Recognition (Topic 605)-Multiple-Deliverable Revenue Arrangements.*”

Revenue recognition for contract services. We generally recognize revenue and profit as work progresses on long-term, fixed price contracts for product application development using the percentage-of-completion method. Generally, we estimate percentage complete by determining cost incurred to date as a percentage of total estimated cost at completion. For certain other contracts, percentage complete is determined by measuring progress towards

contract deliverables if it is determined that this methodology more closely tracks the realization of the earnings process. For contracts measured under the estimated cost approach, we believe we can generally make dependable estimates of the revenue and costs applicable to various stages of a contract. Recognized revenue and profit are subject to revisions as the contract progresses to completion. Our estimates of contract costs are based on expectations of engineering development time and materials and other support costs. These estimates can change based on unforeseen technology and integration issues, but known risk factors and contract challenges are generally allowed for in the initial scope and cost estimate of the program. Our historical final contract costs have usually approximated the initial estimates and any unforeseen changes in the estimates have not normally resulted in a material impact to financial results. Revisions in profit estimates are charged to income in the period in which the facts that give rise to the revision become known. For energy sales, we recognize revenues based on the terms of a power purchase agreement which outlines long-term pricing and escalation for the power produced by the renewable energy farm.

Allowance for doubtful accounts. We conduct a major portion of our business with a limited number of customers. Credit is extended based upon an evaluation of each customer's financial condition, with terms consistent with those present throughout the industry. Typically, we do not require collateral from customers. We have recorded an allowance for uncollectible accounts receivable based on past experience and certain circumstances surrounding the composition of total accounts receivable. To the extent we increase this allowance, we must include an expense in the statement of operations. If commercial conditions differ from management's estimates, an additional write-off may be required.

Warranties. We provide for the estimated cost of product warranties at the time revenue is recognized based on past experience and expectations of future costs to be incurred. Our Fuel Storage & Systems segment provides product warranty on storage and fuel systems that are standard for the industry. For prototype components and systems that are not production intent, warranties are generally not provided. While we engage in product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required.

Inventory. We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. As part of our estimate, we rely upon future planned design configurations and projected alternative usage of certain components estimated by our engineering teams. We also consider estimated demand for service and warranty parts based on historical information. If actual usage rates or market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Long-lived asset impairment. We periodically evaluate our long-lived assets for impairment, including intangible assets and goodwill relating to acquisitions. Goodwill is not amortized, but is evaluated periodically for any impairment in the carrying value. We review our long-lived assets, which include property and equipment, construction in process, intangible assets and goodwill, for impairment on an annual basis or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important which could trigger an impairment review include, but are not limited to, the following: significant underperformance relative to expected historical or projected future operating results; significant changes in the manner of our use of the acquired assets or the strategy for our overall business; significant negative industry or economic trends; and a significant decline in our stock price for a sustained period. Goodwill and long-lived asset impairment assessments are generally determined based on fair value techniques, including determining the estimated future discounted and undiscounted cash flows over the remaining useful life of the asset. Those models require estimates of future revenue, profits, capital expenditures and working capital for each reporting unit. We estimate these amounts by evaluating historical trends, the current state of the automotive and renewable energy industries and the economy, current budgets, and operating plans. Discounted cash flows are calculated using a discount rate determined by management to be commensurate with the risk inherent in the current business model. Determining the fair value of reporting units and goodwill includes significant judgment by management and different judgments could yield different results. Any resulting impairment loss could have a material impact on our financial condition and results of operations.

Derivatives. We account for provisions contained within certain debt obligations and warrant contracts as derivative instrument liabilities in accordance with ASC Topic No. 815 "Derivatives and Hedging" (ASC 815). The share price of our common stock represents the underlying variable that gives rise to the value of the derivative instruments. Additional factors include the volatility of our stock price, our credit rating, discount rates, and stated interest rates. In accordance with ASC 815, the derivative instrument liabilities are recorded at fair value and marked to market each period. Changes in fair value of the derivatives each period resulting from a movement in

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the share price of our common stock or the passage of time are recognized as fair value adjustments of derivative instruments in our consolidated statements of operations and comprehensive loss.

Debt modifications. We evaluate whether modifications to and restructuring of existing debt instruments result in substantial changes as defined by ASC Topic No. 470, “Debt” (ASC 470). Significant management judgment is required and we use the assistance of independent valuation consultants to estimate the fair value of the original and amended debt instruments as part of our evaluation. Different judgments could yield different results. If we determine that a substantial change has occurred with respect to the modifications, we treat the transaction as an extinguishment of the original debt and recognize a gain or loss on the debt retirement. If we determine that our lender has for economic or legal reasons related to our financial condition, granted us a concession that our lender would not otherwise consider, we treat the modifications as a troubled debt restructuring and analyze whether a gain should be recorded in connection with the concession.

Stock compensation. We account for stock compensation expense under ASC Topic No. 718 “Compensation-Stock Compensation” (ASC 718). ASC 718 requires all share-based payments, including grants of stock options and restricted stock, to be recognized in our financial statements based on their respective grant date fair values. The fair value of each employee stock option is estimated on the date of grant using an option-pricing model that meets certain requirements. We currently use the Black-Scholes option-pricing model to estimate the fair value of our stock options. The Black-Scholes model meets the requirements of ASC 718 but the fair values generated by the model may not be indicative of the actual fair values of our stock options as it does not consider certain factors important to share-based awards, such as continued employment, periodic vesting requirements and limited transferability. The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. We estimate the expected volatility and estimated life of our stock options at grant date based on historical data trended into the future. The risk-free interest rate assumption is the Constant Maturity Treasury rate on government securities with a remaining term equal to the expected term of the option. The dividend yield assumption is based on our history and expectation of dividend payouts. The grant date fair value of our restricted stock is based on the fair market value of our common stock on the date of grant. Share-based compensation expense recognized in our financial statements is based on awards that are ultimately expected to vest. The amount of share-based compensation expense is reduced for estimated forfeitures based on historical experience. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We evaluate the assumptions used to value stock-based awards on a quarterly basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned share-based compensation expense. To the extent that we grant additional equity securities to employees or we assume unvested securities in connection with any acquisitions, our share-based compensation expense will be increased by the additional unearned compensation resulting from those additional grants or acquisitions.

Income taxes. As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves the estimation of our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. Included in this assessment is the determination of the net operating loss carry-forward that has resulted from our cumulative net operating loss. These temporary differences result in an overall net deferred tax asset or liability position. We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent that we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance or change this allowance in a period, we generally include an expense or benefit within the tax provision in the consolidated statement of operations. Significant management judgment is required in determining our provision for income taxes, our deferred tax liabilities and our deferred tax assets, including any valuation allowance recorded against our deferred tax assets. We have recorded a partial valuation allowance on our deferred tax assets due to uncertainties related to our ability to fully utilize these assets, primarily consisting of net operating losses and credits that may be carried forward before they expire, and that are subject to certain limitations. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust the recorded valuation allowance, which could materially impact our financial position and results of operations.

Warrant classification. We evaluate the warrants we issue in accordance with applicable accounting guidance and we have concluded that liability classification is appropriate for the warrants issued on October 27, 2006, June 22, 2007, August 25, 2008, August 3, 2009, September 4, 2009, February 18, 2011 (Series “B”), January 24, 2013 and May 16, 2013. Although we mark to market all the warrants classified as liabilities each period, all of these

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warrants had either expired, been fully exercised, or the fair values of the remaining warrants were nominal as of the most recent reported balance sheet date. We have further concluded that equity classification is appropriate for all other warrants that were outstanding during the periods presented due to the fact that these warrants are considered to be indexed to our own stock, are required to be physically settled in shares of our common stock and there are no provisions that could require net-cash settlement. The proceeds we received from the transactions that gave rise to the issuance of the warrants have been allocated to the common stock or debt issued, as applicable, and the warrants based on their relative fair values. For those transactions in which proceeds were received in connection with the sale of common stock, we aggregate the values of those warrants that we do not classify as liabilities with the fair value of the stock issued as both of these types of instruments have been classified as permanent equity. The classification as equity for certain of the warrants could change as a result of either future modifications to the existing terms of settlement or the issuance of new financial instruments by us that could be converted into an increased or unlimited number of shares. If a change in classification of certain warrants is required in the future, the warrants would be treated as derivatives, reclassified as liabilities on the balance sheet at their fair value, and marked to market each period, with the changes in fair values being recognized in the respective period's statement of operations.

NEW ACCOUNTING STANDARD

See Note 2 of the Notes to the Consolidated Financial Statements of this Annual Report for information regarding recent accounting pronouncements adopted and or issued.

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

Information required by Item 305 of Regulation S-K relating to quantitative and qualitative disclosures about market risks is not required by a smaller reporting company.

Item 8. Financial Statements and Supplementary Data.

The information required by this item is contained in the consolidated financial statements listed in Item 15(a) of this Annual Report under the caption "Financial Statements" and appear beginning on page F-1 of this Annual Report.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We have established disclosure controls and procedures to ensure that material information relating to our company, including our consolidated subsidiaries, is made known to the officers who certify our financial reports and to other members of senior management and the Board of Directors.

Based on their evaluation as of December 31, 2014, the Chief Executive Officer and Chief Financial Officer of our company have concluded that our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) were effective to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f).

Our internal control over financial reporting includes policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of our assets;

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- Provide reasonable assurance that our transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles;
- Provide reasonable assurances that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements prepared for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2014, based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The scope of our assessment of and conclusion on the effectiveness of our internal controls over financial reporting included the internal controls of Schneider Power.

Based on our evaluation under the framework in *Internal Control—Integrated Framework (2013)*, management concluded that our internal control over financial reporting was effective as of December 31, 2014.

Our independent registered accounting firm, Haskell & White LLP, has issued an audit report on the effectiveness of our internal control over financial reporting as of December 31, 2014, as stated in their report that is included in Part II, Item 8 herein.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during our fiscal quarter ended December 31, 2014 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART III

Items 10, 11, 12, 13 and 14

We hereby incorporate by reference information required by Part III (Items 10, 11, 12, 13 and 14) of this Annual Report from our definitive Proxy Statement for our 2015 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission, pursuant to Regulation 14A, not later than April 30, 2015.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this report:

(1) Financial Statements. See Consolidated Financial Statements beginning on page F-1.

Financial Statement Schedules. See Schedule II, Valuation and Qualifying Accounts that follow the Consolidated Financial Statements.

All other schedules are omitted because the information is not applicable or is not material, or because the information is included in the consolidated financial statements or the notes thereto.

(3) Exhibits. The following exhibits are filed or incorporated by reference as a part of this report:

3.1	Restated Certificate of Incorporation of the Registrant, dated July 2, 2014 (incorporated herein by reference to Exhibit 3.1 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 8, 2014).
3.2	Amended and Restated Bylaws of the Registrant (incorporated herein by reference to Exhibit 3.2 of the Registrant's Transition Report on Form 10-K/T filed with the SEC on March 28, 2012).
4.1	Specimen Common Stock Certificate (incorporated herein by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form 10 (File No. 000-49629), which was filed with the SEC on February 13, 2002).
4.2	Form of Convertible Note (incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on September 18, 2013).
4.3	Form of Warrant (incorporated herein by the reference to Exhibit 4.2 of the Registrant's Current Report on Form 8-K filed on September 18, 2013).
4.4	Form of Warrant issued by the Registrant to certain accredited investors on July 25, 2012 and June 28, 2012 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on July 26, 2012).
4.5	Form of Warrant issued by the Registrant to certain accredited investors on July 25, 2012 and June 28, 2012 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on July 26, 2012).
4.6	Form of Warrant issued by the Registrant to certain accredited investors on June 22, 2012 and June 28, 2012 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2012).
4.7	Warrant, dated May 7, 2012, issued by the Registrant to Advanced Equities, Inc. (incorporated herein by reference to Exhibit 4.4 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 10, 2012).
4.8	Form of Warrant Agreement between the Registrant and Broadridge Corporate Issuer Solutions, Inc., and accompanying form of Series B Warrant and form of Series C Warrant (incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed with the SEC on March 16, 2012).

4.9	Form of Warrant Agreement, dated December 21, 2011, between the Company and Broadridge Corporate Issuer Solutions, Inc. (incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2011).
4.10	Form of Warrant issued by the Registrant to certain accredited investors on November 15, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on November 18, 2011).
4.11	Form of Warrant issued by the Registrant to certain accredited investors during the period October 17, 2011 through October 21, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on October 21, 2011).

4.12	Form of Warrant issued by the Registrant to certain accredited investors on September 29, 2011 and October 12, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on October 5, 2011).
4.13	Form of Warrant issued by the Registrant to certain accredited investors on August 23, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on August 24, 2011).
4.14	Form of Warrant issued by the Registrant to certain accredited investors on July 6, 2011 (incorporated herein by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-3 filed with the SEC on August 12, 2011).
4.15	Form of Concession Warrant issued by the Registrant to its placement agent on July 6, 2011 (incorporated herein by reference to Exhibit 4.3 of the Registrant's Registration Statement on Form S-3 filed with the SEC on August 12, 2011).
4.16	Form of Warrant issued by the Registrant to certain accredited investors on June 15, 2011 and June 21, 2011 (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on June 15, 2011).
4.17	Form of Retainer Warrant issued by the Registrant to its placement agent on June 15, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on June 15, 2011).
4.18	Form of Concession Warrant issued by the Registrant to its placement agent on June 15, 2011 and June 21, 2011 (incorporated herein by reference to Exhibit 10.4 of the Registrant's Current Report on Form 8-K filed with the SEC on June 15, 2011).
4.19	Form of "A" Warrant issued by the Registrant to certain accredited investors on February 18, 2011 (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on February 17, 2011).
4.20	Form of "B" Warrant issued by the Registrant to certain accredited investors on February 18, 2011 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on February 17, 2011).
4.21	Form of Warrant issued by the Registrant to certain accredited investors in connection with a private placement transaction that was completed in October 2010 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on October 19, 2010).
4.22	Form of Concession Warrant, dated July 22, 2010, issued by the Registrant to its placement agent in connection with a private placement transaction that was completed in July 2010 (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on July 26, 2010).
4.23	Form of Warrant issued by the Registrant to certain accredited investors in connection with a private placement transaction that was completed in July 2010 (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on May 6, 2010).
4.24	Form of Retainer Warrant issued by the Registrant to its placement agent in connection with a private placement transaction that was completed in July 2010 (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on May 6, 2010).

4.25	Warrant, dated August 19, 2008, issued by Registrant to Capital Ventures International in a registered offering (incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K/A filed with the SEC on August 21, 2008).
10.1	Quantum Fuel Systems Technologies Worldwide, Inc. Amended 2002 Stock Incentive Plan and Form of Award Agreement (incorporated herein by reference to Exhibit 10.7 of Registrant's Quarterly Report on Form 10-Q filed with the SEC on September 9, 2005).
10.2	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers (incorporated herein by reference to Exhibit 10.21 of the Registrant's Registration Statement on Form S-1 (File No. 333-101668) filed with the SEC on December 5, 2002).
10.3	Lease Agreement, with an effective date of November 1, 2008, between the Registrant and Cartwright Real Estate Holdings, LLC (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on November 17, 2008).
10.4†	Agreement in Support of Development, dated February 14, 2011, between the Registrant and General Motors Holdings LLC (incorporated herein by reference to Exhibit 10.63 of Registrant's Registration of Securities on Form S-1 filed with the SEC on March 4, 2011).
10.5	Access and Security Agreement, dated February 14, 2011, between the Registrant and General Motors Holdings LLC (incorporated herein by reference to Exhibit 10.64 of Registrant's Registration of Securities on Form S-1 filed with the SEC on March 4, 2011).

10.6	Quantum Fuel Systems Technologies Worldwide, Inc. 2011 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed with the SEC on October 31, 2011).
10.7	Loan and Security Agreement, dated May 7, 2012, between the Registrant and Bridge Bank, National Association (incorporated herein by reference to Exhibit 10.3 of Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 10, 2012).
10.8	Limited Recourse Guaranty and Pledge Agreement, dated April 19, 2012, by and among Schneider Power Inc., Zephyr Farms Limited and Samsung Heavy Industries Co. Ltd. (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed with the SEC on April 25, 2012).
10.9	Credit Agreement between Zephyr Farms Limited and Samsung Heavy Industries Co. Ltd. (incorporated herein by reference to Exhibit 10.6 of Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 9, 2012).
10.10	Letter Agreement, effective April 20, 2012, between the Registrant, Schneider Power Inc. and Samsung Heavy Industries Co. Ltd. (incorporated herein by reference to Exhibit 10.7 of Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 9, 2012).
10.11	Form of Stock Option Award Agreement for stock options issued under the Registrant's 2011 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on June 8, 2012).
10.12	Form of Restricted Stock Award Agreement for restricted stock awards granted under the Registrant's 2011 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on June 8, 2012).
10.13	Sale and Purchase Agreement, dated November 6, 2012, between the Registrant and Amur Finance I, LLC (incorporated herein by reference to Exhibit 10.7 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2012).
10.14	Lease Agreement, dated November 6, 2012, between the Registrant and Amur Finance I, LLC (incorporated herein by reference to Exhibit 10.8 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2012).
10.15	Master Amending Agreement, dated March 19, 2013, between Schneider Power Inc., its wholly-owned subsidiary, Zephyr Farms Limited, and Samsung Heavy Industries Co. Ltd. (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on March 25, 2013).

10.16	Amended and Restated Credit Agreement, dated March 19, 2013, between Zephyr Farms Limited and Samsung Heavy Industries Co. (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on March 25, 2013).
10.17	Debenture Delivery Agreement, dated March 19, 2013, between Zephyr Farms Limited and Samsung Heavy Industries Co. (incorporated herein by reference to the Exhibit 10.3 of the Registrant's Current Report on Form 8-K filed with the SEC on March 25, 2013).
10.18	Agreement of Purchase and Sale dated March 20, 2013, between Schneider Power Inc., 1604718 Ontario Ltd. and Leader Resources Services Corp. (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on March 26, 2013).
10.19	Asset Purchase Agreement, dated March 20, 2013, between the Registrant, Schneider Power Providence Bay Inc. and Leader Resources Services Corp. (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on March 26, 2013).
10.20	Form of Securities Purchase Agreement, dated May 16, 2013, between the Registrant and an accredited investor (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on May 16, 2013).
10.21	Loan and Security Modification Agreement, dated May 20, 2013, between the Registrant and Bridge Bank, National Association (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on May 24, 2013).
10.22	Purchase Agreement, dated May 24, 2013, between Trout Creek Wind Power Inc., Quantum Fuel Systems Technologies Worldwide, Inc., Schneider Power Inc., Schneider Power Generation Inc., and Sierra Nevada Power (Ontario) LTD. (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed with the SEC on May 31, 2013).
10.23	Agreement and First Amendment to Standard Industrial/Commercial Single - Tenant Lease Agreement, dated May 30, 2013 (incorporated herein by reference to Exhibit 10. 1 of Registrant's Current Report on Form 8-K filed with the SEC on June 5, 2013).
10.24	Employment Agreement, dated June 24, 2013, between the Registrant and Brian Olson (incorporated herein by reference to Exhibit 10.1of Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2013).

10.25	Employment Agreement, dated June 24, 2013, between the Registrant and Bradley J. Timon (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2013).
10.26	Employment Agreement, dated June 24, 2013, between the Registrant and Kenneth R. Lombardo (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed with the SEC on June 28, 2013).
10.27	Quantum Fuel Systems Technologies Worldwide, Inc. Executive Cash Bonus Plan (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K Filed with the SEC on July 19, 2013).
10.28	At The Market Offering Agreement, dated August 19, 2013, between Registrant and Ascendiant Capital Markets, LLC (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed with the SEC on August 19, 2013).
10.29	Form of Convertible Note and Warrant Purchase Agreement dated September 15, 2013 (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on September 18, 2013).
10.30	Form of Subordinated Security Agreement, dated September of 2013, between the Registrant and Kevin Douglas, as collateral agent (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form File 8-K filed with the SEC on September 18, 2013).

10.31	Employment Agreement, dated September 2, 2013, between the Registrant and Mark Arold (incorporated herein by reference to Exhibit 10.60 of the Registrant's Annual Report on Form 10-K filed with the SEC on March 14, 2014).
10.32	Third Amendment to Agreement in Support of Development Program and Access and Security Agreement, dated December 20, 2013, between the Registrant and General Motors Holdings, LLC (incorporated herein by reference to Exhibit 10.61 of the Registrant's Annual Report on Form 10-K filed with the SEC on March 14, 2014).
10.33*	Schedule of Non-Employee Director Compensation for 2015
10.34	Second Amendment to Loan and Security Agreement (incorporated herein by reference to Exhibit 10.63 of the Registrant's Annual Report on Form 10-K filed with the SEC on March 14, 2014).
10.35	Amended and Restated Lease Agreement between the Registrant and Braden Courts Associated (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on September 12, 2014).
10.36	Debt Repayment Agreement, dated December 10, 2014, by and among the Registrant, Advanced Green Innovations, LLC, ZHRO Solutions, LLC and Advanced Green Technologies, LLC (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2014.)
10.37	Pledge Agreement, dated December 10, 2014, by and among the Registrant, Advanced Green Innovations, LLC and Advanced Green Technologies, LLC (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2014.)
10.38	First Amendment to Master Amendment Agreement, dated January 26, 2015, by and among Schneider Power Inc., Zephyr Farms Limited and Samsung Heavy Industries Co. Ltd. (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on January 30, 2015).
10.39	Third Loan and Security Modification Agreement, dated February 10, 2015, between the Registrant and Bridge Bank, National Association (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed with the SEC on February 10, 2015.)
21.1*	Subsidiaries of the Registrant
23.1*	Consent of Haskell & White LLP
24.1	Power of Attorney (included in signature page of this registration statement)
31.1*	Certification of the Chief Executive Officer of the Registrant pursuant to Exchange Act Rule 13a-14(a).
31.2*	Certification of the Chief Financial Officer of the Registrant pursuant to Exchange Act Rule 13a-14(a).
32.1*	Certification of the Chief Executive Officer of the Registrant furnished pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. 1350.
32.2*	Certification of the Chief Financial Officer of the Registrant furnished pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. 1350.

101*	The following Quantum Fuel Systems Technologies Worldwide, Inc. financial information for the year ended December 31, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Equity, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements, tagged as blocks of text. The information in Exhibit 101 is "furnished" and not "filed," as provided in Rule 402 of Regulation S-T.
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* - Filed herewith

† - Certain portions of this Exhibit have been omitted and separately filed with the Securities and Exchange Commission pursuant to a request for confidential treatment.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Quantum Fuel Systems Technologies Worldwide, Inc.

We have audited the accompanying consolidated balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. (the “Company”) as of December 31, 2014 and 2013, and the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity, and cash flows for each of the years ended December 31, 2014 and 2013. In connection with our audits of the consolidated financial statements, we have also audited the financial statement schedule for the years ended December 31, 2014 and 2013. We have also audited the Company’s internal control over financial reporting as of

December 31, 2014, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2014 and 2013, and the consolidated results of its operations and its cash flows for each of the years ended December 31, 2014 and 2013, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the financial statement schedule for each of the years ended December 31, 2014 and 2013, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ HASKELL & WHITE LLP

Irvine, California
March 16, 2015

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2014	2013
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 4,103,841	\$ 6,254,359
Accounts receivable, net	11,626,467	8,418,559
Inventories, net	8,872,704	5,011,780
Prepaid and other current assets	1,261,953	1,629,668
Assets of discontinued operations held for sale	1,049,603	1,324,945
Total current assets	26,914,568	22,639,311
Property and equipment, net	9,762,341	5,091,959
Goodwill	12,400,000	12,400,000
Deposits and other assets	487,209	839,475
Assets of discontinued operations held for sale	22,112,396	25,033,797
Total assets	\$ 71,676,514	\$ 66,004,542
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 9,313,192	\$ 7,179,463
Accrued payroll obligations	1,263,257	1,154,346
Deferred revenue	2,990,908	2,223,903
Accrued warranties	611,999	399,171
Derivative instruments	7,000	2,415,000
Other accrued liabilities	1,010,340	496,726
Debt obligations, current portion	5,177,207	3,946,582
Liabilities of discontinued operations held for sale	1,550,164	1,894,476
Total current liabilities	21,924,067	19,709,667

Debt obligations, net of current portion	7,053,195	7,794,289
Liabilities of discontinued operations held for sale	19,094,320	21,520,634
Commitments and contingencies (Note 16)		
Stockholders' equity:		
Preferred stock, \$.001 par value; 20,000,000 shares authorized; none issued	—	—
Common stock, \$.02 par value; 50,000,000 shares authorized, 23,310,721 shares issued, of which 23,276,264 are outstanding and 34,457 are held in treasury at December 31, 2014; 37,475,000 shares authorized, 18,885,878 shares issued, of which 18,875,253 are outstanding and 10,625 are held in treasury at December 31, 2013	465,525	377,505
Additional paid-in-capital	514,065,280	492,360,165
Accumulated deficit	(490,426,307)	(475,502,703)
Accumulated other comprehensive loss in discontinued operations	(499,566)	(255,015)
Total stockholders' equity	23,604,932	16,979,952
Total liabilities and stockholders' equity	<u>\$ 71,676,514</u>	<u>\$ 66,004,542</u>

See accompanying notes.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

	Years Ended December 31,	
	2014	2013
Revenues	\$ 34,102,994	\$ 31,903,690
Cost of revenues	28,964,490	21,558,161
Gross margin	5,138,504	10,345,529
Operating expenses:		
Research and development	7,616,018	5,996,414
Selling, general and administrative	10,238,254	11,086,020
Total operating expenses	17,854,272	17,082,434
Operating loss	(12,715,768)	(6,736,905)
Interest expense, net	(2,051,160)	(4,877,122)

Fair value adjustments of derivative instruments, net	2,018,864	(8,421,268)
Other income (expense), net	(1,736,206)	17,357
Loss from continuing operations before income taxes	(14,484,270)	(20,017,938)
Income tax expense	(1,600)	(1,600)
Loss from continuing operations	(14,485,870)	(20,019,538)
Loss from discontinued operations, net of taxes	(437,734)	(3,025,028)
Net loss	<u><u>\$ (14,923,604)</u></u>	<u><u>\$ (23,044,566)</u></u>
Per share data - Basic and diluted:		
Loss from continuing operations	\$ (0.65)	\$ (1.37)
Loss from discontinued operations	(0.02)	(0.20)
Net loss	<u><u>\$ (0.67)</u></u>	<u><u>\$ (1.57)</u></u>
Weighted average shares outstanding:		
Basic and diluted	22,407,818	14,642,320
Comprehensive loss:		
Net loss	\$ (14,923,604)	\$ (23,044,566)
Foreign currency translation adjustments, net of tax	(244,551)	(340,996)
Reclassification of accumulated foreign currency translation in connection with asset disposals, net of tax	—	8,127
Other comprehensive loss	(244,551)	(332,869)
Comprehensive loss	<u><u>\$ (15,168,155)</u></u>	<u><u>\$ (23,377,435)</u></u>

See accompanying notes.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
 CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

Series B	Common Stock	Additional	Accumulated	Accumulated	Total
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	Common Stock				Paid-In-	Other Comprehensive		
	Shares	Amount	Shares	Amount	Capital	Deficit	Income (loss)	Equity
Balance at January 1, 2013	12,499	\$ 250	11,940,183	\$ 238,804	\$466,363,910	\$ (452,458,137)	\$ 77,854	\$ 14,222,681
Share-based compensation on stock option and restricted stock awards	—	—	126,250	2,525	437,368	—	—	439,893
Issuance of common stock and warrants to investors	—	—	3,185,846	63,717	5,198,594	—	—	5,262,311
Exchange of shares in connection with conversion provision	(12,499)	(250)	12,499	250	—	—	—	—
Issuance of common stock in connection with option and warrant exercises	—	—	2,858,695	57,174	13,030,721	—	—	13,087,895
Issuance of warrants in connection with debt issuances	—	—	—	—	2,946,876	—	—	2,946,876
Reclassification from debt to equity upon exercise and settlement of derivative warrant exchange	—	—	751,780	15,035	1,781,042	—	—	1,796,077
Recognition of beneficial conversion feature in connection with debt issuances	—	—	—	—	2,601,654	—	—	2,601,654
Foreign currency translation adjustments	—	—	—	—	—	—	(340,996)	(340,996)
Reclassification of accumulated foreign currency translation in connection with asset impairments	—	—	—	—	—	—	8,127	8,127
Net loss	—	—	—	—	—	(23,044,566)	—	(23,044,566)
Balance at December 31, 2013	—	—	18,875,253	377,505	492,360,165	(475,502,703)	(255,015)	16,979,952
Share-based compensation on stock options and restricted stock awards	—	—	221,768	4,434	498,541	—	—	502,975
Issuance of common stock to investors	—	—	2,357,500	47,150	15,212,470	—	—	15,259,620
Reclassification of debt to equity upon exercise and settlement of derivative warrants	—	—	39,839	797	388,340	—	—	389,137
Issuance of common stock in connection with option and warrant exercises	—	—	1,561,540	31,232	5,085,171	—	—	5,116,403
Issuance of common stock in satisfaction of debt principal	—	—	220,364	4,407	520,593	—	—	525,000
Foreign currency translation	—	—	—	—	—	—	(244,551)	(244,551)
Net loss	—	—	—	—	—	(14,923,604)	—	(14,923,604)
Balance at December 31, 2014	—	\$ —	23,276,264	\$ 465,525	\$514,065,280	\$ (490,426,307)	\$ (499,566)	\$ 23,604,932

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,	
	2014	2013
Cash flows from operating activities:		
Net loss	\$ (14,923,604)	\$ (23,044,566)
Adjustments to reconcile net loss from operations to cash used in operating activities:		
Depreciation on property and equipment	1,475,298	1,082,347
Impairment of assets of discontinued operations held for sale	882,298	2,665,503
Share-based compensation charges	565,990	439,893
Fair value adjustments of derivative instruments	(2,018,864)	8,421,268
Interest on debt obligations	1,301,781	3,115,202
Loss on sale of assets of discontinued operations	—	308,482
Provisions for bad debt (recovery)	(99,947)	535,957
Inventory obsolescence	68,584	517,397
Other non-cash items	—	9,728
Changes in operating assets and liabilities:		
Accounts receivable	(3,017,541)	(5,335,060)
Inventories	(3,929,508)	(3,142,590)
Other assets	(20,320)	683,735
Accounts payable	2,179,305	2,700,877
Deferred revenue and other accrued liabilities	1,373,291	992,371
Net cash used in operating activities	(16,163,237)	(10,049,456)
Cash flows from investing activities:		
Purchases and development of property and equipment	(6,145,680)	(3,194,554)
Proceeds from sale of discontinued operations, net of selling costs	—	1,108,499
Other	—	1,300
Net cash used in investing activities	(6,145,680)	(2,084,755)
Cash flows from financing activities:		
Proceeds from issuance of common stock and warrants	16,620,375	7,506,907

Common stock and warrant issuance costs	(1,360,755)	(694,170)
Proceeds from borrowings under line of credit	4,500,000	831,917
Proceeds from issuance of long-term debt and warrants	—	12,500,000
Debt and warrant issuance costs	—	(867,165)
Repayments under line of credit	(3,831,917)	—
Repayments of long-term obligations	(552,966)	(8,741,060)
Borrowings on capital leases	316,038	1,462,014
Repayments on capital leases	(872,929)	(696,947)
Proceeds from exercise of options and warrants	5,140,534	5,965,692
Taxes paid in lieu of shares issued for share based compensation	(63,015)	—
Other	(85,152)	(27,289)
Net cash provided by financing activities	19,810,213	17,239,899
Net effect of exchange rate changes on cash	(37,391)	(87,445)
Net increase (decrease) in cash and cash equivalents	(2,536,095)	5,018,243
Cash and cash equivalents at beginning of period	7,031,981	2,013,738
Cash and cash equivalents at end of period	<u>\$ 4,495,886</u>	<u>\$ 7,031,981</u>
Cash and cash equivalents at end of period:		
Continuing operations	\$ 4,103,841	\$ 6,254,359
Discontinued operations	392,045	777,622
Total	<u>\$ 4,495,886</u>	<u>\$ 7,031,981</u>

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)

	Years Ended December 31,	
	2014	2013
Supplemental Cash Flow Information:		
Cash paid for interest	\$1,987,472	\$3,072,930

Cash paid for income taxes	\$1,600	\$1,600
Supplemental Schedule of Non-cash Investing and Financing activities:		
Exercise of warrants classified as derivative instruments:		
Decrease in derivative instruments associated with warrants	\$389,137	\$8,915,268
Increase in common stock and additional paid-in-capital	(389,137)	(8,915,268)
Conversion of debt to equity:		
Decrease in debt principal and interest	525,000	—
Increase in common stock and additional paid-in-capital	(525,000)	—
Recognition of debt discount in connection with long-term debt and warrants:		
Decrease in debt obligations	—	5,875,000
Increase in additional paid-in-capital	—	(5,875,000)
Recognition of derivative liability in connection with issuance of common stock and warrants:		
Decrease in additional paid-in-capital	—	1,604,000
Increase in derivative liabilities	—	(1,604,000)
Recognition of derivative liabilities in connection with debt issuance:		
Decrease in debt obligations	—	705,000
Increase in derivative liabilities	—	(705,000)

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2014

Note 1: Background and Basis of Presentation

We are a leader in the innovation, development and production of compressed natural gas (CNG) fuel storage tanks and packaged fuel storage systems and the integration of vehicle system technologies, including engine and vehicle control systems and drivetrains.

We produce innovative, advanced and light-weight CNG storage tanks, and supply these tanks, in addition to fully-integrated natural gas storage systems, to truck and automotive original equipment manufacturers (OEM) and aftermarket and OEM truck integrators. We also provide low emission and fast-to-market solutions to support the integration and production of natural gas fuel and storage systems, hydrogen fuel and storage systems, hybrid technologies and specialty vehicles, as well as hydrogen refueling systems and dispensers.

Unless the context otherwise requires, “we,” “our,” “us,” “Quantum” and similar expressions refers to Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries.

We were formed as a Delaware corporation in October 2000, and became a publicly traded company on July 23, 2002. Our common stock trades on The Nasdaq Capital Market under the symbol “QTWW.” Our principal office is located in Lake Forest, California.

We classify our business operations into three reporting segments: Fuel Storage & Systems, Renewable Energy and Corporate. The Renewable Energy business segment, consisting entirely of the operations of Schneider Power Inc. (Schneider Power), is now classified as discontinued operations as discussed further below.

Fuel Storage & Systems Segment

This segment generates revenue from two sources: product sales and contract services. Product sales are derived primarily from the sale of storage tanks and packaged fuel system modules for CNG applications. Contract services revenue is generated by providing engineering design and support to OEMs and other customers, so that our fuel systems and advanced propulsion systems integrate and operate with our customer's CNG, hybrid or fuel cell applications. Contract services revenue is also generated from customers in the aerospace industry, material science, and other governmental entities and agencies.

We primarily manufacture and supply CNG storage and fuel systems for a variety of heavy, medium and light-duty trucks and passenger vehicles. We also provide design, engineering development and packaging, production validation and system integration for transportation applications, including hydrogen fuel storage and hybrid technologies. For hybrid and plug-in electric vehicle (PHEV) applications, we provide powertrain engineering, electronic control, software strategies and system integration. We also design, engineer and manufacture refueling systems and dispensers.

Renewable Energy Segment

Our Renewable Energy segment consists solely of the business operations of our wholly-owned subsidiary, Schneider Power, which we acquired on April 16, 2010. Schneider Power, previously headquartered in Toronto, Ontario, Canada, and now administered out of our Lake Forest, California facility beginning in January 2014, is an independent wind power producer and holder of interests in certain renewable energy projects.

Since August 2012, we have been actively looking for buyers for the assets and operations of Schneider Power. On May 13, 2013, we completed the sale of Schneider Power’s 1.6 megawatt (MW) Providence Bay wind farm. On May 29, 2013, we announced that we had entered into definitive agreements for the sale of the 10.0 MW Trout Creek development project, which sale will occur in two phases. The closing for the first phase, which resulted in the sale of a majority interest in the Trout Creek wind farm project, occurred on September 18, 2013. The sale of the remaining interest in the Trout Creek wind farm project is expected to be completed near the end of 2015, subject to the project achieving commercial operation. We are also actively pursuing the sale of other Schneider Power assets, including the 10.0 MW Zephyr wind farm operating asset which represents a substantial portion of the remaining assets and liabilities of Schneider Power as of December 31, 2014.

As a result of these actions and our expectations for a completion of a sale of the business within the next year, we report the historical activities and balances of Schneider Power as discontinued operations held for sale.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Corporate Segment

The Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel Storage & Systems or Renewable Energy business segments. Corporate expenses consist primarily of personnel costs, share-based compensation costs and related general and administrative costs for executive, finance, legal, human resources, investor relations, and our board of directors.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). In the opinion of management, all adjustments considered necessary for a fair presentation have been included. These adjustments consist of normal and recurring accruals, as well as non-recurring charges.

The consolidated financial statements for the periods presented include the accounts of Quantum Fuel Systems Technologies Worldwide, Inc., and our wholly owned subsidiary, Schneider Power Inc. (Schneider Power).

Schneider Power is an independent power producer and holder of interests in certain renewable energy projects. Schneider Power's portfolio includes the 10.0 megawatt Zephyr operating wind farm located in Ontario, Canada. In August 2012, we committed to a plan to sell the Schneider Power business and initiated steps to locate buyers. To date, we have completed the sale of certain assets as further discussed in Note 3. We continue to actively seek one or more buyers for Schneider Power's remaining operations and assets. As a result of these actions and our expectations for a completion of a sale of the business within the next year, the historical activities and balances of Schneider Power are reported as discontinued operations in the accompanying consolidated financial statements for all periods presented.

All significant intercompany accounts and transactions have been eliminated in consolidation. Certain reclassifications have been made to the historical amounts to conform to the presentation of the current period.

In preparing the consolidated financial statements, we have evaluated subsequent events. For purposes of these consolidated financial statements, subsequent events are those events that occurred after the most recent balance sheet date presented but before the consolidated financial statements are issued or available to be issued.

Reverse Stock Split

On July 30, 2013, we implemented a reverse stock split pursuant to which all classes of our issued and outstanding shares of our common stock at the close of business on such date were combined and reconstituted into a smaller number of shares of common stock in a ratio of 1 share of common stock for every 4 shares of common stock. Concurrently, our authorized shares of common stock were reduced proportionately from 150,000,000 to 37,500,000, of which 25,000 shares were designated as Series B non-voting common stock. The reverse stock split did not affect our 20,000,000 shares of authorized preferred stock. The accompanying consolidated financial statements and footnotes have been retroactively adjusted to reflect the effects of the reverse stock split.

Authorized Shares

Effective December 31, 2013, General Motors Holdings, LLC ("GM Holdings"), the only holder of our issued and outstanding Series B Stock, exchanged all 12,499 of its shares of Series B Common Stock for 12,499 shares of our common stock, \$0.02 par value per share. As a result of such exchange, there are no longer any issued and outstanding shares of our Series B Stock. On February 26, 2014, our certificate of incorporation was amended to retire the 25,000 authorized shares of Series B common stock. On May 6, 2014, our certificate of incorporation was further amended to increase the number of authorized shares of common stock from 37,475,000 to 50,000,000.

Liquidity

Our historical operating results, capital resources and financial position, in combination with current projections and estimates, were considered in management's plan and intentions to fund our operations over a reasonable period of time, which we define in this report as the twelve month period ending December 31, 2015. For purposes of liquidity disclosures, we assess the likelihood that we have sufficient available working capital and other principal sources of liquidity to fund our operating activities and obligations as they become due and the likelihood that we will be able to maintain compliance with the required provisions contained within our debt instruments over the twelve month period.

For purposes of our assessment, we consider the \$4.1 million of cash and cash equivalents as of December 31, 2014, the \$3.0 million of potential availability under our expanded \$7.5 million line of credit (as last amended on February 10, 2015), and the \$10.5 million in net proceeds received from our February 18, 2015 underwritten public offering subsequent to the balance sheet date, as principal sources of capital.

Based on our current operating plan and expectations, we believe we have sufficient available capital through at least December 31, 2015 to cover our existing operations and obligations. Our long-term future cash requirements will depend on numerous factors, including our revenue base, profit margins, product development activities, market acceptance of our products, future expansion plans and ability to control costs.

Note 2: Summary of Significant Accounting Policies

Use of Estimates in the Preparation of Consolidated Financial Statements

The preparation of consolidated 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 consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. These estimates include assessing our levels of liquidity needs through December 31, 2015, collectability of accounts receivable, estimates of contract costs and percentage of completion, the use and recoverability of inventory, the carrying amounts and fair value of assets held for sale, long-lived assets and goodwill, including estimates of future cash flows and market valuations associated with asset impairment evaluations, the fair value of derivatives associated with debt instruments and warrants, the realization of deferred taxes, useful lives for depreciation/ amortization periods of assets and provisions for warranty claims, among others. The markets for our products are characterized by competition, technological development and new product introduction, all of which could impact the future realizability of our assets. Actual results could differ materially from those estimates.

Foreign Currency

The books and records of our wholly-owned subsidiary held for sale, Schneider Power, are maintained in a functional currency, the Canadian dollar, that differs from the United States (U.S.) dollar functional currency that is reported in the accompanying consolidated financial statements.

Schneider Power's assets and liabilities are translated at rates of exchange in effect at the end of the reporting periods. Schneider Power's revenues and expenses are translated at the average rates of exchange for the applicable period. Foreign currency translation gains or losses are accumulated within other comprehensive income or loss as a separate component of stockholders' equity.

Revenue Recognition

We generally manufacture products based on specific orders from customers. Revenue is recognized when the earnings process is complete and collectability is reasonably assured, which for product sales is generally upon shipment from our warehouse or shipment from warehouses of certain component suppliers that we have contractual relationships with. We include the costs of shipping and handling, when incurred, in cost of goods sold.

Contract services revenue is derived primarily from services related to system development and application engineering and qualification testing of our products and systems under funded contracts with OEMs and other customers. Contract services revenue is recognized principally by the percentage of completion method. For applicable contracts, we generally estimate percentage complete by determining cost incurred to date as a percentage of total estimated cost at completion. For certain other contracts, percentage complete is determined by measuring progress towards contract deliverables if it is determined that this methodology more closely tracks the realization of the earnings process. For contracts measured under the estimated cost approach, we believe we can generally make dependable estimates of the revenue and costs applicable to various stages of a contract. Recognized revenue and profit are subject to revisions as the contract progresses to completion. Our estimates of contract costs are based on expectations of engineering development time and materials and other support costs. These estimates can change based on unforeseen technology and integration issues, but known risk factors and contract challenges are generally allowed for in the initial scope and cost estimate of the program. Revisions in profit estimates are charged to income in the period in which the facts that give rise to the revision become known. We also recognize contract services revenue under certain other arrangements on a time and material basis.

In certain circumstances, customers pay one price for multiple products and services. Consideration from multiple element arrangements is allocated among the separate units of accounting based on the relative selling price method.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Revenues of our discontinued operations held for sale principally include energy generation sales associated with wind farm operations which are recognized at the time of generation and delivery to the purchasing utility providers as metered at the point of interconnection with the transmission systems. The rates paid by the respective purchasing utility providers are established in Power Purchase Agreements (PPA) executed between us and the utility providers.

Research and Development Costs

Research and development costs are charged to expense as incurred. Equipment used in research and development with alternative future uses is capitalized and only the current period depreciation is charged to research and development.

Cash and Cash Equivalents

All unrestricted highly liquid investments with original maturities of three months or less when purchased are considered to be cash equivalents.

Cash Flow Presentation

We report cash flows under the indirect method.

Accounts Receivable

We sell to customers using credit terms customary in our industry. Credit is extended to customers based on an evaluation of the customer's financial condition, and when credit is extended, collateral is generally not required. Interest is not normally charged on receivables. We establish an allowance for potential losses on our accounts receivable based on historical loss experience and current economic conditions. Accounts receivable are charged off to the allowance when we determine that the account is uncollectible.

Inventories

Inventories are valued at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method for all inventories. Market is determined by replacement cost for raw materials and parts and net realizable value for work-in-process and finished goods. Our business is subject to the risk of technological and design changes. We provide for obsolete or slow-moving inventory based on our analysis of inventory levels and future sales forecasts at the end of each accounting period.

Long-Lived Assets, Including Goodwill and Other Intangible Assets

Property and equipment, which includes amounts recorded under capital leases, are stated at cost less accumulated depreciation. Depreciation on property and equipment (other than land which is not depreciated) is computed by the straight-line method over the estimated useful lives of the assets. We are depreciating tooling, dies and molds over 5 years; plant machinery and equipment between 7 years and 15 years; information systems and office equipment over periods of 3 to 7 years; and automobiles and trucks over 5 years. Amortization of leasehold improvements is provided using the straight-line method over the assets' estimated useful lives. We amortize acquired intangible assets using the straight-line method over their estimated useful lives of 20 years.

Major renewals and improvements are capitalized and minor replacements, maintenance and repairs are charged to current operations as incurred. Upon retirement or disposal of assets, the cost and related accumulated depreciation are removed from the balance sheets and any gain or loss is reflected in the statements of operations.

Goodwill represents the excess of purchase price over the fair value of net assets acquired in acquisitions and is allocated to our business segments. Goodwill is not amortized and is assessed at least annually for impairment or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable.

We evaluate the recoverability of property and equipment and amortizable intangible assets for impairment when events or circumstances occur such as, a significant decrease in market value of an asset, an adverse change in business climate, a current expectation to dispose before end of estimated useful life, a significant change in extent or manner in which the asset is used or a significant physical change to

the asset, that indicate that the carrying amount of such assets may not be recoverable. Impairment losses are recorded on long-lived assets used in operations when an indicator of impairment is present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Warranty Costs

We offer a warranty for production level storage systems, tanks, component parts and other alternative fuel products shipped to our customers in trucking applications. The specific terms and conditions of those warranties vary depending on the customer requirements; however, CNG systems are generally sold with a warranty of two years or 200,000 miles, whichever occurs first. We estimate the costs that may be incurred under our warranty provisions and record a liability in the amount of such costs at the time product revenue is recognized. Factors that affect our warranty liability include the number of units sold, historical and anticipated rates of warranty claims, and cost per claim.

We generally disclaim all warranties on our prototype component parts and systems. At our discretion or under certain programs, we may provide for the replacement cost or perform additional tests of prototype component parts subsequent to product delivery. We include an estimate of these types of arrangements as part of our warranty liability. We periodically assess the adequacy of our recorded warranty liabilities and adjust the amounts as necessary.

Derivative Financial Instruments

We account for conversion features contained within certain of our debt instruments and exercise features of certain of our warrant contracts as derivative financial instruments as further discussed in Notes 9 and 10.

The derivative financial instruments, which are classified as liabilities, are recorded at fair value and marked to market each period. Changes in fair value of the derivatives each period resulting from a movement in the share price of our common stock or the passage of time are recognized as fair value adjustments of derivative instruments in the consolidated statements of operations and comprehensive loss. Changes in fair value resulting from the modification to the terms of the derivative are recognized as a gain or loss on modification of derivative instruments in the consolidated statements of operations and comprehensive loss. We also use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to our own stock, including evaluating the instrument's contingent exercise and settlement provisions.

Derivative instruments are presented as current liabilities on the consolidated balance sheet if (i): the terms allow the holder to convert debt principal or demand principal repayments associated with derivative instruments within twelve months of the balance sheet date or (ii) in the case of warrants, certain contractual provisions under the warrant contracts could require immediate cash payment due to events that are outside of our control. These types of derivative instruments are similar in nature to demand obligations because the settlement of the obligations could require cash payment within the current operating cycle.

Income Taxes

The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred tax assets and liabilities are determined based on the differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date (see Note 12).

We account for uncertainties in income tax law under a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. We recognize the tax effects of a position if it is “more-likely-than-not” to be sustained by the taxing authority as of the reporting date. If the tax position is not considered “more-likely-than-not” to be sustained, then no benefits of the position are recognized.

Share-Based Compensation

We account for share-based compensation expense by recognizing the estimated fair value of stock options and restricted stock issued to our employees on a straight-line basis over the requisite vesting period as an expense, reduced for estimated forfeitures.

Segment Information

We classify our continuing business operations into two segments: Fuel Storage & Vehicles Systems and Corporate which are discussed further in Note 14. Our Renewable Energy business segment is classified as discontinued operations held for sale which is discussed further in Note 3.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Other Comprehensive Income (Loss)

Other comprehensive income (loss) refers to revenues, expenses, gains and losses that under GAAP are included in comprehensive income (loss) but are excluded from net income or loss attributable to stockholders, as these amounts are recorded directly as an adjustment to stockholders' equity. The change in our accumulated other comprehensive income (loss) for the periods presented is associated with activity resulting from the effects of currency translation.

Interest Expense

We recognize the amortization of deferred loan origination costs and debt discounts as interest expense under the effective interest method over the life of the applicable arrangements.

Financial Instruments, Hedging Derivatives, and Concentration of Credit Risk

Financial instruments that we enter into consist principally of cash equivalents, trade receivables and payables, stock options and warrants, and debt obligations.

We conduct a major portion of our business with a limited number of customers and suppliers. See further discussion of revenue and purchase concentrations of our continuing operations in Note 15.

Fair Values Measurements

We determine fair values of our assets and liabilities based on the three level valuation hierarchy established in accordance with accounting guidance for measuring fair value. The valuation hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. GAAP describes three different valuation techniques to be used in determining fair value for financial assets and liabilities: the market, income or cost approaches. The three valuation techniques are consistent with generally accepted valuation methodologies. The three level hierarchy which prioritizes the inputs used to measure fair value from market based assumptions to entity specific assumptions are as follows:

Level 1: Inputs based on quoted market prices for identical assets or liabilities in active markets at the measurement date.

Level 2: Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3: Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the instrument's valuation.

We have adopted Accounting Standards Codification (ASC) Topic No. 825 “Financial Instruments” (ASC 825), which allows an entity the irrevocable option to elect fair value for the initial and subsequent measurement for specified financial assets and liabilities on a contract-by-contract basis. We did not elect to adopt the fair value option for any of our financial assets or liabilities that were not already measured on a recurring basis. Based on certain qualifying events, we may elect to adopt the fair value option in the future for certain financial assets and liabilities.

The carrying value of cash and cash equivalents, accounts receivable, investments and other assets, accounts payable and amounts included in accrued liabilities and other meeting the definition of a financial instrument approximated their fair values at December 31, 2014 and 2013. See further discussion of fair value measurements in Note 9.

New Accounting Pronouncement

In May 2014, the Financial Accounting Standards Board issued Accounting Standards Update No. 2014-09 *Revenue from Contracts with Customers* (ASU 2014-09), which amends the existing accounting standards for revenue recognition. ASU 2014-09 outlines principles that govern revenue recognition at an amount an entity expects to be entitled when products are transferred to customers. ASU 2014-09 will be effective for us in the first quarter of 2017. ASU 2014-09 may be applied retrospectively for each period presented or retrospectively with the cumulative effect recognized in the opening retained earnings balance in 2017. We are in the process of evaluating the impact of adopting the new standard on our consolidated financial statements.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 3: Discontinued Operations Held for Sale —Schneider Power

Our Renewable Energy segment consists solely of the business operations of Schneider Power.

Since August 2012, we have been actively looking for buyers for the assets and operations of Schneider Power. During the periods presented, we completed the sale of certain assets as discussed below.

As a result of these actions and our expectations for a completion of a sale of the business within the next year, we report the historical activities and balances of Schneider Power as discontinued operations.

The conversion rate of one CAD to one US Dollar was 0.86 to 1.0 as of December 31, 2014 and 0.94 to 1.0 as of December 31, 2013.

Divestitures

In May 2013, we completed the sale of Schneider Power's 1.6 MW Providence Bay wind farm (Providence Bay) in exchange for Canadian Dollar (CAD) \$403,373 in cash and the assumption of CAD \$1,111,977 of bank debt and certain other project related liabilities. The sale of Providence Bay resulted in the recognition of a loss of CAD \$55,012 related to the disposal.

In May 2013, we announced that we had entered into definitive agreements for the sale of the 10.0 MW Trout Creek development project (Trout Creek), which sale will occur in two phases. The closing for the first phase, which resulted in the sale of a majority interest in Trout Creek, was completed in September 2013 for CAD \$971,250 in cash and the assumption of CAD \$236,709 of project related liabilities. The closing of the first phase of the sale of Trout Creek resulted in the recognition of a loss of CAD \$165,297 related to the disposal. In connection with the closing of the first phase, we recorded an asset of CAD \$907,558, representing the fair value of contingent consideration of CAD \$1,143,750 that will be payable to Schneider Power if the Trout Creek project achieves commercial operation. The sale of the remaining interest in the Trout Creek wind farm project is expected to be completed near the end of 2015, subject to the project achieving commercial operation.

In December 2013, we completed the sale of three development projects for CAD \$75,000 in cash and an asset of CAD \$125,904, representing the fair value of the contingent consideration that will be payable if any one or more of the three development projects reach commercial operation. The sale of the three development projects resulted in the recognition of a loss of CAD \$105,220.

The following table provides the results of Schneider Power, classified as discontinued operations, for the years ended December 31:

	2014	2013
Revenue:		
Net product sales	\$ 2,363,324	\$ 2,736,146
Costs and expenses:		
Cost of product sales	580,753	674,536
Research and development	—	16,872
Selling, general and administrative	158,970	998,959
Impairments of long-lived operating assets (1)	882,297	2,665,503
Loss on sale of assets (2)	—	308,482
Total costs and expenses	1,622,020	4,664,352
Operating income (loss)	741,304	(1,928,206)
Interest expense, net	(1,255,567)	(1,410,560)
Other income, net (3)	76,529	227,846
Loss from discontinued operations before income taxes	(437,734)	(3,110,920)
Income tax benefit	—	85,892
Net loss from discontinued operations held for sale	\$ (437,734)	\$ (3,025,028)

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

- (1) We measure each disposal group of Schneider Power at the lower of its carrying amount or fair value less costs to sell. The fair value measurements are based on available Level 3 inputs such as market conditions and pending agreements to sell the assets. Based on assessments that we updated during 2014 and 2013, we determined that the carrying values of goodwill and intangible assets of certain disposal groups were above their fair values, net of selling costs. In 2014, we recognized \$0.9 million of impairment charges, of which \$0.4 million related to goodwill impairment and \$0.5 million related to intangible assets associated with SPI's development pipeline projects compared to \$2.7 million recognized in 2013, of which \$1.8 million related to goodwill associated with Zephyr, \$0.8 million related to assets associated with Schneider Power's development project pipeline and \$0.1 million related to property and equipment associated with the Providence Bay Wind Farm.

- (2) Represents the loss recognized upon the sale of the Providence Bay wind farm and certain wind farm development projects.
- (3) For 2014, represents an approved insurance claim associated with turbine downtime during 2012. For 2013, represents return of a development deposit associated with a wind farm development project that was abandoned in 2011.

The balance sheets of Schneider Power, classified as discontinued operations held for sale, are as follows for the year ended December 31:

	2014	2013
Current Assets:		
Cash and cash equivalents	\$ 392,045	\$ 777,622
Accounts receivable, net	221,943	328,730
Prepaids and other current assets	435,615	218,593
Total current assets	<u>\$ 1,049,603</u>	<u>\$ 1,324,945</u>
Non-Current Assets:		
Property and equipment, net (1)	\$ 20,190,824	\$ 22,016,644
Intangible asset, net (2)	1,014,185	1,577,672
Goodwill (3)	2,191	452,682
Deposits and other assets (4)	905,196	986,799
Total non-current assets	<u>\$ 22,112,396</u>	<u>\$ 25,033,797</u>
Current Liabilities:		
Accounts payable	\$ 275,628	\$ 291,730
Other accrued liabilities	101,015	344,919
Current portion of debt obligations (5)	1,173,521	1,257,827
Total current liabilities	<u>\$ 1,550,164</u>	<u>\$ 1,894,476</u>
Non-Current Liabilities:		
Debt obligations, net of current portion (5)	\$ 19,094,320	\$ 21,520,634
Total non-current liabilities	<u>\$ 19,094,320</u>	<u>\$ 21,520,634</u>

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

- (1) Consists mainly of wind turbine assets of the 10 megawatt Zephyr Wind Farm acquired in April 2012. Depreciation was ceased in 2012 upon the classification of the operations as held for sale. Accumulated depreciation of property and equipment at December 31, 2014 was \$193,284.
- (2) Consists of project assets associated with Schneider Power's renewable energy portfolio and power purchase agreements associated with the Zephyr Wind Farm. The estimated useful lives for the intangible assets associated with Zephyr Wind Farm are 20 years; however, amortization was ceased in 2012 upon the classification of the operations as held for sale.
- (3) Represents goodwill ascribed to the Zephyr Wind Farm acquisition in April 2012.
- (4) Consists mainly of the fair value of contingent consideration associated with the sale of the Trout Creek wind farm project and three development projects.
- (5) Consists of a credit facility due to a secured project lender in connection with the acquisition of the Zephyr Wind Farm as discussed below.

Zephyr Wind Farm - Samsung Debt

In connection with Schneider Power's acquisition of Zephyr Farms Limited (Zephyr) and its 10 MW wind farm (Zephyr Wind Farm) on April 20, 2012, Schneider Power assumed a credit facility owed to Samsung Heavy Industries Co. Ltd (Samsung) related to the project (the Samsung Debt). The Samsung Debt had a total principal and interest amount of CAD \$23.2 million as of the date of the acquisition. Pursuant to the original terms of the Samsung Debt, Zephyr was required to make regularly scheduled semi-annual principal and interest payments, accruing at a rate of 6.5% per annum, for a period of ten years, as follows: (1) eighteen semi-annual payments of principal and interest in the approximate amount of CAD \$1.05 million commencing six months following the date that the Zephyr wind farm achieved commercial operations (which event occurred in May 2012), (ii) a principal balloon payment in year five in the approximate amount of CAD \$5.3 million and (iii) a final payment in year ten in the approximate amount of CAD \$9.6 million.

On March 19, 2013, Schneider Power and Zephyr entered into a Master Amendment Agreement with Samsung to resolve certain issues with respect to the performance of the wind turbines purchased by Zephyr from Samsung for use by the Zephyr Wind Farm pursuant to which the parties agreed to, among other things, (i) revise the turbine delivery date to February 1, 2013, thus, extending the grace period (and Zephyr's right to claim performance related liquidated damages) to January 31, 2013, (ii) waive all of Zephyr's fee obligations under an operations and maintenance agreement between Zephyr and Samsung applicable to the turbines owned and operated by Zephyr that would have been payable to Samsung through January 31, 2013, (iii) waive a portion of the interest component that would have been

payable to Samsung through January 31, 2013, and (iv) restructure the repayment terms of the principal obligations owed by Zephyr to Samsung under the Samsung Debt. In connection with the execution of the Master Amendment Agreement, Zephyr and Samsung also executed an Amended and Restated Credit Agreement. Except for the modifications to the repayment terms of the principal and interest obligations owed under the Credit Agreement, no other material amendments were made to the Credit Agreement.

Based on the present value of the cash flows of the amended Samsung Debt, we determined that the March 2013 modified terms were not substantially different from the original payment terms.

Upon execution of the Master Amendment Agreement, Zephyr was obligated to repay the Samsung Debt, together with interest at a rate of 6.5% per year, over a ten year period, as follows: (i) an interest payment of CAD \$100,000 that was made before March 31, 2013, (ii) an interest only payment in the approximate amount of CAD \$1.3 million that was made on August 12, 2013 (the scheduled payment date was on July 31, 2013 but was subsequently extended to August 15, 2013), (iii) nineteen semi-annual payments of principal and interest in the approximate amount of CAD \$1.1 million commencing on January 31, 2014, (iv) a principal balloon payment in the approximate amount of CAD \$2.6 million on each of January 31, 2018 and July 31, 2018, (v) a principal balloon payment in the approximate amount of CAD \$5.6 million on July 31, 2022 and (vi) a final payment in the approximate amount of CAD \$5.1 million on January 31, 2023.

As of December 31, 2014, the total amount of the Samsung Debt was CAD \$23.5 million, which consisted of CAD \$22.1 million of principal, CAD \$0.8 million of unamortized premium and CAD \$0.6 million of accrued interest.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

On January 8, 2015, Schneider Power and Zephyr notified Samsung of their assertion that Samsung is in default of its obligations under the Turbine Supply Agreement dated June 30, 2010, as amended, and the Operations and Maintenance Agreement dated May 22, 2012. Under the terms of the Operations and Maintenance Agreement, Samsung is contractually required to maintain an average availability at or above 96% for the wind turbines purchased by Zephyr from Samsung. As a result of specifically identified operating and maintenance issues during the past six month period that Samsung has acknowledged, the average availability is materially below the minimum contractual levels and therefore Zephyr will be entitled to certain compensatory payments under the terms of the contract. The parties have entered into discussions to address the performance issues. The execution of the First Amendment to Master Amendment Agreement (discussed below) followed the notification to Samsung and initial discussions. Senior executives of Schneider Power and Zephyr intend to continue discussing the issues with Samsung executives in an attempt to find a broader resolution related to the matter.

On January 26, 2015, Schneider Power and Zephyr entered into a First Amendment to Master Amendment Agreement pursuant to which the parties agreed to defer until January 31, 2016 approximately CAD \$462,167 of interest owed to Samsung under the Master Amendment Agreement that was originally scheduled to be paid on January 31, 2015.

The debt amounts due under the Samsung Debt are secured by substantially all of Zephyr's assets and a pledge of all of the shares of Zephyr held by Schneider Power. Quantum has no obligation to service the debt payments and has not provided any guarantees associated with the Samsung Debt.

Bank Term Loan - Providence Bay Wind Farm

The significant terms of the Bank Term Loan as last amended in April 2012 were as follows: (i) scheduled maturity date of April 10, 2017, (ii) interest at 6.0% per annum, and (iii) required fixed cash payments of CAD \$12,899 per month through April 10, 2017, with the remaining principal amount of CAD \$667,422 due on the maturity date.

Upon our sale of substantially all of the SPI Providence Bay wind farm assets in May 2013, the purchaser also assumed substantially all of the SPI Providence Bay wind farm liabilities including the remaining CAD \$1.1 million balance of the Bank Term Loan.

Commitments of Discontinued Operations

At December 31, 2014, minimum future commitments under a noncancelable operating land lease for Zephyr aggregated \$1,635,912, payable as follows: \$86,777 in 2015, \$87,065 in 2016, \$87,065 in 2017, \$87,652 in 2018, \$87,945 in 2019, and \$1,199,408 thereafter. The lease contains renewal options, which we have not considered in the amounts disclosed. Rental expense under the operating lease was \$93,971 in 2014 and \$99,906 in 2013.

At December 31, 2014, minimum payments under an operational and maintenance agreement for Zephyr Wind Farm aggregated \$893,354, payable as follows: \$291,908 in 2015, \$297,746 in 2016 and \$303,700 in 2017.

Note 4: Accounts Receivable

Net accounts receivable of continuing operations consist of the following as of December 31:

	2014	2013
Customer accounts billed	\$ 11,120,593	\$ 8,268,171
Customer accounts unbilled	797,518	549,072
Allowance for doubtful accounts	(291,644)	(398,684)
Accounts receivable, net	<u>\$ 11,626,467</u>	<u>\$ 8,418,559</u>

We assess the collectability of receivables associated with our customers on an ongoing basis and historically any losses have been within management's expectations.

Advanced Green Innovations, LLC (AGI) and its subsidiary, ZHRO Solutions, LLC (ZHRO) are customers and revenues from services we provided to them comprised 9% and 12% of our total revenues from continuing operations in 2014 and 2013, respectively. AGI and ZHRO owed approximately \$2.2 million (the “Outstanding Balance”) for engineering, design and development services invoiced by us through October 3, 2014 that were beyond the contractual payment dates. AGI has informed us that they are experiencing liquidity constraints that have caused delays in payments to us in connection with the services provided.

On December 11, 2014, we entered into a Debt Repayment Agreement (the “Debt Repayment Agreement”), effective as of December 10, 2014, with AGI, ZHRO and Advanced Green Technologies, LLC (an affiliate of AGI and ZHRO that is referred to as “AGT”). Under the terms of the Debt Repayment Agreement, AGI and ZHRO jointly and severally agreed to pay the Outstanding Balance, plus interest at 5% per annum, over a ten month period with the first payment in the amount of \$300,000 due on or before December 25, 2014. In the event that AGI and ZHRO fail to make any payment prior to the expiration of any applicable cure period, then the remaining Outstanding Balance is immediately due and payable and the interest rate is increased to 18% per annum. AGT provided us with a limited non-recourse guaranty of AGI’s and ZHRO’s payment of the Outstanding Balance and interest.

To secure AGI’s and ZHRO’s performance of its obligations under the Debt Repayment Agreement and AGT's performance under its limited non-recourse guaranty, AGI and AGT pledged all of their ownership interests in East Camelback, LLC (“East Camelback”), consisting in the aggregate of 510 voting units (51.0%), 474 non-voting units and 47.5% of the participation rights in East Camelback, pursuant to the terms of a Pledge Agreement between us, AGI and AGT. East Camelback indirectly owns 100% of a commercial building, consisting of approximately 23,700 square feet of office space, located in Phoenix, Arizona.

As of December 31, 2014, the total amount due from AGI and its affiliates amounted to \$2.8 million, of which \$2.2 million is associated with the Outstanding Balance under the Debt Repayment Agreement and \$0.6 million is associated with other receivables. Only \$150,000 in cash has been received by us subsequent to the balance sheet date under the Debt Repayment Agreement and as a result, AGI and its affiliates are in default of the Debt Repayment Agreement. Based on communications and feedback we continue to have with executives of AGI, we believe the amounts outstanding are fully realizable. As such, we have not recorded a specific allowance against the AGI receivable; however, we will continue to assess the collectability on an ongoing basis.

Note 5: Inventories

Inventories of continuing operations consist of the following as of December 31:

	2014	2013
Materials and parts	\$ 10,383,269	\$ 6,495,599
Work-in-process	389,155	1,146,589
Finished goods	2,046,025	1,246,753
	12,818,449	8,888,941
Less: Provision for obsolescence	(3,945,745)	(3,877,161)
Inventories, net	<u>\$ 8,872,704</u>	<u>\$ 5,011,780</u>

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 6: Long-lived Assets*Property and equipment*

Property and equipment of continuing operations consists of the following as of December 31:

	2014	2013
Plant machinery and equipment	\$ 15,850,432	\$ 13,232,440
Information systems and office equipment	11,027,393	10,236,625
Leasehold improvements	8,254,022	5,396,408
Tooling, dies and molds	3,765,969	3,531,460
Automobiles and trucks	392,679	392,679
Property and equipment in service, gross	39,290,495	32,789,612
Less: Accumulated depreciation	(31,270,855)	(29,795,556)
Property and equipment in service, net	8,019,640	2,994,056
Construction in progress:		
Plant equipment and other	1,742,701	2,097,903
Property and equipment, net	\$ 9,762,341	\$ 5,091,959

Total depreciation expense on property and equipment, including amortization of equipment held under capital leases, was \$1,475,298 and \$1,082,347 for the years ended December 31, 2014 and 2013, respectively.

Property and equipment at December 31, 2014 and December 31, 2013 includes \$3,250,000 and \$2,933,963 acquired under capital leases, respectively, of which the majority is included in plant machinery and equipment, information systems and construction in progress. Accumulated depreciation of property and equipment acquired under these capital leases was \$765,150 at December 31, 2014 and \$399,709 at December 31, 2013.

Goodwill

The carrying amount of goodwill of continuing operations, reported in our Fuel Storage & Systems business segment, was \$12,400,000 at both December 31, 2014 and 2013, and there was no goodwill activity associated with continuing operations during the years ended December 31, 2014 and 2013.

We believe that no event or circumstance currently exists that would indicate a potential impairment of the carrying values of property and equipment, goodwill, or any other significant long-lived operating asset as of December 31, 2014.

Note 7: Warranties

Changes in our product warranty liability for continuing operations are as follows:

Period	Balance at Beginning of Year	Warranties Issued	Settlements Made (1)	Changes in Liability for Pre-Existing Warranties	Balance at End of Year
Twelve months ended December 31, 2014	\$ 399,171	\$ 435,453	\$ (222,625)	\$ —	\$ 611,999
Twelve months ended December 31, 2013	\$ 364,749	\$ 101,399	\$ (66,977)	\$ —	\$ 399,171

(1) Consists of material and labor costs incurred to analyze, repair or replace products under warranty contracts.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 8: Debt Obligations

Our debt obligations for continuing operations consist of the following as of December 31:

	2014	2013
Obligations to Secured Lenders		
Convertible Notes: \$10,475,000 principal, \$269,441 accrued interest, net of unamortized discount of \$4,628,439 at December 31, 2014; \$11,000,000 principal, \$62,944 accrued interest, net of unamortized discount of \$5,671,145 at December 31, 2013	\$ 6,116,002	\$ 5,391,799
Line of Credit: \$4,500,000 principal and \$9,218 accrued interest at December 31, 2014; \$3,831,917 principal and \$11,735 accrued interest at December 31, 2013	4,509,218	3,843,652
Capital lease obligation: \$1,576,234 principal and \$15,703 accrued interest at December 31, 2014; \$2,449,163 principal and \$23,724 accrued interest at December 31, 2013	1,591,937	2,472,887
Obligations to Other Creditors:		
Other obligations	13,245	32,533

Debt obligations of continuing operations, current and non-current	12,230,402	11,740,871
Less: Current portion of long-term debt, net of unamortized discount	(5,177,207)	(3,946,582)
Debt obligations of continuing operations, non-current	<u>\$ 7,053,195</u>	<u>\$ 7,794,289</u>

Convertible Notes

On September 18, 2013, we received gross proceeds of \$11,000,000 in connection with the closing of a private placement of 2.0% secured convertible promissory notes (the Convertible Notes) and warrants (the September 2013 Warrants) to purchase up to 3,411,235 shares of our common stock (see Note 10). Net proceeds from the transaction, after placement agent fees and other transaction costs, were \$10,420,898.

The lead investor, who indirectly purchased \$10,000,000 of the Convertible Notes, has the right to appoint one member to our board of directors for as long as the lead investor beneficially owns at least 5.0% of our common stock. Effective October 24, 2013, Mr. Timothy McGaw was appointed by the lead investor and currently serves on our board of directors. Certain of our executives and board of directors (Related Parties) also participated in the offering including W. Brian Olson, our Chief Executive Officer and Bradley Timon, our Chief Financial Officer.

The significant terms of the Convertible Notes are as follows: (i) scheduled maturity date of September 17, 2018, provided, however, during the 30-day period beginning on September 18, 2016, and upon notice provided by the holders of a majority of the outstanding principal amount of the Notes, the holders have the option to require us to redeem the principal and interest then outstanding under the Convertible Notes within 90 days thereafter, (ii) accrues interest at 2.0% per annum, payable upon the earlier of conversion or maturity, (iii) outstanding principal under the Convertible Notes convertible into shares of our common stock at a fixed conversion price of \$2.3824 per share at any time until maturity at the option of the Convertible Note holders, subject to customary anti-dilution provisions, (iv) we have the right to pay the accrued interest in cash or stock (if we elect to pay in stock, then the number of shares to be issued in payment of the interest will be based on the conversion price), and (v) the Convertible Notes are subject to redemption in connection with a change in control transaction.

Our obligations under the Convertible Notes are secured by a second lien on substantially all of the operating assets used in our continuing operations and provide for an event of default if our common stock is not listed on NASDAQ or another national securities exchange as well as other customary events of default.

In connection with the private placement, we filed a resale registration statement covering the shares of common stock issuable upon conversion of the Convertible Notes and exercise of the September 2013 Warrants which became effective on December 23, 2013. We agreed to pay the holders of the Convertible Notes liquidated damages not to exceed 12% of the gross proceeds received by us if, under certain circumstances, the registration statement is suspended or is no longer effective.

The transaction documents contain a provision that prohibits any investor from converting or exercising any portion of the Convertible Notes or September 2013 Warrants, as applicable, if after giving effect to such conversion or exercise, the investor would beneficially own more than 19.99% of our issued and outstanding shares on a post-conversion/exercise basis unless and until such time that our stockholders approve the transaction. On May 15, 2014, our stockholders approved the transaction at our 2014 annual meeting of stockholders, thus, the 19.99% beneficial ownership limitation no longer applies.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

We incurred transaction costs of \$579,103 in connection with the private placement transaction of which we allocated \$268,252 to the Convertible Notes which is being amortized to interest expense over the scheduled life of the notes and \$310,851 is allocated to the September 2013 Warrants issued to the investors of the Convertible Notes (see Note 10). In addition, we recorded a debt discount on the

origination date of the Convertible Notes equal to the relative fair value of the warrants and beneficial conversion feature issued with the Convertible Notes of \$5,875,000 that is being amortized to interest expense through the scheduled maturity date on September 17, 2018.

During 2014, certain of the holders of the Convertible Notes converted \$525,000 of outstanding principal. As a result, these holders received a combined total of 220,364 shares of our common stock in satisfaction of the principal portion converted. We elected to pay the \$3,361 of accrued interest related to the converted principal in cash. In connection with the conversions in 2014, \$12,765 of the deferred debt issuance costs and \$269,493 of the debt discount were immediately recognized as non-cash interest expense, respectively.

At December 31, 2014, the total amount of principal and interest due to Related Parties, including Mr. McGaw, under the Convertible Notes was \$487,218, which consisted of \$475,000 of principal and \$12,218 of accrued interest

Line of Credit

On May 7, 2012, we obtained a revolving line of credit with Bridge Bank, National Association (Bank) that initially provided us with the ability to draw up to \$10,000,000 in working capital advances at a variable interest rate represented by the greater of (i) 5.25% or (ii) the bank's prime rate, plus 2.00% (the "Line of Credit"). The amount of advances that we can draw down under the facility is dependent upon our future levels of eligible accounts receivables and inventories and our compliance with certain financial covenants. Under the original credit facility, there were two significant financial covenants that we were required to meet in order to continue to have the ability to draw down under the Line of Credit. These covenants consisted of a "Performance to Plan" covenant and a minimum asset coverage ratio of 1.25 to 1.00 of unrestricted cash balances maintained at the bank plus eligible accounts receivables above the level of advances outstanding under the line.

During 2012 and through the first quarter of 2013, we were not in compliance with the quarterly Performance to Plan covenant and as of March 31, 2013, we were also not in compliance with the asset coverage ratio covenant. On May 20, 2013, we and our senior secured lender entered into a Loan and Security Modification Agreement with the bank pursuant to which (i) the bank agreed to waive all covenant defaults through that date, (ii) the Performance to Plan financial covenant was deleted in its entirety, (iii) the definition of Borrowing Base was revised to allow for up to 50% of eligible inventory (subject to a cap of 40% of all outstanding advances) regardless of the asset coverage ratio, (iv) the facility fee due on the first anniversary date was reduced from \$100,000 to \$50,000, (v) the interest rate was subject to adjustment to the bank's prime rate, plus 2.5%, in the event our asset coverage ratio fell below 1.35 to 1.00 at the end of a month until the asset coverage ratio again achieved a ratio of at least 1.35 to 1.00, and (vi) the amount available to us under the revolving line of credit was reduced from \$10,000,000 to \$5,000,000. In connection with the Loan and Security Modification Agreement, we paid the bank cash fees totaling \$70,075 and issued warrants to purchase shares of our common stock to the bank with a fair value of \$39,000 (see Note 10). The loan fees and fair value of the warrants have been deferred and are being amortized to interest expense over the remaining life of the credit facility. We determined that the modified terms were not substantially different from the original terms.

On March 14, 2014, we and the Bank amended the Line of Credit pursuant to which, among other things, (i) the maturity date was extended to March 14, 2016, (ii) the asset coverage ratio financial covenant was deleted in its entirety, (iii) the interest rate was reduced to the Bank's prime rate, plus 0.5%, and (iv) a covenant requiring us to maintain at least \$1,500,000 million of cash and cash equivalents at all times through maturity was added. We incurred \$25,000 of debt issuance costs in connection with this amendment.

As of December 31, 2014, the maximum borrowing capacity was \$5,000,000, of which we had advances of \$4,500,000 and \$180,000 was reserved for letters of credit and credit card services.

On February 10, 2015, we and the Bank further amended the Line of Credit pursuant to which, among other things, (i) the line of credit was increased from \$5,000,000 to \$7,500,000, (ii) the amount of inventory eligible to be included in the borrowing base is limited to \$2,000,000, (iii) a fee of 0.15% per annum, payable quarterly in arrears, is charged on the average unused portion of the line of credit, and (iv) for any period that the outstanding advances on the line of credit exceeds \$5,000,000, then the amount of unrestricted cash that the Registrant is required to maintain at Bridge Bank increases from \$1,500,000 to \$2,000,000 (Note 17).

The Bank has a senior secured first position on substantially all of the assets used in our continuing operations, other than certain equipment acquired under the capital lease arrangement described below.

Capital Lease Obligation

On November 6, 2012, we entered into an equipment sale and leaseback financing arrangement that provided us with access to a total of \$3,250,000 to finance the acquisition of certain equipment to be employed in our continuing operations. The arrangement calls for payments of \$111,846 on or before the fifteenth of each month through October 15, 2015 and a final payment of \$691,846 on November 6, 2015. In 2014, we made total payments of \$1,342,146 of which \$469,217 represented the implied interest cost.

We have the option to prepay the present value of the remaining scheduled lease obligations at any time in a lump sum. The discount rate used to calculate the lump sum is 23.0% for any prepayments that are made after November 7, 2014.

The lease obligation is secured by the equipment that is acquired under the arrangement.

The following table sets forth the total minimum lease payments under the capital lease arrangement for equipment along with the present value of the net minimum lease payments as of December 31, 2014:

Total minimum lease payments due in 2015	\$	1,810,300
Less: Amount representing interest		(234,066)
Capital lease obligation	\$	<u>1,576,234</u>

June / July 2012 Bridge Notes

On September 19, 2013, we used the net proceeds of the Convertible Notes to retire the \$7,100,000 outstanding principal balance and \$186,740 of accrued interest due under the June/July 2012 Bridge Notes. In connection with the repayment, the remaining unamortized balances of the deferred debt issuance costs of \$34,686 and debt discount of \$199,476 were immediately recognized as non-cash interest expense.

January 2013 Bridge Notes

On January 24, 2013, we entered into agreements with certain accredited investors for the sale and purchase of \$1,800,000 of unsecured 0% nonconvertible promissory notes (the “January 2013 Bridge Notes”) and warrants to purchase shares of our common stock. The January 2013 Bridge Notes included a \$300,000 original issue discount; provided, however, if the January 2013 Bridge Notes were repaid in full on or before July 1, 2013, then the total principal amount due under the January 2013 Bridge Notes would be reduced to \$1,625,000, which, as a result, would lower the original issue discount to \$125,000. At closing, we received gross proceeds of \$1,500,000. Because of certain provisions contained in the warrants, we determined that the warrant contracts represent freestanding derivative instruments (see Notes 10 and 11) and allocated \$705,000 of the proceeds to the derivative instruments, representing the fair value of the warrants on the transaction date. The remaining proceeds of \$795,000 were allocated to the debt instruments on a residual basis. The difference between the face amount of the debt instruments of \$1,800,000 and the proceeds allocated to the debt instruments resulted in an implied debt discount of \$1,005,000 that was being amortized to interest expense on the effective interest rate method over the expected remaining life of the debt instruments until the notes were repaid in full on July 1, 2013.

In addition, we allocated total costs of \$137,500 incurred in connection with the transaction between the derivative warrants for \$64,625 and debt instruments for \$72,875 on a relative fair value basis. The portion allocated to the derivative warrants was recognized immediately as interest expense and the portion allocated to the debt instruments was deferred and was being amortized to interest expense on the effective interest rate method over the expected life of the debt instruments.

The January 2013 Bridge Notes were originally set to mature on December 31, 2013; however, we had the right to prepay the notes, in whole or in part, at any time without penalty. On July 1, 2013, we repaid in full the remaining outstanding balance under the January 2013 Bridge Notes. The early repayment of the outstanding balance under the January 2013 Bridge Notes resulted in a savings of \$175,000 as a result of the provision that decreased the original debt discount if an early repayment was received on or before July 1, 2013.

Debt Covenants

We were in compliance with all existing covenants and other requirements of our debt instruments as of December 31, 2014.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Debt Maturities

The table below shows scheduled maturities of our debt obligations of our continuing operations for each of the following years until maturity:

	Debt Maturities		Amortization of Discount		Net Maturities of Debt Obligations	
2015 (1)	\$	6,114,400	\$	(937,193)	\$	5,177,207
2016 (2)		10,744,441		(3,691,246)		7,053,195
	\$	16,858,841	\$	(4,628,439)	\$	12,230,402

(1) Includes debt obligation under the Line of Credit that is not scheduled to expire until February 2017; however, the terms could potentially require partial repayment within one year if levels of eligible receivables and inventories were to decline significantly.

(2) Includes debt obligations under the Convertible Notes that are not scheduled to mature until September 2018; however, holders have an option over a 30 day period beginning on September 18, 2016 that, if exercised, would require us to redeem the obligations in cash within 90 days upon notice.

Note 9: Derivative Instruments and Fair Value Measurements

We measure our financial assets and liabilities in accordance with Fair Value Measurements and Disclosures under GAAP, which maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. GAAP describes three different valuation techniques to be used in determining fair value for financial assets and liabilities: the market, income or cost approaches. The three valuation techniques are consistent with generally accepted valuation methodologies. The hierarchy which prioritizes the inputs used to measure fair value from market based assumptions to entity specific assumptions are as follows:

Level 1: Inputs based on quoted market prices for identical assets or liabilities in active markets at the measurement date.

Level 2: Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3: Inputs reflect management’s best estimate of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the instrument’s valuation.

Our derivative instruments are measured on their respective origination dates, at the end of each reporting period and at other points in time when necessary, such as modifications, using Level 3 inputs under accounting guidance for measuring fair value. We do not report any financial assets or liabilities that we measure using Level 1 or Level 2 inputs and there were no transfers in or out of Level 3 inputs for all periods reported.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table summarizes the changes in the fair value for the derivative instrument liabilities (classified as current) using Level 3 inputs:

	October 2006 Warrants (1)	February 2011 Warrants (Series B)	January 2013 Warrants	May 2013 Warrants	Total
Balance at December 31, 2012	\$ 597,000	\$ 3,000	\$ —	\$ —	\$ 600,000
Origination of derivative instruments	—	—	705,000	1,604,000	2,309,000
Fair value adjustments resulting from change in value of underlying asset and passage of time recognized in earnings	7,144,514	6,000	1,078,000	192,754	8,421,268
Settlements associated with warrant exercises	(5,397,514)	—	(1,721,000)	(1,796,754)	(8,915,268)
Balance at December 31, 2013	<u>2,344,000</u>	<u>9,000</u>	<u>62,000</u>	<u>—</u>	<u>2,415,000</u>
Fair value adjustments resulting from change in value of underlying asset and passage of time recognized in earnings	(1,954,863)	(9,000)	(55,000)	—	(2,018,863)
Settlements associated with warrant exercises	(389,137)	—	—	—	(389,137)
Balance at December 31, 2014	<u><u>\$ —</u></u>	<u><u>\$ —</u></u>	<u><u>\$ 7,000</u></u>	<u><u>\$ —</u></u>	<u><u>\$ 7,000</u></u>

(1) Warrant contracts expired on April 27, 2014.

We determined the fair values of the derivative instrument liabilities associated with certain warrant contracts primarily based on option-pricing mathematical models generally referred to as “Black-Scholes” and “Monte Carlo” option-pricing models. These models determine the value of the derivative instruments based on complex mathematical formulas that assume that returns on our underlying stock are normally-distributed and that risk-free interest rates and stock volatilities will remain constant over the term of the contract. We use the Black-Scholes model to calculate the value of the derivative instrument liabilities associated with warrant contracts in which the contractual terms are fixed. For derivative warrant contracts that incorporate contingent terms, including exercise price reset provisions for

the warrant contracts issued on October 27, 2006, we utilized the Monte Carlo model through its expiration which is similar to the Black-Scholes model; however, the Monte Carlo model simulates several thousand possible (but random) price paths for the underlying value of the derivative instruments. These random price paths were then averaged to determine the value of the derivative instruments as of the reporting date.

On August 2, 2013, the holder of the May 2013 Warrant exercised its cashless exchange right (see Note 10) and we settled the cashless exchange by issuing to the investor 751,780 registered shares of common stock. We determined the fair value of the cashless exchange based on the underlying shares issued in connection with the exchange and the closing price of our stock on the exercise date of the cashless exercise.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The fair value of derivative instrument liabilities measured with Level 3 inputs are revalued quarterly. The assumptions used in the calculations under our binomial and/or option pricing models for the following periods were as follows:

	October 2006 Warrants (2)	February 2011 Warrants	January 2013 Warrants
<u>December 31, 2014</u>			
Annual volatility (1)	*	54.7%	52.8%
Risk-free rate	*	0.25%	1.38%
Dividend rate	*	—%	—%
Closing price of Quantum stock	*	\$ 2.09	\$ 2.09
Exercise price	*	\$ 24.00	\$ 2.84
<u>December 31, 2013</u>			
Annual volatility (1)	33.6%	40.6%	51.2%
Risk-free rate	0.09%	0.38%	1.75%
Dividend rate	—%	—%	—%
Closing price of Quantum stock	\$ 7.80	\$ 7.80	\$ 7.80
Exercise price	\$ 1.5142	\$ 24.00	\$ 2.84

(1) Annual volatility is based on the historical average of our identified peer group for a period consistent with the remaining term of the contract.

(2) Warrant contracts expired on April 27, 2014. The Level 3 inputs in 2014 were used to measure the change in fair value and marked to market just prior to expiration.

* Not applicable

Note 10: Stockholders' Equity

Authorized Shares

At December 31, 2014, our authorized shares of capital stock consisted of the following: (i) 50,000,000 shares of common stock, \$0.02 par value, and (ii) 20,000,000 shares of preferred stock, \$0.001 par value.

Common Stock

Holders of our common stock are entitled to one vote for each share on all matters voted on by stockholders. Holders of common stock do not have cumulative voting rights in the election of directors and have no subscription, redemption or conversion privileges. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of common stock will be entitled to participate ratably in dividends of our common stock as declared by the board of directors. Holders of common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of our liquidation or dissolution, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock. No holder of our capital stock authorized at any such distribution date will have any preemptive right to subscribe for or purchase any of our securities of any class or kind.

Preferred Stock

Our charter authorizes the board of directors, without any vote or action by the holders of our common stock, to issue up to 20,000,000 shares of preferred stock from time to time in one or more series. Our board of directors are authorized to determine the number of shares and designation of any series of preferred stock and the dividend rights, dividend rate, conversion rights and terms, voting rights (full or limited, if any), redemption rights and terms, liquidation preferences and sinking fund terms of any series of preferred stock. Issuances of preferred stock would be subject to the applicable rules of the NASDAQ Capital Market or other organizations on whose systems our stock may then be quoted or listed. Depending upon the terms of preferred stock established by our board of directors, any or all series of preferred stock could have preference over our common stock with respect to dividends and other distribution upon our potential liquidation. Issuance of any such shares with voting powers, or issuance of additional shares of our common stock, would dilute the voting power of our outstanding common stock. We have no present plans to issue any preferred stock.

Common Stock Issuances and Additional Paid-in Capital

In December 2012 and August 2013, we entered into two separate At The Market Offering Agreements (ATM) with a sales agent. Under the ATMs, we had the right to offer and sell, from time to time, shares of our common stock through the sales agent. During the period from the inception of the ATMs to the termination of the arrangements in May and September 2013, respectively, total proceeds from the sale of 1,959,078 shares common stock under the ATMs, net of sales agent commissions and other transaction costs, were \$4,228,981. Sales agent commissions of 3.0% and other transaction costs during 2013 amounted to \$277,926 in connection with the transactions.

In May 2013, we completed a registered direct offering that yielded gross proceeds of \$3,000,000 from the sale of 1,229,508 shares of our common stock at a price of \$2.44 per share. The investor also received a warrant (the May 2013 Warrant) in connection with the transaction. As required by GAAP, we allocated \$1,604,000 of the proceeds from the transaction to the May 2013 Warrant that we classified as a derivative instrument as of the transaction date. The net amount received by us, after deducting placement agent fees and transaction expenses, was \$2,695,005. In August 2013, the investor exercised the

May 2013 Warrant under a cashless exchange provision pursuant to which we issued 751,780 registered shares of common stock to the investor with a fair value of \$1,796,754 in full settlement of the May 2013 warrant, which was reclassified from a derivative liability to equity on the exercise date (Note 9).

In September 2013, we completed a private placement transaction in which we received gross proceeds of \$11,000,000 from the sale of convertible notes and warrants. We recorded the fair value of the warrants and beneficial conversion feature, net of transaction costs, as equity in the amount of \$2,946,876 and \$2,601,654, respectively, with an equal combined amount recognized as a debt discount on the Convertible Notes.

During 2014 and 2013, we received cash proceeds of \$5,122,285 and \$5,965,762, respectively, from the exercise of outstanding warrants.

On February 20, 2014, we completed an underwritten public offering and received proceeds, net of underwriter discounts and other offering costs, of \$15,259,620 from the sale and issuance of 2,357,500 shares of common stock.

On February 18, 2015, we completed an underwritten offering and received proceeds, net of underwriter discounts and other estimated offering costs, of approximately \$10,500,000 from the sale and issuance of 4,600,000 shares of common stock (Note 17).

Warrants

Warrant activity and warrants outstanding, reportable in the equivalent number of shares of our common stock that can be purchased upon exercise of the warrants, is as follows:

Warrants outstanding at January 1, 2013	9,583,097
Issued - original number	4,560,189
Issued - additional number (1)	1,016,366
Exercised (2)	(4,053,005)
Expired	(253,900)
Warrants outstanding at December 31, 2013	10,852,747
Exercised (2)	(1,828,232)
Expired	(697,110)
Warrants outstanding at December 31, 2014	8,327,405

(1) Associated with reset provisions contained within the October 27, 2006 warrant contracts.

(2) Includes cash and cashless warrant exercises.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

January 2013 Warrants

On January 24, 2013, in connection with the issuance of the January 2013 Bridge Notes (see Note 10), each investor received a warrant entitling the investor to purchase shares of our common stock equal in number to 100% of the purchase price for such investor's bridge note divided by \$4.00. The aggregate number of shares underlying the warrants is 375,000. Each warrant has a term of 5.5 years, cannot be exercised for a period of six months following the date of issuance and entitled the investor to purchase one share of our common stock at an exercise price of \$4.00 per share (the Initial Exercise Price), subject to customary anti-dilution adjustments.

If the January 2013 Bridge Notes had not been repaid in full by July 2, 2013, then a full-ratchet anti-dilution provision (price only) applied for the remaining term of the warrants, subject, however, to a floor price of \$2.84 (the Floor Price). If the January 2013 Bridge Notes were repaid in full before July 2, 2013 and on the date of such repayment the closing price for a share of our common stock was less than the Initial Exercise Price, then the exercise price was to be adjusted to the greater of (i) the Floor Price and (ii) \$0.01 above the consolidated closing bid price on the date the January 2013 Bridge Notes were repaid in full. The warrants permit a cashless exercise if at the time of exercise the underlying shares are not covered by an effective registration statement.

On July 1, 2013, we repaid in full the remaining outstanding balance under the January 2013 Bridge Notes. The early repayment allowed us to avoid issuing an additional 125,000 warrants that would have been contractually required if the notes were not repaid in full on or before July 1, 2013. As a result of the repayment, the exercise price of such Warrants was adjusted from \$4.00 per share to \$2.84 per share. No further adjustments to the exercise price of the Warrants are required to be made in the future other than adjustments pursuant to customary anti-dilution provisions. The 375,000 warrants held by the investors were exercised in full during the second half of 2013.

We also issued our placement agent a warrant to purchase 11,250 shares of our common stock, with terms substantially the same as the investor warrants described above, in partial consideration for the placement agent's services in connection with the transaction.

The investors and the placement agent had piggyback registration rights and accordingly, a resale registration statement was filed in June 2013 that was declared effective on July 5, 2013.

As a result of the contractual provisions that could potentially require us to net-cash settle the value of the remaining outstanding warrants in the event of a change in control or other fundamental change, we account for the remaining January 2013 warrant contracts as derivative instruments (see Note 9).

May 2013 Registered Direct Offering Warrants

In connection with the registered direct offering we completed on May 16, 2013, the investor received a five-year warrant entitling the investor to initially purchase up to 737,704 shares of our common stock at an exercise price of \$2.684 per share, subject to customary anti-dilution adjustments.

As an alternative to exercising the warrant in whole or in part, the investor had the right, subject to certain conditions being satisfied, to exchange all or part of the warrant for an amount equal to a prescribed Black-Scholes value of the warrant at any time after 30 days following the date of issuance if our share price was trading below the current exercise price of the warrant. The prescribed Black-Scholes value was determined at closing to be approximately \$1.56 million.

We, at our option, had the right to settle an exchange in cash, shares of our common stock (provided certain conditions were satisfied), or any combination thereof. If the investor exercised its exchange right and we elected to settle the exchange using shares of our common stock, the number of shares we would be obligated to issue was to be determined by dividing the prescribed Black-Scholes value of the warrant (or portion thereof so exchanged) by the closing bid price for a share of our common stock as of two business days prior to the date of the exchange. In the event that the aggregate number of shares originally issued to the investor plus the number of shares of common stock required to settle the exchange would have exceeded 19.99% of the issued and outstanding shares immediately preceding the closing of the offering, then, with respect to the portion of the prescribed Black-Scholes value that we could not have settled using shares of common stock we could have, at our option, settled in cash or by delivery of a one-year 10% unsecured promissory note.

The warrant also provided that, under certain circumstances, we would have had the ability to cause the holder to exercise the warrant for cash. The warrant also provided that if our common stock was delisted from the NASDAQ Capital Market, then the number of shares underlying the warrant at the time of such delisting would have automatically been adjusted upward by multiplying the number of warrant shares at the time of the delisting by 116.667%.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

On August 2, 2013, the investor exercised its exchange right under the warrant provisions. We settled the cashless exchange by issuing to the investor 751,780 registered shares of common stock. As a result of the investor's warrant exchange, we have no further obligation to issue additional shares to the investor under any circumstances, including (i) any shares associated with contingent additional warrants that would have been applicable if we were unable to remain listed on the NASDAQ Capital Market and (ii) any additional shares that could have been required to satisfy the Exchange Right if our share price declined in the future.

Based on the aforementioned contractual provisions, we considered the May 2013 Warrants to be a derivative instrument classified as a current liability, recorded at fair value and marked to market, with the changes in fair values being recognized in the respective period's statement of operations. On August 2, 2013, the fair value of the May 2013 Warrants was reclassified to additional paid-in-capital upon the exercise and settlement of the cashless exchange (Note 9).

May 2013 Line of Credit Warrants

In connection with the Loan and Security Modification Agreement on the Line of Credit executed on May 20, 2013, we issued warrants to our lender to purchase up to 25,000 shares of our common stock at a fixed exercise price of \$2.48 per share, which were fully exercised in December 2013.

September 2013 Warrants

On September 18, 2013, in connection with the private placement of the Convertible Notes (see Note 8), the independent investors and Related Parties received warrants to purchase 3,279,440 and 131,795 shares, respectively. The warrants were not exercisable for six months following the date of issuance, have a term of 5.5 years and a fixed exercise price of \$2.30 per share, subject to customary anti-dilution provisions.

Warrant Classification

We evaluate the warrants we issue in accordance with applicable accounting guidance and we have concluded that liability classification is appropriate for the warrants issued on October 27, 2006, June 22, 2007, August 25, 2008, August 3, 2009, September 4, 2009, February 18, 2011 (Series "B") and January 24, 2013 as further discussed below. Although we mark to market all the warrants classified as liabilities each period (see Note 9), all of these warrants had either expired, been fully exercised, or the fair values of the warrants of the remaining warrants were nominal as of the most recent reported balance sheet date. We have further concluded that equity classification is appropriate for all other warrants that were outstanding during the periods presented due to the fact that these warrants are considered to be indexed to our own stock, are required to be physically settled in shares of our common stock and there are no provisions that could require net-cash settlement.

The proceeds we received from the transactions that gave rise to the issuance of the warrants have been allocated to the common stock or debt issued, as applicable, and the warrants based on their relative fair values. For those transactions in which proceeds were received in connection with the sale of common stock, we aggregate the values of those warrants that we do not classify as liabilities with the fair value of the stock issued as both of these types of instruments have been classified as permanent equity.

The classification as equity for certain of the warrants could change as a result of either future modifications to the existing terms of settlement or the issuance of new financial instruments by us that could be converted into an increased or unlimited number of shares. If a change in classification of certain warrants is required in the future, the warrants would be treated as derivatives, reclassified as liabilities on the balance sheet at their fair value, and marked to market each period, with the changes in fair values being recognized in the respective period's statement of operations.

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

A summary of our outstanding warrants as of December 31, 2014 is as follows:

Issue Date	Expiration Date	Shares Subject to Outstanding Warrants	Exercise Price at End of Period	Reference
August 25, 2008	August 25, 2015	349,741	\$ 154.40	(a)
April 30, 2010 through July 1, 2010	April 30, 2015 through July 1, 2015	55,473	\$ 72.80	
October 13, 2010 and October 19, 2010	October 13, 2015 and October 19, 2015	9,037	\$ 53.60	
February 18, 2011	February 18, 2016	189,836	\$ 26.28	
February 18, 2011; Series "B"	February 18, 2016	98,481	\$ 24.00	(a)
June 15, 2011	June 15, 2016	361,458	\$ 15.40	
June 15, 2011	June 15, 2018	11,250	\$ 12.48	
June 15, 2011	June 15, 2018	30,064	\$ 15.40	
June 20, 2011	June 20, 2016	14,269	\$ 15.60	
June 20, 2011	June 20, 2018	31	\$ 15.60	
July 6, 2011	July 6, 2016	104,929	\$ 15.40	
August 23, 2011	August 23, 2016	28,750	\$ 15.40	
September 29, 2011	September 29, 2016	4,782	\$ 3.32	
October 12, 2011	October 12, 2016	115,314	\$ 3.32	
October 17, 2011 through October 21, 2011	October 17, 2016 through October 21, 2016	19,138	\$ 10.56	
December 21, 2011	December 21, 2016	819,851	\$ 4.88	

January 19, 2012	January 19, 2017	33,187	\$	4.88	
March 20, 2012; Series "B"	March 20, 2017	1,311,000	\$	4.08	
March 21, 2012; Series "B"	March 21, 2017	735,900	\$	4.08	
May 3, 2012; Series "B"	May 3, 2017	27,612	\$	4.08	
May 7, 2012	May 7, 2019	50,000	\$	3.60	
June 14, 2012; Series "B"	June 14, 2017	51,112	\$	4.08	
June 22, 2012	June 22, 2017	516,178	\$	3.40	
June 28, 2012	June 28, 2017	56,682	\$	3.40	
July 25, 2012	July 25, 2017	34,888	\$	3.56	
January 24, 2013	July 25, 2018	11,250	\$	2.84	(a)
September 18, 2013	March 18, 2019	3,287,192	\$	2.30	
		<u>8,327,405</u>			

None of the outstanding warrant contracts contain exercise price reset provisions.

- (a) These warrants contain contractual provisions that could potentially require us to net-cash settle the value of the remaining outstanding warrants in the event of a change in control or other fundamental change. Since the contractual provisions that could require us to net-cash settle the warrants are deemed not to be within our control under applicable accounting guidance, equity classification is precluded. As such, we consider these warrants to be derivative instruments that are classified as current derivative liabilities at fair value on the dates of the consolidated balance sheets presented. A summary of the changes in the fair values marked to market during the periods presented on the condensed consolidated statements of operations are disclosed in Note 9.

Shares Available

The number of undesignated shares available as of December 31, 2014 is as follows:

	Common Stock	Preferred Stock
Shares Authorized	50,000,000	20,000,000
Less shares issued and outstanding at December 31, 2014	(23,276,264)	—
Less shares designated as of December 31, 2014 for issuance under:		
Stock options (1)	(658,152)	—
Warrants outstanding	(8,327,405)	—
Conversion of principal under convertible notes (2)	(4,396,823)	—
Undesignated shares available	13,341,356	20,000,000

(1) Includes all of the options outstanding plus 202,300 shares remaining that are available for issuance under the 2011 Plan.

(2) Represents the number of shares issuable upon conversion of \$10,475,000 of principal maturing on September 18, 2018 under the Convertible Notes at a fixed conversion price of \$2.3824 per share.

Note 11: Share-Based Compensation

On October 27, 2011, our stockholders approved our 2011 Stock Incentive Plan (2011 Plan). The 2011 Plan replaced our 2002 Stock Incentive Plan (2002 Plan) and awards can no longer be issued under the 2002 Plan; however, awards issued under the 2002 Plan prior to its termination remain outstanding in accordance with their terms.

Both stock incentive plans provide that awards of stock options and shares of restricted stock may be granted to directors, employees and consultants. The terms of the award are established by the administrator of the plans, our Compensation Committee. Historically, options expire ten years after the date of grant or 30 days after termination of employment, vest ratably at the rate of 25% on each of the first four anniversaries of the grant date and have an exercise price at least equal to the market price of our stock at the date of grant. Outstanding restricted stock awards either vest at a rate of 33.33% on each of the first three anniversaries of the grant date or cliff vest on the third anniversary of the grant date.

The 2011 Plan initially provided for an aggregate of 775,000 shares available for grant, subject to adjustment in the event of a stock split, stock dividend, or other similar change in our common stock or our capital structure. The 2011 Plan contains an “evergreen” provision under which beginning on January 1, 2013, the number of shares available for grant under the 2011 Plan increases annually by an amount equal to the lesser of (x) 125,000 shares, (y) 3.0% of the number of shares outstanding as of such first day of each year or (z) a lesser number of shares determined by our Board of Directors.

During the years ended December 31, 2014 and 2013, a total of 245,600 and 126,250 shares of restricted stock and 214,100 and 142,375 stock options, respectively, were issued under our 2011 plan to our directors, executive officers and employees. As of January 1, 2015, after including the effects of grants, forfeitures and the evergreen provision, we had 327,300 shares available for issuance under the 2011 Plan.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The share-based compensation expense related to stock options and restricted stock of continuing operations included in the accompanying consolidated statements of operations and in the financial information by reportable business segment in Note 14 is:

	Fuel Storage & Systems	Corporate	Total
<u>Year Ended December 31, 2014:</u>			
Cost of product sales	\$ 21,588	\$ —	\$ 21,588
Research and development	160,853	—	160,853
Selling, general and administrative	29,661	353,888	383,549
Total share-based compensation	<u>\$ 212,102</u>	<u>\$ 353,888</u>	<u>\$ 565,990</u>
<u>Year Ended December 31, 2013:</u>			
Cost of product sales	\$ 24,603	\$ —	\$ 24,603
Research and development	80,139	—	80,139
Selling, general and administrative	15,999	269,049	285,048
Total share-based compensation	<u>\$ 120,741</u>	<u>\$ 269,049</u>	<u>\$ 389,790</u>

As of December 31, 2014, there was \$1,586,839 of unrecognized share-based compensation expense for stock options and restricted stock of which we expect to recognize \$671,733 in 2015, \$550,862 in 2016, \$302,671 in 2017 and \$61,573 in 2018.

Stock Options

Below is a summary of the options activity:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (In Years)	Aggregate Intrinsic Value
Options outstanding at January 1, 2013	173,418	\$ 24.96		
Granted	142,375	\$ 2.30		
Forfeited	(22,910)	\$ 11.47		

Expired	(12,739)	\$	57.61		
Exercised	(1,499)	\$	2.46		
Options outstanding at December 31, 2013	278,645	\$	13.37	8.40	\$1,195,735
Options outstanding at January 1, 2014	278,645	\$	13.37		
Granted	214,100	\$	4.35		
Forfeited	(13,170)	\$	8.83		
Expired	(16,040)	\$	43.86		
Exercised	(7,685)	\$	2.37		
Options outstanding at December 31, 2014	455,850	\$	8.60	8.74	\$ —
Vested and expected to vest at December 31, 2014	425,420	\$	9.04	8.78	\$ —
Options exercisable at December 31, 2014	122,353	\$	24.69	9.93	\$ —

The aggregate intrinsic value, if any, in the table above is based on our closing stock price of \$2.09 and \$7.80 per share as of the last business day of the year ended December 31, 2014 and 2013, respectively and represents the amount that would have been received by the options had all options been exercised on that date.

Below is a summary of the estimated weighted average grant-date fair value along with a summary of the assumptions used in the fair value calculations for the 214,100 and 142,375 stock options granted under the 2011 Plan during the years

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

ended December 31, 2014 and 2013, respectively. The fair value of each stock option award is estimated on the grant date using the Black-Scholes option-pricing formula. Expected volatilities are based on the historical volatility of our stock price. The expected life of options granted is derived based on the historical life of our options. The risk-free rate for periods within the expected life of the option is based on the U.S. Treasury interest rates in effect at the time of grant.

	May 29, 2014	May 15, 2014	October 24, 2013	August 19, 2013
Estimated grant-date fair value per option granted	\$3.72	\$2.95	\$3.89	\$1.45
Number of options	201,600	12,500	2,500	139,875
Exercise price per option granted	\$4.37	\$3.46	\$6.10	\$2.23
Dividend yield	—%	—%	—%	—%
Expected life - years	5.8	5.8	5.8	5.8

Risk-free interest rate	2.65%	2.65%	2.63%	2.79%
Expected volatility of common stock	116.6%	116.6%	71.1%	73.1%

A summary of the options activity of our non-vested options and changes are as follows:

	Number of Shares	Weighted- Average Exercise Price
Nonvested outstanding at January 1, 2013	123,688	\$ 6.76
Granted	142,375	\$ 2.30
Vested	(36,650)	\$ 42.50
Forfeited	(24,472)	\$ 11.47
Nonvested outstanding at December 31, 2013	<u>204,941</u>	<u>\$ 2.89</u>
Nonvested outstanding at January 1, 2014	204,941	\$ 2.89
Granted	214,100	\$ 4.35
Vested	(72,374)	\$ 24.75
Forfeited	(13,170)	\$ 8.83
Nonvested outstanding at December 31, 2014	<u>333,497</u>	<u>\$ 2.64</u>

We received cash for exercises of stock options during the years ended December 31, 2014 and 2013 of \$18,249 and \$3,688 respectively.

The total fair value of options vested was \$0 and \$44,156 for the years ended December 31, 2014 and 2013, respectively.

Restricted Stock

We periodically issue restricted stock to our directors and executives as a form of equity-based compensation. The value of the shares, measured on the date of award based upon the closing price of our common stock, is recognized as stock compensation expense ratably over the vesting period, typically three years.

Changes in outstanding restricted stock were as follows:

	Restricted Stock	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2013	38,747	\$ 47.24
Granted	126,250	\$ 2.23
Vested	(14,997)	\$ 47.20
Nonvested at December 31, 2013	150,000	\$ 2.27
Vested and expected to vest at December 31, 2013	150,000	\$ 2.27
Nonvested at January 1, 2014	150,000	\$ 2.27
Granted	245,600	\$ 4.35
Vested	(42,083)	\$ 4.35
Forfeited	(11,667)	\$ 2.41
Nonvested at December 31, 2014	341,850	\$ 3.77
Vested and expected to vest at December 31, 2014	341,850	\$ 3.77
The weighted average grant-date fair value of restricted stock granted during the year ended December 31, 2014 and 2013 was \$4.35 and \$2.23 respectively.		
The total fair value of restricted stock vested during the years ended December 31, 2014 and 2013 was \$217,992 and \$35,843, respectively.		

Note 12: Income Taxes

The following table presents the principal reasons for the difference between the effective tax rate and the federal statutory income tax rate for continuing operations for the year ended December 31:

	2014	2013
Income tax benefit at U.S. statutory rates	34.0 %	34.0 %
Derivative instruments and fair value measurements	4.7 %	(14.3)%
Share-based compensation	(0.5)%	(0.4)%
Other	(0.1)%	— %
Valuation allowance	(39.7)%	(19.6)%
Original issue discount	1.6 %	0.3 %
Effective tax rate	— %	— %

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table presents the provision for income taxes for continuing operations on a separate tax return basis as of the year ended December 31:

	2014	2013
Current:		
Federal	\$ —	\$ —
State and local	1,600	1,600
	\$ 1,600	\$ 1,600
Deferred:		
Federal	\$ (5,752,360)	\$ 68,981,592
State and local	(986,967)	5,758,375
	\$ (6,739,327)	\$ 74,739,967
Less: Change in valuation allowance	6,739,327	(74,739,967)
Subtotal	—	—
Income tax expense	\$ 1,600	\$ 1,600

The components of deferred tax assets and liabilities at December 31 were as follows:

	2014	2013
Deferred income tax assets:		
Accrued compensation	\$ 363,684	\$ 358,742
Accrued warranty	243,786	103,816
Inventory	1,575,527	1,524,902
Share-based compensation	2,768,688	2,622,451
Other comprehensive income	295,793	295,793
Tax credits	764,575	764,575
Other	677,611	335,286
Net operating loss carry-forwards	17,920,468	11,753,569
	24,610,132	17,759,134

Less: Valuation allowance	(24,294,275)	(17,554,948)
Total deferred income tax assets	315,857	204,186
Deferred income tax liabilities:		
Equipment and leasehold improvements	(315,857)	(204,186)
Net deferred tax liability	\$ —	\$ —

For our U.S. based businesses, we have a net deferred tax asset position primarily consisting of net operating loss carry forwards, a portion of which, are available to offset future taxable income. In accordance with GAAP, we have established a valuation allowance for our net deferred tax asset since it is unlikely that the asset will be fully realized based on our lack of earnings history and current evidence.

As of December 31, 2014, Schneider Power had a tax liability of \$48,300 related to the sale of a wind farm operation in May 2013.

Undistributed earnings of Schneider Power at December 31, 2014, which are nominal, are considered to be indefinitely reinvested and, accordingly, no provisions for federal and state income taxes have been provided thereon. Upon distribution of those earnings in the form of dividends or otherwise, we would be subject to both U.S. income taxes (subject to an adjustment for foreign tax credits) and withholding taxes payable to various foreign countries. Determination of the amount of unrecognized deferred income tax liability related to these earnings is not practicable.

Loss from operations before income taxes for the years ended December 31, 2014 and 2013 attributable to domestic operations was \$14.5 million and \$20.0 million, respectively, and loss attributable to foreign operations was \$0.4 million and \$3.0 million, respectively.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The U.S. tax laws contain provisions (Section 382 limitations) that limit the annual utilization of net operating loss and credit carry forwards upon the occurrence of certain events including a significant change in ownership interest. Generally, such limitations arise when the ownership of certain shareholders of public groups in the stock of a corporation change by more than 50 percentage points over a three-year period. A study was completed during 2013 to determine if an ownership change had occurred at any time between April 30, 2004 and December 31, 2012. Such an event had occurred which limits the future use of our losses and resulted in the expiration of pre-2013 Federal and State net operating losses of \$218 million and \$123 million before utilization. We may also have incurred such an event or events since 2012; however, we have not completed a study to determine the extent of the limitations, if any. Until a study is completed and the extent of the limitations is able to be determined, no additional amounts have been written off or are being presented as an uncertain tax position.

At December 31, 2014, after taking into consideration the expiration of net operating losses noted above, we had federal net operating loss carryforwards of approximately \$45 million available to offset future federal taxable income that expire between the years 2031 and 2034 and we had state net operating loss carryforwards of approximately \$45 million available to offset future state taxable income that expire between the years 2031 and 2034.

We have no unrecognized tax benefits for uncertain tax positions as defined under GAAP for any of the periods presented. To the extent applicable in the future, interest and penalties related to income tax liabilities will be included in pre-tax income as interest expense and tax penalties.

At December 31, 2014, our U.S. federal tax returns related to the years ended April 30, 2010 and April 30, 2011, the eight months ended December 31, 2011 and the years ended December 31, 2012 through December 31, 2014 remain open to examination by the tax authorities. However, we have consolidated or acquired net operating losses beginning in the tax year ended September 27, 1998 that would cause the statute of limitations to remain open for the year in which the net operating loss was incurred only to the extent that the net operating losses may be adjusted.

Note 13: Earnings (Loss) Per Share

We compute net income (loss) per share by dividing the net income (loss) for the period by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing the net income (loss) for the period by the weighted average number of common and common equivalent shares outstanding during the period. We consider common equivalent shares from the exercise of stock options, warrants and convertible debt payable in the instance where the shares are dilutive to our net loss. The effects of stock options, warrants and convertible debt were anti-dilutive for all periods presented.

The following table sets forth the computation of basic and diluted loss per share as of the year ended December 31:

	<u>2014</u>	<u>2013</u>
Numerators for basic and diluted loss per share data:		
Net loss from continuing operations	\$ (14,485,870)	\$ (20,019,538)
Net loss from discontinued operations	(437,734)	(3,025,028)
Net loss	<u>\$ (14,923,604)</u>	<u>\$ (23,044,566)</u>
Denominator for basic and diluted loss per share data - weighted-average shares	22,407,818	14,642,320
Basic and diluted loss per share data:		
Net loss from continuing operations	\$ (0.65)	\$ (1.37)
Net loss from discontinued operations	(0.02)	(0.20)
Net loss	<u>\$ (0.67)</u>	<u>\$ (1.57)</u>

For the periods presented above, shares of common stock potentially issuable upon the exercise of options, warrants and convertible notes were excluded in the computation of diluted per share data, as the effects would be anti-dilutive.

The following table sets forth the amount of shares excluded from the computation of diluted earnings per share, as to do so would have been anti-dilutive as of the years ended December 31:

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	<u>2014</u>	<u>2013</u>
Stock Options	455,850	278,645

Warrants	8,327,405	10,852,747
Convertible Notes	4,396,823	4,617,187
	13,180,078	15,748,579

Note 14: Business Segments and Geographic Information

Business Segments

We classify our business into three reporting segments: Fuel Storage & Systems, Renewable Energy and Corporate. Due to our plan to dispose of Schneider Power within the next 12 months, the Renewable Energy business segment, consisting entirely of the operations of Schneider Power, is classified as discontinued operations (see Note 3).

The chief operating decision maker allocates resources and tracks performance by the reporting segments. We evaluate performance based on profit or loss from operations before interest, non-operating income and expenses, and income taxes.

Fuel Storage & Systems Segment

Our Fuel Storage & Systems segment is a leader in the development and production of CNG fuel storage systems and the integration of alternative fuel vehicle system technologies including engine and vehicle control systems and drivetrains.

This segment designs and manufactures advanced light-weight CNG storage tanks and supplies these tanks, in addition to fully-integrated natural gas storage systems, to truck and automotive OEMs and aftermarket OEM truck integrators. These high-pressure CNG and hydrogen storage tanks use advanced composite technology and are capable of storage at up to 10,000 psi. This segment's powertrain engineering, system integration, vehicle manufacturing, and assembly capabilities provides fast-to-market solutions to support the integration and production of natural gas and hydrogen fuel storage systems, hybrid technologies and transportable refueling stations.

This segment generates revenue from two sources: product sales and contract services. Product sales are derived primarily from the sale of storage tanks and packaged fuel system modules for CNG applications. Contract services revenue is generated by providing engineering design and support to OEMs and other customers, so that our fuel systems and advanced propulsion systems integrate and operate with our customer's CNG, hybrid or fuel cell applications. Contract services revenue is also generated from customers in the aerospace industry, material science, and other governmental entities and agencies.

We expense all research and development when incurred. We will continue to require significant research and development expenditures over the next several years in order to increase the commercialization of our products for natural gas, hybrid, hydrogen fuel cell and other alternative fuel applications.

Corporate Segment

The Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel Storage & Systems or Renewable Energy reporting segments. Corporate expenses consist primarily of personnel costs, share-based compensation costs and related general and administrative costs for executive, finance, legal, human resources, investor relations and our board of directors.

Geographic Information

Our long-lived assets as of December 31, 2014 related to our continuing operations are primarily based within our Lake Forest, CA facilities and long-lived assets related to our discontinued operations are primarily located in Ontario, Canada.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Revenue for continuing operations by country is as follows:

	Year Ended December 31,	
	2014	2013
United States	\$ 32,400,794	\$ 30,369,607
Canada	916,517	226,134
Germany	355,350	1,148,114
Australia	344,813	—
India	76,350	140,726
United Kingdom	9,170	—
Spain	—	9,619
Taiwan	—	9,490
Total	<u>\$ 34,102,994</u>	<u>\$ 31,903,690</u>

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Financial Information by Business Segment

Selected financial information of continuing operations by business segment is as follows:

Years Ended December 31,

	2014	2013
<u>Revenues</u>		
Fuel Storage & Systems:		
Net product sales	\$ 25,785,837	\$ 22,943,639
Contract services (1)	8,317,157	8,960,051
Total revenues	<u>\$ 34,102,994</u>	<u>\$ 31,903,690</u>
<u>Cost of Revenues</u>		
Fuel Storage & Systems:		
Cost of product sales	\$ 23,743,646	\$ 16,261,662
Cost of contract services	5,220,844	5,296,499
Total cost of revenues	<u>\$ 28,964,490</u>	<u>\$ 21,558,161</u>
<u>Gross Margin</u>		
Fuel Storage & Systems:		
Net product sales	\$ 2,042,191	\$ 6,681,977
Contract services	3,096,313	3,663,552
Total gross margin	<u>\$ 5,138,504</u>	<u>\$ 10,345,529</u>
<u>Operating Expenses</u>		
Fuel Storage & Systems:		
Research and development	\$ 7,616,018	\$ 5,996,414
Selling, general, and administrative	3,405,513	4,244,781
Total	11,021,531	10,241,195
Corporate		
Selling, general, and administrative	6,832,741	6,841,239
Total	<u>\$ 17,854,272</u>	<u>\$ 17,082,434</u>
<u>Operating Income (Loss)</u>		
Fuel Storage & Systems	\$ (5,883,027)	\$ 104,334
Corporate	(6,832,741)	(6,841,239)
Total operating loss	<u>\$ (12,715,768)</u>	<u>\$ (6,736,905)</u>
<u>Capital Expenditures</u>		
Fuel Storage & Systems	\$ 6,081,290	\$ 2,963,301
Corporate	64,390	4,554
Total capital expenditures	<u>\$ 6,145,680</u>	<u>\$ 2,967,855</u>
<u>Depreciation</u>		

Fuel Storage & Systems	\$	1,429,064	\$	1,040,791
Corporate		46,234		41,556
Total depreciation	\$	1,475,298	\$	1,082,347

- (1) In December 2013, we and General Motors amended certain contractual arrangements under a development program that, in part, removed certain gain contingencies and, consequently, positively impacted revenue recognition by \$1.7 million for services provided through the date of the amendment under the program. In connection with the contractual amendments, we also immediately recognized \$0.8 million of deferred engineering costs associated with the program.

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**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Identifiable assets by reporting segment are as follows as of December 31:

	2014	2013
<u>Identifiable Assets</u>		
Fuel Storage & Systems	\$ 42,108,373	\$ 31,727,999
Renewable Energy - Held for Sale	23,161,999	26,358,742
Corporate	6,406,142	7,917,801
	<u>\$ 71,676,514</u>	<u>\$ 66,004,542</u>

Note 15: Revenue and Purchase Concentrations

Agility Fuel Systems comprised 28%, and 45%, Ryder Vehicle Purchasing LLC comprised 12%, and 0%, General Motors comprised 11% and 8%, and AGI and its affiliates comprised 9% and 12% of the total consolidated revenue for continuing operations reported for the years ended December 31, 2014 and 2013, respectively.

As of December 31, 2014 and December 31, 2013, AGI and its affiliates comprised of 25% and 4% Agility Fuel Systems comprised 10% and 38% and General Motors comprised 9% and 24% of our total outstanding accounts receivable for continuing operations, respectively.

For the years ended December 31, 2014 and 2013, purchases from one supplier constituted approximately 37%, and 39%, respectively, of net raw materials purchases of our continuing operations. For the years ended December 31, 2014 and 2013, the top suppliers accounted for approximately 65% and 77%, respectively, of net raw materials purchases of our continuing operations.

Note 16: Commitments and Contingencies

Commitments

We lease our corporate operations, manufacturing, assembly, design, testing and research and development facilities, which is located at our campus in Lake Forest, California. The operating leases are scheduled to expire beginning on May 31, 2018; however, we have the option to extend the lease until May 31, 2020 for one facility and May 31, 2025 for the remaining two facilities. As of December 31, 2014, the monthly lease payment was \$163,472. We incurred rent expense of \$1,775,323 in 2014 and \$2,308,537 in 2013.

At December 31, 2014, minimum future lease commitments for our continuing operations under non-cancelable operating leases for facilities and equipment having lease terms in excess of one year are payable as follows:

		Lease Commitments
2015	\$	1,695,293
2016		1,531,362
2017		1,577,325
2018		1,624,662
2019		1,673,400
Thereafter		4,568,271
Total minimum lease payments	\$	<u>12,670,313</u>

Litigation

Management and our legal counsel periodically review the probable outcome of pending proceedings and the costs reasonably expected to be incurred. We accrue for these costs when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

On June 6, 2013, Iroquois Master Fund Ltd (Iroquois) filed suit against us in the United States District Court for the Southern District of New York (the Complaint). In the Complaint, Iroquois asserted that the registered direct offering we completed on May 16, 2013 triggered the full-ratchet anti dilution reset provision contained in its October 2006 Warrant contract and, as a result, the exercise price of its October 2006 Warrant should have been adjusted downward to \$0.932 and the

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

number of shares underlying its October 2006 Warrant proportionately increased. Although we did adjust the exercise price to \$1.5142 effective as of August 2, 2013 and increased the number of warrants pursuant to our interpretation of the applicable provisions of the October 2006 Warrant, Iroquois claimed that we were in breach of the warrant contract due to our refusal to honor the lower exercise price and higher number of shares claimed by Iroquois.

In connection with the Complaint, Iroquois asserted that it was entitled to either (i) monetary damages (which Iroquois estimated to be approximately \$4.1 million as of November 4, 2013) or (ii) in the alternative, either (a) specific performance in the form of delivery by us of 810,805 October 2006 Warrants exercisable at \$0.932 per share with equitable modifications to the terms of the October 2006

Warrants to compensate Iroquois for the alleged delay in issuance, plus the return of \$542,564 Iroquois claims it overpaid when it exercised its October 2006 Warrants, or (b) 852,220 shares of our common stock. Iroquois also requested interest at 9% per annum on any monetary award and recovery of its attorney’s fees and other related expenses, if successful.

A bench trial was held on May 20 and 21, 2014. On May 23, 2014, the Court concluded that a reset did occur on May 16, 2013, but rejected Iroquois’s position with respect to the appropriate reset price. The Court determined that the exercise price of the October 2006 Warrant should have been reset to \$1.4284 on May 16, 2013, and reset again to \$1.2488 on August 2, 2013, the date the holder of the May 2013 Warrant exercised the Exchange Feature contained in the May 2013 Warrant.

On June 17, 2014, the Court issued its Decision and Order, wherein the Court denied Iroquois’ request for specific performance damages but did grant Iroquois’ request for monetary damages, prejudgment interest and attorney’s fees. The total amount that we have incurred in connection with the Iroquois litigation is \$1,813,206, consisting of (i) \$1,015,440 in monetary damages, (ii) \$704,857 in legal fees and other expenses and (iii) \$92,909 in interest related expenses. We recorded these amounts in our consolidated statements of operations and comprehensive loss during 2014 which are included in the other expenses and interest expense classifications. On September 3, 2014, we paid the monetary damages and interest and on January 23, 2015 we paid the legal fees and other expenses.

On December 15, 2014, Iroquois Master Fund (“Iroquois”) filed a Notice of Appeal with the United States Court of Appeals for the Second Circuit from the judgment entered by the United States District Court for the Southern District of New York. Although we believe that we will prevail on appeal, we can provide no assurance that the Second Circuit will uphold District Court’s judgment. If the Second Circuit were to reverse the District Court’s decision, then we may have to pay Iroquois additional damages and reimburse them for their reasonable attorney fees incurred in connection with the appeal.

Compensation Plan

We sponsor a defined contribution plan (the “401K Plan”) for our continuing operations that is qualified under Internal Revenue Service Code Section 401(k). The 401K Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Under the 401K Plan, all applicable employees who are at least age twenty-one or older are eligible to participate in the 401K Plan at the beginning of the next month after their first day of employment with us. Employee contributions to the 401K Plan are based on funding standards established by ERISA. Our matching contributions under the 401K Plan are discretionary and match elective salary deferrals up to 3% of compensation.

We made contributions of \$329,997 and \$268,690 for each of the years ended December 31, 2014 and 2013, respectively.

Note 17: Subsequent Events

Samsung Debt

On January 8, 2015, Schneider Power and Zephyr notified Samsung of their assertion that Samsung is in default of its obligations under a Turbine Supply Agreement and an Operations and Maintenance Agreement. Following this notification and initial discussions, Schneider Power and Zephyr entered into a First Amendment to Master Amendment Agreement on January 26, 2015 pursuant to which the parties agreed to defer until January 31, 2016 approximately CAD \$462,167 of interest owed to Samsung under the Master Amendment Agreement that was originally scheduled to be paid on January 31, 2015 (see Note 3).

On February 10, 2015, we and Bridge Bank, National Association, entered into a Third Loan and Security Modification Agreement pursuant to which, among other things, (i) the line of credit was increased from \$5.0 million to \$7.5 million, (ii) the amount of inventory eligible to be included in the borrowing base is limited to \$2.0 million, (iii) a fee of 0.15% per annum, payable quarterly in arrears, is charged on the average unused portion of the line of credit, and (iv) for any period that the outstanding advances on the line of credit exceeds \$5.0 million, then the amount of unrestricted cash that we are required to maintain at Bridge Bank increases from \$1.5 million to \$2.0 million.

The interest rate on the credit facility, which is a variable rate at the greater of 3.75% or Bridge Bank's prime rate plus 0.5%, did not change as a result of the Third Amendment (see Note 8).

February 2015 Public Offering

On February 18, 2015, we completed an underwritten public offering of 4,600,000 shares of common stock, \$0.02 par value per share. The number of shares sold in the offering includes the underwriter's full exercise of the over-allotment option to purchase an additional 600,000 shares of common stock. The net proceeds we received, net of underwriting discounts and other estimated offering expenses, were approximately \$10.5 million.

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**SCHEDULE II
VALUATION AND QUALIFYING ACCOUNTS**

Valuation and qualifying accounts are as follows:

Account Description	Balance at beginning of year	Additions charged to costs and expenses	Deductions	Balance at end of year
Allowance for doubtful accounts:				
Year ended December 31, 2014	\$ 398,684	\$ (99,947)	\$ (7,093) (a)	\$ 291,644
Year ended December 31, 2013	429,686	535,957	(566,959) (a)	398,684
Provision for obsolescence reserve:				
Year ended December 31, 2014	3,877,161	68,584	—	3,945,745
Year ended December 31, 2013	3,359,764	517,397	—	3,877,161
Warranty reserve:				
Year ended December 31, 2014	399,171	435,453	(222,625) (b)	611,999
Year ended December 31, 2013	364,749	101,399	(66,977) (b)	399,171

(a) Primarily relates to gross accounts receivable and specific allowances against those gross receivables being written-off during the period, net of recoveries.

(b) Consists of material and labor costs incurred to analyze, repair or replace products under warranty contracts.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: March 16, 2015

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

By: /S/ BRADLEY J. TIMON

Bradley J. Timon, Chief Financial Officer and Treasurer
[Authorized Signatory and Principal Financial Officer]

Power of Attorney

Each director and officer of the Company whose signature appears below hereby appoints W. Brian Olson and Bradley J. Timon, and each of them individually, as his or her true and lawful attorney-in-fact and agent to sign in his name and behalf, in any and all capacities stated below, and to file this Annual Report on Form 10-K, and any and all amendments thereto, with the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report has been signed below by the following persons on behalf of the Company in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ W. BRIAN OLSON</u> W. Brian Olson	President, Chief Executive Officer and Director (Principal Executive Officer)	March 16, 2015
<u>/S/ BRADLEY J. TIMON</u> Bradley J. Timon	Chief Financial Officer and Treasurer (Principal Financial Officer)	March 16, 2015
<u>/S/ CHANDRU SHAROFF</u>	Controller (Principal Accounting Officer)	March 16, 2015

Chandru Sharoff		
/S/ JONATHAN LUNDY	Chairman of the Board of Directors	March 16, 2015
Jonathan Lundy		
/S/ G. SCOTT SAMUELSEN	Director	March 16, 2015
G. Scott Samuelsen		
/S/ CARL E. SHEFFER	Director	March 16, 2015
Carl E. Sheffer		
/S/ PAUL GRUTZNER	Director	March 16, 2015
Paul Grutzner		
/S/ TIMOTHY A. MCGAW	Director	March 16, 2015
Timothy A. McGaw		