QUANTUM
TECHNOLOGIES

Powering the Future


Wind


Automotive


Solar


Aerospace

2010 Annual Report

Dear Stockholders,

We spent much of fiscal 2010 enhancing our business model as an emerging renewable and clean energy company. During this period, we completed development of our proprietary Q-Drive™ hybrid vehicle drive system, completed the acquisition of Schneider Power, and helped facilitate the expansion of Asola's 45 megawatt solar facility.

Just recently, we announced that we signed a definitive supply agreement with Fisker Automotive, an American green car company that Quantum co-founded, to supply key components and control systems for the Q-Drive™ powertrain system that is being incorporated into the Fisker Karma. We will also receive a royalty payment on each Karma that incorporates our Q-Drive. Fisker Automotive received a loan from the U.S. Department of Energy for $528.7 million in April 2010. This DOE loan will be used by Fisker Automotive for the development and production of two models of plug-in hybrid electric vehicles, including the Karma, a four door sports sedan, and a line of family-oriented models being developed under Fisker Automotive's Project Nina program. We expect to supply the first production systems this fall to enable the start of volume production, which is expected to commence in February 2011, with a forecasted production volume of 15,000 vehicles per year. We are extremely excited to see Fisker Automotive moving into the production phase and the fruition of many years of dedicated work to reach this milestone.

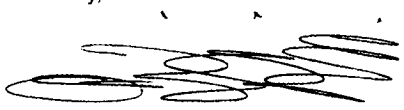
During fiscal 2010, we acquired Schneider Power Inc., a wind and solar utility scale renewable energy generation development company based in Ontario, Canada with a renewable energy project pipeline in excess of 1 gigawatt. This acquisition makes Quantum a more vertically and horizontally integrated alternative energy company with an experienced project development skill set for both wind and solar power generation projects. We expect to expand Schneider Power's existing portfolio of renewable energy assets with the development of new projects, with each new project producing positive cash flows over a 25 year period.

Our German affiliate, Asola, unveiled a new state-of-the-art solar manufacturing facility earlier this year that produces silicon solar photovoltaic modules for the global markets. The facility has reached its 45 megawatt capacity and European sales remain strong for Asola. Asola reached record revenues this past year and continue to recognize bottom line profitability. Asola produces and markets high-quality silicon-based photovoltaic solar modules that comprise mono-crystalline or polycrystalline silicon cells. Asola's technologies include high efficiency flat solar modules for residential and industrial applications, and specialized solar spherical systems for automotive applications. Just recently, Quantum and Asola were awarded a pre-production contract by Fisker Automotive for vehicle-integrated solar photovoltaic systems. Under this contract, we and Asola will design and procure tooling to enable production of solar roof modules for the Fisker Karma. Under the terms of our supply arrangement with Fisker Automotive, we will be the exclusive supplier of solar roof modules for the Fisker Karma. Quantum and Asola have developed one of the largest monolithic automotive solar roofs in the world that involves complex double curvature for the Karma.

Clean energy has become a driving force for economic recovery and we are excited to be part of it. We plan to further expand our interests in renewable energy thereby allowing us to benefit from the ongoing adaptation of renewable energy by consumers, industries and utilities. Governments around the world are implementing progressive energy policies and providing financial incentives for renewable energy. Within the last twelve months, we have received or been awarded government contracts, grants or funding in Germany, Ontario Canada, and right here in our home state of California. It's an exciting time to be a renewable energy company.

In fiscal 2010, we saw new and promising developments for Quantum and with the efforts of our dedicated employees and the support from our Board of Directors, we can expect continued success. I thank our employees for their dedication and hard work. We thank you, our stockholders, for your continued support.

Sincerely,



Alan Niedzwiecki
President & CEO

QUANTUM TECHNOLOGIES

Form 10-K

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 April 30, 2010 OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission File No.: 0-49629

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**33-0933072**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification Number)**

17872 Cartwright Road, Irvine, CA 92614
(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, $0.001 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 ☒

The aggregate market value of the common stock held by non-affiliates of the Registrant as of October 31, 2009 was approximately $155.1 million, based upon the closing sale price of the Registrant's common stock on such date, as reported on the Nasdaq Global Market. Shares of Common stock held by each executive officer and director and each person owning more than 10% of the outstanding common stock of the Registrant have been excluded in that such persons may be deemed to be affiliates of the Registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares outstanding of each of the issuer's classes of common stock as of June 21, 2010: 181,853,469 shares of common stock, $.001 par value per share, and 999,969 shares of Series B common stock, $.001 par value per share.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

TABLE OF CONTENTS

FORWARD-LOOKING STATEMENTS

All statements included in this Annual Report on Form 10-K and any 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. Examples of forward-looking statements include, but are not limited to, statements regarding our expectation that we will be able to raise a sufficient level of debt or equity capital to fund our operations, our belief that our current operating plan will allow us to achieve profitability, our expectations of future revenue, expenses, gross margin and operating profit (loss), the level of growth in the hybrid, plug-in hybrid and fuel cell and alternative fuel industries, when our Q Drive powertrain architecture and other products and technologies will be commercialized, our plans to develop new lower cost technologies, when Fisker Automotive will go to production, the number of vehicles that Fisker Automotive expects to sell, our belief that we will be a supplier to Fisker Automotive on a long-term basis, our belief that we have sufficient liquidity to fund operations through at least April 30, 2011, our intentions to commission a solar manufacturing facility in southern California, our expectation that the US government will continue to support the advancement of alternative fuel technologies through loans, grants and tax credits, our belief that we have a competitive advantage over our competitors, our intentions to support the growth of our subsidiary, Schneider Power, Inc., and our German affiliate, Asola, our intentions to establish joint development programs and strategic alliances with leaders in the alternative energy industry, our relationship with General Motors and the impact such relationship will have on our ability to develop our products, the impact that new accounting pronouncements will have on our financial statements, and the effect that an adverse result in Asola's dispute with its solar cell supplier would have on our financial statements.

Forward-looking statements generally 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. 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 prospectus under the "Risk Factors" section beginning on Page 23 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.

Many of the risk factors are beyond our ability to control or predict. You should not unduly rely on any of our forward-looking statements. These statements are made only as of this Annual Report. Except as required by law, we are not obligated to publicly release any revisions to these forward-looking statements to reflect future events or developments. All subsequent written and oral forward-looking statements attributable to us and persons acting on our behalf are qualified in their entirety by the cautionary statements contained in this section and elsewhere in this prospectus.

PART I

Item 1. Business.

Overview

Unless the context otherwise requires, "we," "our," "us," "Quantum" and similar expressions refers to Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries. We are a United States public company listed on NASDAQ with our corporate offices located in Irvine, California.

We are a fully integrated alternative energy company—a leader in the development and production of advanced clean propulsion systems, and renewable energy generation systems and services. We believe that we are uniquely positioned to integrate advanced fuel system, electric drive, software control strategies and propulsion control system technologies for alternative fuel vehicles, in particular, plug-in electric hybrid, electric and hydrogen hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics, system control strategies and system integration.

Our Fuel Systems business segment provides powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and propulsion control systems for vehicles and other applications including fuel cells, hybrids, plug-in electric hybrid, alternative fuels, and hydrogen refueling stations and systems. We also design, engineer and manufacture hybrid and fuel cell vehicles.

Our portfolio of technologies and products include hybrid electric and plug-in hybrid electric powertrain systems, advanced battery control systems, electronic vehicle control systems and software, fuel storage and fuel delivery products and control systems for use in hybrid, fuel cell, and other alternative fuel vehicles. We also design and manufacture computerized controls, regulators and automatic shut-off equipment, lightweight, high-pressure hydrogen and natural gas storage tanks using advanced composite technology and hydrogen refueling systems.

With our recent acquisition of Schneider Power, Inc. (SPI) discussed further below, our business now includes the Renewable Energy business segment, which consists of development, construction and operation of wind and solar energy farms.

We classify our business operations into three reporting segments as of April 30, 2010: Fuel Systems, Renewable Energy (as of April 16, 2010) and Corporate. The Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel Systems or Renewable Energy business segments. The Corporate segment also includes activities of our anticipated future operating segments.

Prior to January 16, 2008, we also had a Tecstar Automotive Group business segment, which ceased operations on January 16, 2008 when we transferred substantially all of that segment's business operations to an affiliate of our senior lender. As a result of such transfer, the historical activities of the Tecstar Automotive Group business segment are now classified as discontinued operations. In addition, certain historical indirect expenses of the Corporate segment that were directly attributable to the Tecstar Automotive Group business activities and would not have been incurred had the Tecstar Automotive Group business segment not existed, have been reclassified and are reported as discontinued operations.

Our customer base includes automotive Original Equipment Manufacturers (OEMs), military and governmental agencies, aerospace, and other strategic alliance partners.

Background

We were incorporated in the state of Delaware in October 2000 as a wholly-owned subsidiary of IMPCO Technologies, Inc (IMPCO). We spun off from IMPCO and became a separate company on July 23, 2002.

On April 16, 2010 we completed our acquisition of Toronto, Ontario, Canada-based Schneider Power, Inc. (SPI) under the terms of a definitive Arrangement Agreement executed on November 24, 2009 (the "Arrangement Agreement") pursuant to which Quantum acquired all of the outstanding shares of SPI in a stock-for-stock exchange. Effective upon the closing of the Arrangement Agreement, we now operate SPI as a wholly-owned subsidiary. SPI is a renewable energy company that develops and constructs wind energy farms. SPI also owns and operates a wind farm in Ontario, Canada and has a significant portfolio of renewable wind and solar energy projects in North America and the Caribbean that it is currently developing.

In connection with the closing of the Arrangement Agreement, we issued a total of 16.8 million shares of our common stock to SPI shareholders (representing 0.236 of a Quantum common share for each SPI common share outstanding), which included 0.2 million of shares issued to holders of SPI in-the-money compensatory stock options at the time of closing. All outstanding SPI stock options and SPI warrants were cancelled effective upon the closing of the transaction. We provided the former SPI warrant holders with Quantum replacement warrants that allows these warrant holders to purchase up to 2.1 million shares of our common stock at exercise prices ranging from $0.48 to $2.41 per share that expire on dates through May 13, 2011. The shares issued in connection with the Arrangement Agreement represented approximately 10% of our total shares outstanding on a post-transaction basis. The closing of the Arrangement Agreement was accounted for as an acquisition of SPI by Quantum. Pursuant to the terms of the Arrangement Agreement, we appointed an individual nominated by SPI to fill a vacancy on our Board of Directors.

On August 27, 2008, start-up activities were initiated in Quantum Solar Energy, Inc. (Quantum Solar), a new venture based in Irvine, California and formed by us along with ConSolTec GmbH (the majority shareholder of asola Advanced and Automotive Solar Systems GmbH (Asola)), for the production and distribution of mono and poly-crystalline silicon solar modules with an initial capacity of 45 megawatts (MW). We currently own 85.0% of Quantum Solar and the remaining 15.0% is owned by the majority shareholder of our affiliate, Asola. All activities of the consolidated subsidiary are included in our Corporate segment and to date principally consist of partial payments on long lead assembly equipment under construction for solar module production capability.

On January 16, 2008, we completed a series of transactions that resulted in the disposal of substantially all the assets of our former Tecstar Automotive Group business segment. Prior to the disposal, the Tecstar Automotive Group business segment consisted of all of the business activities we acquired on March 3, 2005 when we completed our merger with Tecstar Automotive Group, Inc. as well as subsequent specialty vehicle business acquisitions.

Business Operations

Hybrid and Fuel System Operations

We provide hybrid drivetrain and advanced fuel system design, powertrain engineering, electronic control and software strategies, system integration, manufacturing and assembly of propulsion systems and sub-systems for a variety of automotive applications including plug-in hybrid electric, hybrid electric, fuel cell and other alternative fuel vehicles. We also design, engineer and manufacture hybrid and fuel cell concept vehicles and hydrogen refueling systems primarily for use in the transportation, aerospace, and military industries. Our hybrid drive system, which we refer to as *Q-Drive* is comprised of a lithium-ion battery pack, an optimized generator, traction motor(s), transmission/transaxle, inverters, DC-DC converter, hybrid controller, controls strategies and software subsystems designed to improve vehicle fuel economy and performance, leverage existing gas station infrastructure, and utilize home-based battery recharging. We also have other derivative drive systems within our family of hybrid drives that have evolved from the *Q-Drive* hybrid drive system, including a new advanced all-wheel-drive diesel hybrid electric powertrain that we refer to as the "*Q-Force.*" Our packaged fuel systems comprise the powertrain, alternative fuel storage, injection, regulation, monitoring, and electronics and control systems to improve efficiency, enhance power output, and reduce pollutant emissions from hybrids, plug-in hybrids, internal combustion engines and hydrogen fuel cell vehicles.

We supply our hybrid electric drive systems and packaged fuel systems for alternative fuel vehicles to OEM customers for use by consumers and for commercial and government fleets. Since 1997, we have sold approximately 20,000 systems for alternative fuel vehicles, primarily to General Motors Corporation and its affiliates (General Motors). We believe that a commercial market will begin to develop for our *Q-Drive* system or certain *Q-Drive* subsystems within the next year, especially for luxury high performance vehicle applications due to Fisker Automotive's planned launch of the Fisker Karma vehicle platform. We believe this is the first step to market introduction and to demonstrate the technical feasibility and fuel economy advantages of plug-in electric vehicle (PHEV) technology. Within the next two years, we plan to begin engineering and development of a "2nd Generation" scaled version of the *Q-Drive* that is specifically directed at lower-cost light duty vehicles, including mid-size cars and trucks, to significantly advance PHEVs and the average fuel economy in the near term.

We also provide our hybrid electric propulsion systems, gaseous hydrogen fuel systems and refueling products for fuel cell applications, and compressed natural gas fuel systems to major OEMs through funded research and development contracts and on a prototype basis. These hydrogen fuel cell systems and hydrogen refueling products are not currently manufactured in high volumes and will require additional product development. We expect a commercial market to develop for our hydrogen and fuel cell vehicle products further in the future.

Our products and engineering services are designed to meet the demand for vehicles to achieve better fuel economy, which in turn will decrease fuel costs, lessen dependence on crude oil, reduce harmful emissions and meet a growing demand for "green vehicle" technology. Our products and services include:

- *Hybrid electric powertrain systems*—advanced electric propulsion vehicle drive systems that incorporate lithium-ion batteries, an optimized generator, traction motors, transmission/transaxle, inverters and motor control software, DC-DC converter, hybrid controller and software, battery recharging via on-board optimized generator powered by an internal combustion engine or via home-based plug-in capabilities, and integrated hybrid electric control architecture and strategy;
- *Lithium ion and advanced battery control systems*—battery management systems, control algorithms, and fully integrated battery packs developed for automotive hybrid and fuel cell applications as well as for energy storage applications for renewable energy, such as solar photovoltaic applications;
- *Electronic vehicle control systems and software*—solid-state components, electronic controls and proprietary software designed to precisely control powertrain, fuel delivery and vehicle performance. These control systems and software monitor and optimize electrical control strategies or gaseous fuel flow to drive systems to meet manufacturers' hybrid electric, fuel cell, or engine requirements. The 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;
- *Fuel storage*—advanced composite, ultra-lightweight tanks that provide cost-effective storage of hydrogen or natural gas;
- *Fuel delivery*—pressure regulators, fuel injectors, flow control valves, and other components designed to control the pressure, flow and metering of gaseous fuels; and
- *Systems integration*—services to integrate powertrain systems, advanced electronic vehicle control components, electric drive and battery control systems, power electronics, fuel storage, fuel delivery, and other ancillary components to meet OEM requirements, including the complete design of fuel cell and hybrid concept vehicles.

The current market for our hybrid drive systems and packaged fuel systems for PHEVs, electric, fuel cell and hydrogen hybrid applications is the emerging world market for passenger, fleet, industrial and military vehicles. We plan to continue the development of our hybrid drive systems and hydrogen vehicle and refueling technologies to meet market opportunities. We are focusing our enabling technology marketing efforts on North America, Europe and Asia-Pacific.

Renewable Energy Generation and Development Projects

Through our wholly-owned subsidiary, SPI, we are a licensed electricity generator and wholesaler. We currently own and operate a 1.6 megawatt (MW) wind farm in Ontario, Canada. In addition, we have a portfolio of wind and solar farm projects in North America and the Caribbean with potential capacity in excess of 1,000 MW that are in various stages of development. Development of wind and solar farm projects involves several sequential stages of completion and advancement before the project becomes operational. These stages will generally include:

- *Feasibility Studies*—studies are first conducted to obtain sufficient data to validate the energy capacity of a prospective project;
- *Land Easements*—for land parcels that we do not control, we must negotiate with local landowners to obtain easements to allow for the development of a wind and solar project on their properties;
- *Grid Interconnections*—applications are submitted to the local regulated utility distributor to obtain approval for grid interconnections on the subject project;
- *Environmental Studies*—assessments and feasibility studies are completed and submitted to federal, provincial and municipal governments to obtain permits for construction and commissioning of the project;
- *Power Purchase Agreements (PPAs)*—PPAs are negotiated and secured with the local regulated utility distributor and establish rates to be paid for power generated by our projects and the term of the agreement (generally 20 years);
- *Construction Financing*—installation of the project infrastructure and systems requires significant capital outlays that is financed with equity capital, debt or a combination thereof;
- *Commissioning*—upon completion of the construction phase, standard electrical tests are performed and adjustments are made to the wind turbines and/or solar panel arrays to improve the efficiency of the installed systems.

An energy project may be financed with equity, debt or a combination thereof. Due to SPI's limited cash availability and the high cost of development and construction of a project, SPI has historically entered into strategic relationships to provide for project financing. SPI will evaluate its project portfolio and assess sell versus hold factors and the underlying opportunity to develop and retain ownership of its projects. If SPI decides to enter into strategic relationships to provide for project financing on certain of its projects, we anticipate that a typical strategic relationship would be structured such that SPI would transfer a majority interest (usually 80% to 90%) to a strategic partner in exchange for the strategic partner agreeing to fund the development and construction of the renewable energy project. We would anticipate that SPI and the strategic partner would also enter into a development agreement pursuant to which SPI would provide development services for the project and would receive a development fee in return.

In addition to energy sales on our existing wind farm and future wind and solar energy farms that we are currently developing, we anticipate generating revenues and cash flows through the sale of ownership interests in our renewable energy projects and through development and construction services for renewable energy projects owned by third parties.

Industry Overview and Recent Developments

Hybrid and Plug-in Hybrid Electric Vehicle Industry

The emerging hybrid and plug-in hybrid electric vehicle industry offers a technological option to address increasing worldwide energy costs, the long-term availability of petroleum reserves and environmental concerns. Hybrid electric vehicles use both an electric motor and an internal combustion engine to propel the vehicle. A hybrid is designed to capture energy that is normally lost through braking and coasting to recharge the batteries

(regenerative braking), which in turn powers the electric motor without the need for plugging in. The hybrid vehicle market is growing. There is a variety of hybrid electric vehicles available to consumers today with more models expected by 2011. Cities across the country are already benefiting from the use of hybrid electric buses in their communities. Advantages of hybrid electric vehicles include: reduced fuel consumption and tailpipe emissions, optimized fuel efficiency and performance, lower fuel costs, and they are able to use the existing gas station infrastructure. The main challenges include the limited availability of components (batteries, powertrains, power electronics) and the higher initial cost. Even with these challenges, the demand for hybrid electric vehicles has continued to increase. J.D. Powers & Associates reports that hybrid electric vehicle sales are expected to represent 7% of the total car market in 2015. In addition, the U.S. Military has mandated a 5% per annum reduction in its internal fuel usage and is seeking fuel-efficient applications/vehicles to meet this mandate. Further, in May 2009, the Obama administration announced new Corporate Average Fuel Economy (CAFE) standards mandating automakers to increase the average fuel economy of their U.S. vehicle fleets to 35.5 miles per gallon (mpg) by 2016, accelerating the previous timeline for compliance by four years to 2016 from 2020. The CAFE standards raise the average fuel economy for passenger vehicles from 27.5 mpg to 39.0 mpg and increase the standard for light trucks from 23.0 mpg to 30.0 mpg. The accelerated timeframe provides further clarity to automakers to accelerate development of hybrid/electric vehicle platforms.

Recent advances in batteries and other components have resulted in the emergence of PHEVs. As with other hybrids, a PHEV vehicle has the ability to run on either electricity or an internal combustion engine. PHEVs have a larger battery than the batteries used in conventional electric hybrids and they can be recharged by plugging into an appropriate outlet. Recharged vehicles are designed to provide 20-60 miles of all electric, zero emission range without engine power. PHEVs are currently being tested in prototype form and we anticipate will soon be available for sale. Advantages of plug-in hybrids include: reduced fuel consumption and tailpipe emissions, optimized fuel efficiency and performance, recovered energy from regenerative braking, unchanged gas station infrastructure, grid connection potential, "home based" battery recharging at a fraction of the cost of petroleum equivalent, pure zero emission capability, even lower fueling costs compared to battery sustaining hybrids, and possible use in secondary markets for used batteries and reduced waste. 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. But, challenges still remain, including cost and complexity of two powertrains, limited supplier base and component availability (batteries, powertrains, power electronics), higher initial cost, cost of batteries and battery replacement, unproven technologies and added vehicle weight. Advanced battery technologies and systems, specifically lithium-ion batteries, are considered to be the key enabling technology for the commercial viability of PHEVs. Such advanced battery technologies are currently under development but are not yet available on a commercial basis.

In January 2009, Fisker Automotive, showcased its first production car, a plug-in hybrid sports sedan called the Fisker Karma, and a plug-in hybrid hardtop convertible concept vehicle called the Fisker Karma S, at the 2009 North American International Auto Show in Detroit, Michigan. Both of these vehicles incorporated our *Q-Drive* hybrid electric vehicle architecture. We have been providing development services to Fisker Automotive for their Fisker Karma vehicle since November 2007 and began the third phase of the development program in April 2009. The third phase of development includes system validation, certification and other pre-production development activities that we expect will culminate in a certified, saleable, production release vehicle near the end of calendar 2010.

On May 7, 2010, we announced that we had signed a definitive supply agreement with Fisker Automotive to supply key components and control systems for the *Q-Drive* powertrain system that is being incorporated in the Fisker Karma. Under the terms of the licensing and supply arrangement, we will be the exclusive supplier of the *Q-Drive* hybrid control systems and the solar roof module. We will also receive a royalty payment on each Fisker Karma sold that incorporates our *Q-Drive*. The supply agreement will also provide us with the opportunity to supply components and systems for future Fisker Automotive vehicle programs, upon us meeting Fisker Automotive's performance, cost and delivery requirements.

Our first-generation *Q-Drive* system evolved over several years of innovation and development. Our *Q-Drive* system takes full advantage of the performance potential of electric drive systems while achieving high fuel mileage and low emissions through its integrated PHEV design. Benefits of our *Q-Drive* system include optimized fuel efficiency and superior performance, unchanged gas station infrastructure, and convenient battery recharging with any 110-volt outlet, 220/240-volt fast-charging, or possibly using a solar energy powered re-charging station.

In addition to providing incentives to businesses to advance the development of hybrid and electric vehicles, the U.S. government has provided and is expected to continue to provide incentives to taxpayers to purchase and place in service qualified hybrid vehicles through the use of tax credits.

Advanced batteries, capable of meeting standards for durability, performance, and weight, are a key technology for plug-in hybrid electric vehicles and other electric vehicles. The DOE reported that they plan to provide assistance to construct or upgrade battery manufacturing, component, and recycling plants for lithium-ion and other advanced batteries, as well as for production factories for electric drive vehicle power electronics. These grants are expected to help lower the cost of battery packs, batteries, and electric propulsion systems, enabling manufacturers to establish a thriving domestic electric vehicle industry. These advanced battery factories will also support battery manufacturing for consumer products, as well as military and utility applications. The DOE has also pledged to support demonstration, evaluation, and education projects to help develop the market for advanced electric drive vehicles.

Other recent hybrid and electric vehicle programs include:

In February 2010 we announced that we were selected by the US Postal Service (USPS) to produce an advanced electric postal delivery vehicle based on the widely used Long Life Vehicle (LLV) platform. We were competitively selected, along with 4 other companies, for participation in a 1 year demonstration and validation program to be conducted by the USPS in Washington DC. A successful demonstration in the nation's capital could pave the way to broad adoption of battery electric vehicles in the USPS fleet. Electrification of the 178,000-strong LLV segment of the postal delivery fleet, the largest civilian fleet in the country, will help to reduce emissions across the country and reduce dependence on foreign petroleum while supporting the continued development of the US EV industry.

In November 2009, we announced that we had designed, developed and shipped diesel hybrid electric vehicles to the U.S. Army—Tank Automotive Research Development and Engineering Center (TARDEC). We developed the Clandestine Extended Range Vehicle (CERV) for TARDEC, which is a hybrid electric vehicle targeted for quick-paced special operations-type missions involving reconnaissance, surveillance, and targeting. The CERV design incorporates our "*Q-Force*" architecture, which is a new advanced all-wheel-drive diesel hybrid electric powertrain.

In October 2008, we announced that we had designed, developed and shipped a new generation of hybrid electric vehicles incorporating hydrogen internal combustion engines to TARDEC for deployment at the Selfridge Air National Guard Base (SANGB). This deployment is part of a larger test and demonstration program involving TARDEC joint service partners around the country, in support of the US Army's 21st Century Base Initiative. The hydrogen-powered vehicles will reduce emissions and provide an opportunity to verify and utilize the existing hydrogen refueling infrastructure.

In March 2007, we were awarded a contract with California's South Coast Air Quality Management District (AQMD) to develop and demonstrate PHEVs. Under this program, we are currently developing, manufacturing, and deploying 20 Ford Escape PHEVs for demonstration in Southern California. Under the program, we are utilizing our OEM system engineering and vehicle integration methodologies in the development of a plug-in hybrid version of the 2010 Ford Escape Hybrid. The PHEV system is based on integrating a lithium-ion battery pack and management system. We anticipate deliveries of the initial vehicles to the AQMD beginning in July 2010.

Fuel Cell and Hydrogen/Compressed Gas Vehicle Industry

The fuel cell and hydrogen vehicle industry also offers a technological option to address increasing worldwide energy costs, the long-term availability of petroleum reserves and environmental concerns. Fuel cell and hydrogen-based internal combustion engine vehicles have emerged as a potential alternative to existing conventional internal combustion engine vehicles because of their higher efficiency, reduced noise and lower tailpipe emissions. Fuel cell industry participants are currently targeting the transportation and hydrogen refueling infrastructure markets. We believe that our fuel cell and hydrogen-based enabling products of fuel storage, fuel delivery and battery and electronic control systems along with our vehicle-level system integration experience can be effectively applied in these markets.

A fuel cell is an electrochemical device that produces electricity by combining hydrogen with oxygen from the air. This electrochemical reaction occurs silently and without combustion, with useable heat and water as the only by-products. The system can use as its base fuel either pure hydrogen or hydrogen derived from hydrocarbon fuels, such as methanol, natural gas or petroleum, using a device called a reformer. A reformer breaks down hydrocarbon fuels using heat and a catalytic process. Regardless of the fuel used to provide hydrogen, the fuel cell system will require on-board hydrogen storage, fuel delivery and electronic controls. We believe that the keys to optimizing the performance of a fuel cell are proper metering and delivery of hydrogen fuel and air to its fuel cell stacks and efficient storage of the fuel to maximize its total operation time; an area that we have expertise in.

There are now over 100 hydrogen-refueling stations worldwide, with essentially all the stations dispensing compressed hydrogen. In California alone, where Governor Schwarzenegger is actively promoting a "Hydrogen Highway Network," the aim is to establish 40 hydrogen stations by 2013 of which there are currently 26 stations operational. In addition to signing an executive order that calls for a hydrogen refueling infrastructure throughout California, the Governor continues to support hydrogen technologies and claims that hydrogen is one of the "environmental technologies [that] will allow us to conserve energy, cut pollution and protect our natural resources." Other states that have established statewide initiatives to encourage the implementation of hydrogen and fuel cells include Colorado, Florida, Illinois, Michigan, New Mexico, New York and Ohio.

Other examples of fuel cell and hydrogen demonstration programs include the California Fuel Cell Partnership, California Stationary Fuel Cell Collaborative, Compressed Hydrogen Infrastructure Program, Clean Energy Partnership in Berlin, Controlled Hydrogen Fleet & Infrastructure Demonstration and Validation Project, Fuel Cell Bus Club, Japan Hydrogen & Fuel Cell Demonstration Project, Hydrogen Highway Network in California, BC Hydrogen Highway in British Columbia, AQMD Test Fleet, Hi Way Initiative, Ruhr-Alps-Milan Hydrogen Supply Chain Integrated Project, Hydrogen Corridor in Canada, Norwegian HyNor Project, Illinois Hydrogen Highway, The Northern H in the Upper Midwest, Singapore's Initiative in Energy Technology, Iceland's SMART-H_2 project, and projects in Hungary, Spain, and the United Kingdom.

Fuel cell and hydrogen-powered hybrid vehicles are being designed to provide clean, quiet power for a variety of applications in transportation, fleet, industrial and military vehicles. The commercialization of fuel cells in all of these markets will require cost reductions for the entire system, including the fuel cell stack, fuel system, balance-of-plant, and assembly.

Many OEMs, including Daimler, Ford, General Motors, Honda, Hyundai, Nissan, and Toyota Motor Corporation have unveiled prototypes of fuel cell vehicles. Although the number of years required before mass production of fuel cell vehicles will be available to the public cannot be reasonably predicted due to the required advances necessary to reduce the costs of the technology and the cost of developing the required infrastructure, Daimler, Toyota Motor Corporation and General Motors have each announced their intentions to sell fuel cell vehicles to the public within the coming decade.

In April 2008, we completed shipments of our packaged hydrogen fuel systems to General Motors in support of their Equinox fuel cell vehicle program that consists of a fleet of approximately 100 vehicles and we continue to provide service support to General Motors under this program.

We believe that a market for hybrid vehicles and internal combustion engines powered by hydrogen may also be an enabling strategy to prepare for the emerging hydrogen fuel cell vehicle market. Hydrogen-powered hybrid and other hydrogen vehicles can begin to drive the demand for the refueling infrastructure of this clean fuel, which is a critical component to fuel cell vehicle commercialization. South Coast Air Quality Management District in Southern California is positioning the region to be ready for fuel cell vehicles by initiating a hydrogen-powered hybrid program. In 2006, we began delivery of 30 hydrogen hybrid Priuses to participating fleets located in Southern California. The objective of this effort, funded by the South Coast Air Quality Management District, is to stimulate the early demand for hydrogen, expedite the development of infrastructure, and provide a bridge to fuel cell vehicles. We believe this program will help expedite the expansion of a hydrogen infrastructure and bridge the technology gap between conventional gasoline vehicles and fuel cell vehicles, as this technology of the future is being commercialized. We believe that this can be the model for other markets where fuel cell vehicles will emerge, e.g., North America, Europe and Asia-Pacific, and thus we intend to initially focus our marketing efforts of hydrogen hybrid systems in these areas.

Commercialization of fuel cell vehicles is dependent upon establishing cost-effective on-board fuel storage solutions, hydrogen storage and handling codes and standards, and a hydrogen-refueling infrastructure. These technologies will require across-the-board cost reductions for the entire system, including the fuel cell stack, fuel system, balance-of-plant, and assembly. As cost reduction targets are achieved in higher volume production, we believe that the fuel subsystem will ultimately represent approximately 20% of the cost of a fuel cell or hydrogen system. Safety is also a primary concern when dealing with highly compressed gases. The fuel storage systems must be able to withstand rigorous testing as individual components and as part of the fuel system on the vehicle. Safety concerns apply to the fuel system as a whole, including the tank, regulator and fuel lines, all of which need to comply with applicable safety standards. Our operations are ISO/TS 16949 certified and we have performed extensive testing of our fuel storage components and systems which comply with applicable safety standards, including standards developed by the European Integrated Hydrogen Project (EIHP). Additionally, to ensure widespread commercialization, the fuel storage and delivery systems need to provide adequate range, be of acceptable size and shape, and perform similarly to conventionally fueled vehicles without unacceptably high cost.

Although the "hydrogen economy" is not developing as quickly as previously anticipated due to the emergence of hybrid and plug-in hybrid electric vehicle technologies, we believe interim steps will continue to be taken by governments to provide initial refueling infrastructure for demonstration fleets that could include mobile refueling units, compact stationary refueling units and bulk transport trailers in addition to the continuing efforts by OEM's to advance the development of fuel cell vehicle platforms that can be commercialized within this decade.

In May 2007, we announced that we had signed an agreement for the marketing, sales and distribution in India of our alternative fuel vehicle products and systems for natural gas, blends of natural gas and hydrogen, and liquid propane gas. In March 2009, we announced that we were awarded a contract to upgrade Volvo-Eicher Commercial Vehicles Ltd.'s (Volvo's) four and six cylinder engine platforms, using our gaseous fuel injection systems and powertrain engineering expertise, to meet certain new stringent emissions regulations in India that came into effect beginning April 2010. We believe that India holds one of the highest natural gas vehicle growth potentials in the world and we intend to continue to pursue opportunities to expand our business in this market. This strategic alliance led to our equity investment in Shigan Quantum in September 2009.

Fuel Storage Systems for Aerospace Industry

In November 2009, we were awarded a contract to supply carbon fiber composite hydrogen and oxygen storage vessels for Lockheed Martin's Space Systems' development of ISIS (Integrated Sensor is the Structure) airship powered by a Regenerative Fuel Cell (RFC). ISIS is a large stratospheric airship, carrying an integral radar sensor that can detect small valuable targets from a distance of several hundreds of kilometers away. The ISIS uses solar rays during daylight hours to generate renewable electricity that electrolyzes water to generate

hydrogen and oxygen to run the RFC at night. In May 2010, we announced that we were awarded an additional contract to supply critical hydrogen metering systems for the ISIS program. Lockheed martin will build the prototype airship for the U.S. Defense Advanced Research Projects Agency (DARPA) under their $400 million military contract.

Renewable Energy Generation and Development Industry

Demand for electricity has dramatically increased as our society has become more technologically driven, and we expect this trend to continue. Significant new capacity for the generation of electricity will be required to meet this anticipated demand. According to the DOE's Energy Information Administration (EIA), nearly half of all electricity in the United States produced in 2008 was generated by coal, which is the largest source of carbon dioxide in the atmosphere. Other major sources of electricity in 2008 were nuclear (20%) and renewable energy sources (9%).

Most of the world's main energy sources are still based on the consumption of non-renewable resources such as coal, petroleum, natural gas and uranium. Although renewable energy resources today represent a relatively small amount of the energy produced, wind and solar energy farms are growing rapidly in market share.

We intend to leverage our portfolio of existing wind and solar projects, along with strategic relationships developed by SPI to increase our footprint in renewable energy generation and development.

Products

Our products relate primarily to hybrid electric and plug-in hybrid electric powertrain systems, advanced battery control systems, electronic vehicle control systems and software, fuel storage and fuel delivery products and control systems for use in hybrid, fuel cell, and other alternative fuel vehicles. We also design and manufacture computerized controls, regulators and automatic shut-off equipment, and lightweight, high-pressure hydrogen and natural gas storage tanks using advanced composite technology. We continue to improve our products and develop new systems to meet increasingly stringent vehicle operational and durability requirements in automotive OEM hybrid electric and fuel cell powered vehicles. We are currently developing an advanced hybrid control strategy to optimize the overall powertrain efficiency by enhancing the interaction between the engine/generator, traction battery and traction drive. The categories of our hybrid electric and fuel systems products include:

Hybrid Electric Powertrain Systems. Our hybrid electric powertrain systems primarily comprise an advanced electric propulsion vehicle drive system that incorporates lithium-ion batteries, an optimized generator, traction motors, transmission/transaxle, inverters, DC-DC converter, hybrid controller, battery recharging via on-board optimized generator powered by an internal combustion engine or via home-based plug-in capabilities, and integrated hybrid electric control architecture and strategy designed to achieve battery-only, zero emission range of 50 miles per day and average fuel economy of approximately 100 miles per gallon per year under combined electric-gasoline hybrid operation for most daily commuters. Certain subsystems of our *Q-Drive* have been designed to be integrated into the Fisker Karma production vehicle and can be scaled and adopted to integrate into other OEM hybrid vehicle platforms. We expect a certain portion of any future development costs to be funded by customer-sponsored programs or government funding.

Lithium Ion and Advanced Battery Control Systems. Our lithium ion and advanced battery control and software products and fully integrated battery packs are currently in the developmental stage by our battery partners. We have partnered with battery suppliers to further develop these products for use in automotive hybrid, plug-in hybrids and fuel cell applications as well as for energy storage applications for renewable energy, such as solar photovoltaic applications. The development of advanced battery control systems is partially funded internally as well as by a specific application or customer-sponsored programs or government funding.

Electronic Vehicle Control Systems and Software. Our electronic vehicle controls, coupled with our proprietary software are used to optimize fuel flow and drive systems of hybrid and hybrid-electric, fuel cell, and internal combustion engine applications. Functions including power management, driver inputs, motor control, generator control, engine operation, battery subsystem operation, vehicle charging, and cooling system operation are controlled by this software. 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. Our controller and software products range from 8- to 32-bit architecture. Certain control system products precisely control the flow and pressure of gaseous fuels such as natural gas, hydrogen and other gases such as air. The development of electronic controls and software is partially funded internally as well as by a specific application or customer-sponsored programs.

Fuel Storage Products. Our fuel storage products include primarily cylindrical tanks and other advanced design storage products that store gaseous fuel at high pressures. We provide lightweight, all-composite storage tank technologies for compressed hydrogen and natural gas. The lightweight nature of the tank, coupled with high hydrogen mass by volume, improves the range of hydrogen-powered fuel cell vehicles. Our high-pressure tank maximizes hydrogen storage in a given space, optimizing the volume of hydrogen stored on board. These fuel storage products are production ready and are currently on OEM produced vehicles. As we continue to advance these technologies, our efforts will be OEM customer driven with a focus on cost reductions, storage efficiencies and weight. We expect a certain portion of any future development costs to be funded by customer-sponsored programs.

Fuel Delivery Products. Our fuel delivery products consist of in-tank and external regulators, injectors and valves. We have designed our in-tank and external regulators for use with hydrogen for fuel cell applications. We have designed our patented fuel injector for use with dry gases such as hydrogen, propane or natural gas. Our fuel injector is capable of handling the high flow rates needed in automotive OEM applications, while offering superior durability, longer life, less noise and lower cost as compared to other gaseous fuel injectors. This component also allows for very precise metering of fuel, which is critical to optimizing a fuel cell system. These fuel delivery products are production ready and are currently on OEM produced vehicles. Advancement of these technologies is focused on application engineering for specific vehicle customization in order to satisfy OEM-specific mechanization and application design. We expect any application development expenses for our fuel delivery products to be funded by customer-sponsored programs.

Renewable Energy Generation

We currently generate electrical power from wind turbines operating on our renewable energy farm in Ontario, Canada that we sell to a regulated utility distributor under a Power Purchase Agreement (PPA).

Services

Fuel Systems

We provide services in the areas of design, development, validation, certification, manufacturing, and after-sales service support. Services we provide to our customers to support their programs for hybrid and plug-in hybrid vehicles, fuel cell vehicles, hydrogen and internal combustion engine vehicles, alternative fuel vehicles and hydrogen refueling applications include:

- *Vehicle Design and Prototype Vehicle Builds.* We design complete concept and low-volume production vehicles to demonstrate hybrid, plug-in hybrid, and fuel cell vehicle architecture. We also provide complete vehicle builds on a concept and prototype basis.
- *Systems Integration.* We integrate our advanced hybrid drive systems, battery control systems, advanced fuel storage, fuel delivery, and electronic vehicle control components into hybrid and

PHEVs, hydrogen fueled vehicles, fuel cell applications, as well as hydrogen refueling products. We also employ rapid prototyping techniques, which accelerate the iterative design process and result in a more accurate 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. 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.
- *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 facilities or at our customers' facilities. 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 and programs for OEMs. We also provide technical support over the telephone or at customer sites to resolve technical issues.

Renewable Energy Generation and Development

We have capabilities to completely engineer, develop, construct and commission a renewable energy farm. Development of wind and solar farm projects involves several sequential stages of completion and advancement before the project becomes operational. These stages will generally include the feasibility study of the project, negotiating land easements, securing grid interconnections on the subject project, performing environmental studies, entering a power purchase agreement, arranging for construction financing, managing the construction, and commissioning the project.

Business Strategy

Our business strategy is to enhance our leadership position as a tier-one automotive supplier of advanced propulsion systems, alternative fuel systems, powertrain engineering, system integration, and assembly and to leverage these products and capabilities into commercial programs. We also plan to use our existing renewable energy and development platform to expand our ownership of energy producing projects and enhance our involvement in renewable energy.

Our strategy for achieving these objectives includes the following:

Commercialize Our Proprietary Q-Drive™ Hybrid Vehicle Propulsion System and Sub-Systems

We intend to commercialize and supply our *Q-Drive™* system to Fisker Automotive and newly developed variations thereof into production programs with other OEMs, military programs and other customer groups such as the postal service. We delivered our initial *Q-Drive* system to Fisker Automotive and integrated these systems into the first Fisker Karma sports sedan production vehicle and into the Fisker Karma S convertible concept vehicle that were first showcased at the Detroit auto show in January 2008 and 2009, respectively. Over the past three years, we have performed substantial development work on our *Q-Drive* system for incorporation into the

Fisker Automotive line of PHEVs. We are currently working on the third phase of that development which includes system validation, certification and other pre-production development activities. We expect that the successful completion of these development activities will culminate in a certified, saleable, production release vehicle near the end of calendar 2010.

Additionally, we plan to commercialize certain proprietary hybrid drivetrain subsystems including hardware and software controls by selling these subsystems to automotive OEMs, large heavy-duty vehicle manufactures, integrators, and other providers of hybrid vehicle technologies. We believe our internally funded and developed hybrid control strategies, software and technologies can be effectively and efficiently leveraged into these growing market opportunities.

Increase Our Participation in the Hybrid and Plug-in Hybrid OEM Vehicle Markets by Advancing and Introducing New Lower-Cost Technology and Securing Customer Funding

We plan to continue to develop and refine our hybrid drive packages to capture new customers in a growing hybrid vehicle market. We plan to leverage our hybrid drivetrain technology and systems integration capabilities to continue to advance our hybrid control systems, motor control software and propulsion system control strategies. We plan to integrate these technologies and software systems with re-designed drive-train components to provide lower-cost powertrain systems. We expect to continue to expand our customer base in our efforts to further develop advanced and lower cost hybrid drive system component parts and secure customer funding to provide the capital to make these advancements.

We have delivered a hybrid powered light-duty all-terrain vehicle and several hybrid vehicles, including a diesel hybrid version of our military special operations vehicle containing a battery dominant, series hybrid electric propulsion system, to the U.S. Army for evaluation. We are also currently developing, manufacturing, and deploying 20 Ford Escape PHEVs for demonstration in Southern California under a contract with California's South Coast Air Quality Management District (AQMD). Under this contract, we are utilizing our OEM system engineering and vehicle integration methodologies to develop a plug-in hybrid version of the 2010 Ford Escape Hybrid. We have also produced several prototype vehicles with derivative *Q-Drive* systems for customer evaluation. We believe that significant opportunities for growth exist in the market for hybrids, PHEVs, and hydrogen-powered hybrids. Based on the anticipated market size and projected growth rate for hybrid vehicles across the globe, we have prioritized our business development efforts in North America, Asia-Pacific and Europe.

Design, Integrate and Assemble Packaged Fuel Systems and Re-Fueling Units for Hydrogen and Fuel Cell Vehicles, Alternative Fuel and Other Emerging Applications

We plan to continue to leverage our advanced fuel systems, and other alternative vehicle technologies to assist OEMs in expediting the commercialization of hydrogen, fuel cell and other alternative fuel and specialized vehicle applications. We also plan to develop systems and complete vehicles to assist the military in adopting hydrogen and fuel cell technologies. We intend to apply our expanded vehicle-level design, powertrain engineering, vehicle electronics and system integration expertise to early development and emerging OEM and military vehicle programs to capture early limited production and assembly of new vehicles.

We plan to leverage our hydrogen storage, metering and control technologies, and integration capabilities to capitalize on the need for mobile and stationary hydrogen refueling units. We believe there are significant opportunities to work with OEMs and energy and petroleum companies in providing the initial refueling products such as mobile refueling units, compact stationary refueling units, and hydrogen storage for bulk transport trailers. We have grown our programs with the U.S. military to develop advanced fuel cell and hybrid electric vehicle technologies. We plan to continue assisting the military in developing their fuel cell, hybrid electric, and other advanced propulsion system technologies.

In June 2008, we delivered the third of three operational stationary hydrogen refueling units located in the City of Rochester, New York under contracts with General Motors and the New York State Energy Research and Development Authority (NYSERDA). On July 14, 2009, one of our stationary hydrogen refueling units also opened to the public at JFK Airport in New York. We plan to continue seeking out opportunities to add hydrogen refueling infrastructure to further advance the transition to and adoption of alternative fuels.

Expand Our Renewable Energy Development and Production Platform

We intend to expand our footprint in renewable energy projects by developing, constructing and owning various wind and solar projects in North America and the Caribbean that we have in our existing project pipeline and to continue prospecting for future renewable energy sites. We have in excess of 1 gigawatt of projects in our project pipeline that we plan to further assess for feasibility, secure funding and target for development and/or sale of the project.

We also expect to continue to support the growth and expansion of Asola, which opened a state-of- the- art facility in Erfurt, Germany in May 2009 which tripled its capacity to 45 MW. We expect Asola to continue to grow and expand in Europe, Africa and Asia. Asola has signed letters of intent for the formation of joint ventures with alliance partners in Italy, South Korea, and Morocco for the production and distribution of mono and poly-crystalline silicon solar modules with initial capacities of 30 MW. Asola is also in the process of forming a strategic relationship in Canada to begin production of "local content" solar panels for the Ontario, Canada market place.

We, through our subsidiary Quantum Solar, Inc., intend to use Asola's expertise, technologies and know-how to enter the solar panel manufacturing industry in the United States and Canada. Our plan is for Quantum Solar to operate a 45 MW solar panel manufacturing facility in Southern California. Through Quantum Solar, we also plan to assess strategic opportunities in thin film modulization as well as opportunities in solar panel distribution and integration.

Focus Research and Development on Hybrid and Hydrogen Fuel System Technologies and Securing Outside Funding to Support These Programs

We intend to focus our research and development efforts on advancing our hybrid and hydrogen enabling technologies and systems to succeeding generations to further improve performance and reduce cost. We plan to actively seek to establish joint development programs and strategic alliances with the major lithium ion battery producers, fuel cell developers, and other industry leaders in these markets and secure outside funding to support these programs. We are working with certain aerospace companies, and government agencies in advancing hybrid and hydrogen technologies and developing new applications and solutions.

Leverage Our Battery and Hydrogen Storage Systems into Broader Energy Storage Applications

We plan to utilize our full array of storage technologies, developed for automotive and refueling applications, in broader applications within the energy industry. The storage of energy is becoming more important with the emergence of renewable energies and the concept of distributed energy. We believe our industry-leading hydrogen storage systems and our lithium-ion battery system technologies can enhance the availability of intermittent renewable resources, like wind and solar by providing cost effective storage options. Our advanced storage technologies provide energy users with the ability to store and utilize energy on demand.

Strategic Relationships

Affiliates

We evaluate on an ongoing basis the benefits of joint ventures, acquisitions and strategic alliances with our customers and other parties to strengthen our global business position and to expand our business operations. We have focused our strategic alliances on expanding our market opportunities and advancing the development of our technologies. We have acquired or obtained ownership interests in five strategic businesses through April 30, 2010 that are not included in our current reporting segments. For each of these businesses discussed below, our ownership does not rise to the level of a controlling interest but we are considered to be able to exert significant influence over their respective operations and accordingly, we account for our equity interests in these businesses under the equity method of accounting. Our respective share of the results of their operations is discussed in *Non-Reporting Segment Results* under Results of Operations.

Fisker Automotive

On August 7, 2007, we co-founded Fisker Automotive, Inc. (Fisker Automotive), a joint venture with Fisker Coachbuild, LLC, which was formed for the purpose of producing premium plug-in hybrid automobiles. We owned 6.2 million shares of Fisker Automotive's common stock on April 30, 2010, which represented approximately 1% of the issued and outstanding shares of Fisker Automotive's capital stock. As of April 30, 2010, our Chief Executive Officer held a seat on Fisker Automotive's Board of Directors. Fisker Automotive is developing its first production-intent vehicle, the Fisker Karma, a 4-door luxury sports sedan PHEV that incorporates our *Q-Drive* system.

Asola

On January 4, 2008, we acquired a 24.9% ownership interest in Asola, a solar module manufacturer located in Erfurt, Germany. Asola has been developing and manufacturing high-efficiency photovoltaic modules for a number of innovative applications, including automotive, residential, and commercial applications for over 20 years. Asola developed the solar roof panel that is incorporated into the Fisker Karma PHEV. Asola's current facility has an annual manufacturing capacity to produce 45 MW of solar panels.

On December 28, 2009, we provided Asola with written notice that we were exercising our right to increase our ownership interest to 32.66% in exchange for payment of 0.1 million euro. We are currently evaluating the impact such exercise may have on certain material contracts to which Asola is a party and reserved our right to withdraw the exercise until our evaluation is complete.

Advanced Lithium Power, Inc.

On March 24, 2006, we obtained a 35.5% ownership interest in Advanced Lithium Power Inc. (ALP), located in Vancouver, British Columbia. ALP was formed for the purpose of developing state-of-the-art lithium ion battery and battery management control systems that control state-of-charge and provide for thermal management. Our direct ownership interest in ALP as of April 30, 2010 was 12.6%. In June 2010, certain secured creditors of ALP had a receiver appointed pursuant to the terms of a General Security Agreement between ALP and such secured creditors and as a result, ALP ceased operations.

Power Control and Design

On October 6, 2009, we acquired a 22% interest in Power Control and Design, Inc. ("PCD"). PCD designs and develops control software for use in motor control, solar-to-grid, wind-turbine, electric vehicle charges and power conversion products and applications for infrastructure, automotive, aerospace and industrial markets.

Shigan Quantum

On September 3, 2009, we acquired at 25% interest in Shigan Quantum Technologies PVT LTD ("Shigan Quantum"), a start-up company organized under India's Corporate Act. Shigan Quantum intends to manufacture and sell gaseous fuel injectors using the Company's technologies and variants thereof.

General Motors Relationship

In 2002, we entered into a ten-year strategic alliance with General Motors. We believe that our strategic alliance with General Motors will advance and commercialize, on a global basis, the integration of our gaseous storage and handling systems into fuel cell systems used in the transportation markets. Under the alliance, Quantum and General Motors have co-developed technologies that are designed to accelerate the commercialization of fuel cell applications. Additionally, General Motors will endorse Quantum as a recommended provider of hydrogen storage, hydrogen handling and associated electronic controls. This strategic alliance expands the relationship that has been in place between General Motors and Quantum since 1993, through which we provided packaged natural gas and propane fuel systems for General Motors' alternative fuel vehicle products.

Although General Motors' financial condition has significantly deteriorated over the past few years and culminated in General Motors's filing for Chapter 11 bankruptcy protection on June 1, 2009, we continue to support development programs under the auspices of the strategic alliance, although at significantly reduced levels as compared to prior years. We believe that vehicle programs at General Motors utilizing alternative energy technologies are likely to receive enhanced focus in the future as General Motors' financial condition improves. General Motors has taken steps to improve its financial condition and emerged from bankruptcy on July 10, 2009. In connection with the bankruptcy proceedings, General Motors designated us as an important supplier and assumed all contracts and purchase orders with us, including agreements comprising the strategic alliance.

Strategic Alliance for Distribution in India

In May 2007, we announced that we had signed an agreement for the marketing, sales and distribution in India of our alternative fuel vehicle products and systems for natural gas, blends of natural gas and hydrogen, and liquid propane gas. In March 2009, we announced that we were awarded a contract to upgrade Volvo-Eicher Commercial Vehicles Ltd.'s (Volvo's) four and six cylinder engine platforms, using our gaseous fuel injection systems and powertrain engineering expertise, to meet certain new stringent emissions regulations in India that came into effect beginning April 2010. We believe that India holds one of the highest natural gas vehicle growth potentials in the world and we intend to continue to pursue opportunities to expand our business in this market. This strategic alliance led to our equity investment in Shigan Quantum in September 2009.

Customers and Development Programs

A substantial portion of our revenue in fiscal 2010 related to system development and application engineering services provided to Fisker Automotive and General Motors. During fiscal year 2010, revenues from Fisker Automotive, General Motors and U.S. Army—Tank Automotive Research, Development and Engineering Center (TARDEC) comprised 46%, 12% and 11%, respectively, of our total consolidated revenue.

We have had prototype development projects or programs in our continuing operations with the following entities:

Adam Opel AG
AeroVironment
Air Resources Board
Alion Science and Technology
American Wind Power & Hydrogen
Ballard Power Systems
Daimler
EDAG Inc.
Energy Conversion Devices
Fisker Automotive
Ford Motor Company
General Motors (Fuel Cell Activities)
General Motors Corporation
General Motors of Canada, Limited
Hyundai America Technical Center
Hyundai Motor Company
ISE Research
Lawrence Livermore National Laboratory
Lockheed Martin Space Systems
Miljobil Grenland A/S
Missle Defense Agency SBIR
NYSERDA
Proton Energy Systems, Inc.
Roush Performance Products
Saleen, Inc.
Select Engineering Services
Shell Hydrogen LLC
South Coast Air Quality Management District
Suzuki Motor Corporation
The State University of New York—Buffalo
Toyota Motor Corporation
U.S. Army—National Automotive Center
U.S. Army—Tank Automotive Research, Development and Engineering Center
U.S. Department of Energy
VistOrka hf (Eco Energy Ltd.)
Volvo Eicher
Yamaha Motor Company

We intend to establish similar relationships with other leading industry OEMs by using our systems integration capabilities and our leading technology position in hybrid propulsion drive systems, lithium ion battery control systems, electronic control systems, fuel storage, and fuel delivery.

In addition, SPI brings established relationships into our combined businesses related to renewable energy farm development projects that they have fostered with renewable energy companies Energy Farming International and Greta Energy Inc over the past year.

Research and Product Development

We conduct research and product development in the following areas, with corresponding technical capabilities:

- *Vehicle Engineering and Build.* Specialization in designing, engineering and building concept or early adoption type vehicles using hybrid electric drive system, vehicle and powertrain engineering, vehicle and system integration, and vehicle packaging.
- *Hybrid Control Systems and Control Strategies.* Specialization in designing and optimizing control systems and strategies to maximize vehicle performance and range.
- *Lithium Ion and Advanced Battery Control Systems.* Specialization in developing electronic control systems and software to maximize efficiency and energy storage in lithium ion battery applications.
- *Electronic Controls and Software Systems.* Specialization in automotive hardware design and selection, engine modeling, calibration and software design for engine and emission controls.

- *Fuel Storage.* Composite pressure vessel design and analysis, carbon fiber filament winding, and hydraulic, pneumatic, burst and fatigue testing. Evaluation, testing and integration capabilities for advanced hydrogen storage, including hydride, conformable and other emerging compressed and solid state storage.
- *Mechanical Design and Development.* Specialization in pneumatics, kinematics, hydraulic components and systems, and advanced materials, structural, flow and thermal analysis.
- *Advanced Emissions Testing.* Testing facility that utilizes California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) approved advanced technology to test Super Ultra Low Emission Vehicles. EPA/CARB certification testing, vehicle development testing including catalyst efficiency, diagnostics, calibration, engine durability testing, and engine mapping.
- *Advanced Products.* Injectors, fuel management, fuel storage, and fuel supply for fuel cell power systems, mass flow sensors for natural gas flow measurement and "smart" sensors using microcontrollers and microprocessors.
- *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.
- *Concept Vehicle Development.* Specialization in concept vehicle design and development using powertrain engineering, CAD engineering, and other vehicle development and tooling processes.

We believe we are uniquely positioned, based on our research and product development capabilities, as a Tier-1 automotive supplier in providing hybrid propulsion systems, vehicle-level design, powertrain engineering, power electronics and wheel motor interfacing, system integration, and manufacturing and assembly of packaged fuel systems for automotive applications including hybrids, PHEVs, hydrogen electric vehicles, electric only vehicles, fuel cell vehicles, other alternative fuel vehicles, and hydrogen refueling.

Our research and development activities include both customer-funded research and development and company-sponsored research and development that are further discussed in *Item 7. Management's Discussion and Analysis of Financial Condition and Results from Operations.* We will continue to strategically invest in research and development over the next several years in order to advance our products for hybrid, hydrogen fuel cell and alternative fuel applications.

Automotive Industry and the Worldwide Economy

Our business is primarily related to hybrid, hydrogen and alternative fuel vehicle development programs and product sales, which vary directly with the program timing and production schedules of our OEM and other customers. The market for these vehicles is sensitive to general economic conditions, government agency and commercial fleet spending and consumer preferences. The rate at which our customers sell hybrid, hydrogen or alternative fuel vehicles depends on their marketing and distribution strategy, as well as company specific inventory and incentive programs. Any significant reduction or increase in production of these vehicles by our OEM customers may have a material effect on our business.

During calendar 2009, the U.S. and world economy and the automotive industry deteriorated significantly and measures implemented by the federal government to stabilize the domestic credit markets and the economy have not been realized to the extent expected. However, the automotive industry in particular received targeted funding and bailouts from the federal government that have had a direct, positive impact on the Detroit-based automakers. Based on recent profits reported by certain automakers and the repayment of some of these loans, the White House has indicated the industry is recovering at a pace few thought possible. The automotive industry may take years to fully recover and the level of uncertainty in the economy as a whole remains real, but we are experiencing a renewed sense of enthusiasm for advanced technology type vehicle programs from our OEM customers.

Competition

Fuel Systems

A number of domestic and international automotive and industrial manufacturers are developing alternative clean power systems using lithium-ion batteries, hybrid systems, fuel cells or clean burning gaseous fuels in order to decrease fuel costs, lessen dependence on crude oil and reduce harmful emissions.

The demand for hybrid electric and plug-in hybrid electric vehicles has been increasing in response to consumer demand for vehicles that both meet performance expectations and are fuel efficient. Many of the major automotive OEMs (including General Motors, Ford, Toyota and Honda) have rolled out prototypes of electric and/or hybrid electric vehicles over the past year that will compete with us, via our association with our affiliate, Fisker Automotive. We believe our expertise with technologies employed on our hybrid propulsion systems together with our system integration experience offers a competitive advantage to OEM hybrid vehicle manufacturers.

We believe that our competitive advantage over current and potential future competitors is our software development, technology porfolio and integration expertise derived from many years of experience with advanced propulsion systems. Our current competitors typically focus on individual components. We offer complete systems and subsystems based on our own control strategies and advanced technologies.

In the fuel cell and hydrogen industry, our expertise is in hydrogen fuel storage, fuel delivery, electronic and drive system controls, and system integration. We do not manufacture fuel cells or fuel reformers. We may face competition from companies providing components such as tanks, regulators or injectors. We may also face competition from traditional automotive component suppliers, such as Bosch, Delphi, Siemens, and Visteon, and from OEMs that develop fuel systems internally.

A critical element for hydrogen-based vehicles and OEM alternative fuel vehicles is fuel storage. Our major competitors for high-pressure gaseous storage cylinders include Dynetek Industries Ltd., Lincoln Composites and Structural Composites Inc.

Many of these potential competitors have been in business longer than us and have substantially greater financial, marketing and development resources than we have. We expect that we will face increased competition in the future as new competitors enter the market and advanced technologies become available. In addition, consolidation in our industry may also affect our ability to compete. Consolidation may strengthen our competitors' financial, technical and marketing resources and may provide greater access to customers. Consequently, these competitors may be able to develop greater resources for the development, promotion and sale of their products. We cannot assure you that we will be able to compete successfully with our existing or new competitors or that the competitive pressures will not materially and adversely affect our business, financial condition or results of operations.

Renewable Energy

In North America, large utility companies dominate the energy production industry, and coal continues to dominate as the primary resource for electricity production. Electricity generated from wind and solar energy faces competition from other traditional resources such as nuclear, oil and natural gas. The advantages of conventional production of electricity are that:

- the technology and infrastructure already exist for the use of fossil fuels such as coal, oil and natural gas and that commonly-used fossil fuels in liquid form such as light crude oil, gasoline; and
- liquefied petroleum gas is easy to distribute.

However, energy produced by conventional resources also faces a number of challenges including:

- the inefficient atmospheric combustion (burning) of fossil fuels leads to the release of pollution into the atmosphere including carbon dioxide which is largely considered the primary cause of global warming;

- fossil fuels are non-renewable unsustainable resources which are expected to eventually decline in production and become exhausted with potentially negative consequences to societies that remain highly dependent on them; and
- extraction of fossil fuels is becoming more expensive as readily-available resources are exhausted and mines get deeper and oil rigs must drill deeper and further out in oceans.

In contrast, electricity generated from wind and solar energy:

- produces no water or air pollution that can contaminate the environment because there are no chemical processes involved in wind and solar power generation; therefore, there are no waste by-products such as carbon dioxide;
- does not contribute to global warming because it does not generate greenhouse gases;
- are renewable sources of energy; and
- in the case of community wind power, farming and grazing can still take place on land occupied by wind turbines.

However, wind and solar energy producers also face certain obstacles including:

- wind strength and sunshine levels are not consistent as they change throughout each day and season; therefore, wind and solar power are not predictably available, and when the wind speed decreases or sunshine decreases, less or no electricity is generated;
- residents in communities where wind and solar farms exist may consider them an "eyesore;" and
- wind farms, depending on the location and type of turbine, may negatively affect bird migration patterns and may pose a danger to the birds themselves; however, newer, larger wind turbines have slower moving blades which seem to be visible to most birds.

We expect that primary competition for the wind and solar power industry will continue to come from utility company producers of electricity generated from coal and other non-renewable energy sources.

Within the North America wind and solar power markets, there is also a high degree of competition, with growth opportunities in all sectors of the industry regularly attracting new entrants. In the United States, the enactment of the American Recovery and Reinvestment Act in February 2009 provides a greater tax incentive for companies in the renewable energy industry, which may lead to more entrants in the wind and solar power development market, who will have an overall increased need for wind turbines and solar panels.

New entrants in the wind and solar power development market, however, face certain barriers to entry. The length of time to take a project from site identification to commissioning of the equipment generally spans several years and the capital costs of establishing renewable energy farms are high. Other significant factors include the cost of land acquisition, the availability of transmission lines, land use considerations and the environmental impact of construction and operations. Finally, another critical barrier to entry into the renewable energy development business is the necessary experience required to bring projects to the point where they are able to secure agreements with respect to connecting to the existing electricity transmission network, power purchase agreements and project financing for construction.

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 various regulatory bodies and industry practices, including the U.S. Department of Transportation and Federal Motor Vehicle Safety Standards, the National Fire Protection Association, TÜV, European Integrated Hydrogen Project, Kouatsugasu Hoan Kyokai, Underwriters Laboratories, and American Gas Association. Approvals enhance the acceptability of our products in the domestic marketplace. Many foreign countries also accept these agency approvals as satisfying the "approval for sale" requirements in their markets.

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.

Backlog

As of April 30, 2010, our total backlog was $43.8 million as compared to $13.5 million as of April 30, 2009. Our backlog consists of product orders that we believe are firm plus revenue associated with development service programs under contract that has not yet been recognized under the percentage of completion method. We anticipate that substantially all of the current backlog will be completed near the end of fiscal 2011; however, included in our current backlog is $32.6 million representing the sales value of the initial shipments of our *Q-Drive* system for the Fisker Karma vehicle that is scheduled to go into high volume production in early calendar 2011 and any significant delays on behalf of Fisker Automotive could extend the time required to realize all revenues associated with the backlog.

Intellectual Property

The continued development and protection of our intellectual property is crucial to our future success. 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 research and development and creation of "know-how."

We do not know whether any patents will be issued from our patent applications or whether the scopes of our issued patents are sufficiently broad to protect our technologies or processes. Our patents may not provide us

a competitive advantage. Competitors may successfully challenge the validity and/or scope of our patents and trademarks. We also rely on a combination of trademark, trade secret and other intellectual property laws and various contract rights to protect our proprietary rights. However, we do not believe our intellectual property rights provide significant protection from competition. We believe that establishing and maintaining strong strategic relationships with valued customers and OEMs are the most significant factors protecting us from new competitors.

In connection with our strategic alliance with General Motors, each party retains the ownership of its existing technology and jointly owns technology that is jointly created under the alliance. No jointly owned patents have been received or applied for under the alliance. Under the alliance, each party granted the other certain exclusive and/or nonexclusive licenses with respect to certain intellectual property developed by such party prior to and during the term of the alliance and also with respect to the jointly owned intellectual property. During the term of the alliance, we are subject to certain transfer restrictions with respect to the pledge, hypothecation, encumbrance, sale or licensing of certain intellectual property. Further, we are obligated to share with General Motors a portion of our revenues generated from the sale of our gaseous storage, handling and control products for fuel cell systems for both automotive and non-automotive applications. The revenue sharing payments continue for a period of 45 years. We do not expect the revenue sharing payments to begin until at least the 2012 fiscal year. Given the uncertainty of the amount of revenues we will generate from the sale of our gaseous storage, handling and control products in future years, we are unable to quantify the amount of revenue sharing payments we will be required to make to General Motors, if any.

Employees

As of June 21, 2010, we had 101 full-time employees and 3 part-time employees in our combined businesses. 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. We consider our relations with our employees to be good.

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.qtww.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.

Executive Officers

Our executive officers as of April 30, 2010 and their respective ages and positions were as follows:

Name	Age	Position
Alan P. Niedzwiecki	53	Chief Executive Officer; President; Director
Dale L. Rasmussen	60	Chairman of the Board of Directors
W. Brian Olson	46	Chief Financial Officer; Treasurer
David Mazaika	46	Chief Operating Officer
Kenneth R. Lombardo	44	Vice President-Legal; General Counsel and Corporate Secretary
Bradley J. Timon	47	Corporate Controller; Chief Accounting Officer

The following is a biographical summary of the experience of the executive officers:

Alan P. Niedzwiecki has served as President and as one of our directors since February 2002 and was appointed as Chief Executive Officer in August 2002. Mr. Niedzwiecki served as Chief Operating Officer from November 2001 until he was appointed as Chief Executive Officer in August 2002. From October 1999 to November 2001, Mr. Niedzwiecki served as Executive Director of Sales and Marketing. From February 1990 to October 1999, Mr. Niedzwiecki was President of NGV Corporation, an engineering and marketing/ commercialization consulting company. Mr. Niedzwiecki has more than 25 years of experience in the alternative fuels industry in product and technology development and commercialization relating to mobile, stationary power generation and refueling infrastructure solutions. Mr. Niedzwiecki is a graduate of Southern Alberta Institute of Technology. Mr. Niedzwiecki has also served on the board of directors of Fisker Automotive since its formation in November 2007 and on the board of directors of Advanced Lithium Power Inc. since its formation in March 2006.

Dale L. Rasmussen has served as a member of our Board of Directors since October 2000, and was appointed as Chairman of the Board in February 2002. On May 1, 2006, Mr. Rasmussen became a full time employee of the Company. His responsibilities include acquisitions, joint ventures, strategic alliances and investor and shareholder relations. Mr. Rasmussen was the Senior Vice President and Secretary of IMPCO Technologies from 1989 through 2005, joining the Company in 1984 as Vice President of Finance and Administration and Corporate Secretary. Prior to joining IMPCO, Mr. Rasmussen was a commercial banker for twelve years at two banks, both acquired by Key Bank and U.S. Bank, responsible for managing the bank's investment portfolio, branch and corporate development, and served as corporate secretary. Mr. Rasmussen is a graduate of Western Washington University; upon graduating he received the marketing student of the year award. Mr. Rasmussen is also a graduate of Pacific Coast Banking School, University of Washington. Mr. Rasmussen also served on the board of directors, as Chairman, of Fisker Automotive from November 2007 until January 2010 and has served on the board of directors of Advanced Lithium Power, Inc. since its formation in March 2006.

W. Brian Olson has served as Chief Financial Officer and Treasurer since August 2002. From July 1999 to August 2002, Mr. Olson served as Treasurer, Vice President and Chief Financial Officer of IMPCO. He originally joined IMPCO in October 1994 and held various financial positions with IMPCO, including serving as Corporate Controller. Prior to joining IMPCO, Mr. Olson was with the public accounting firm of Ernst & Young LLP and its Kenneth Leventhal Group. Mr. Olson holds a Bachelor of Science degree in business and operations management from Western Illinois University and a Masters of Business Administration degree in finance and economic policy from the University of Southern California. Mr. Olson is a Certified Financial Manager and a Certified Management Accountant.

David M. Mazaika has served as Chief Operating Officer since December 2008. Prior to joining us, Mr. Mazaika served as Chairman and CEO for ISE Corporation, a company which he co-founded in 1994. Prior to this, Mr. Mazaika was Vice President of Business Development for International Space Enterprises. From 1985 to 1993, Mr. Mazaika held senior positions with Convair and Space Systems Divisions of General Dynamics. Mr. Mazaika holds a Bachelor of Science in Electrical Engineering from Cornell University.

Kenneth R. Lombardo has served as Vice President and General Counsel since May 2005 and became Corporate Secretary in September 2005. From March 1996 to May 2005, Mr. Lombardo practiced law at Kerr, Russell and Weber, PLC in Detroit, Michigan, where he specialized in mergers and acquisitions, taxation, corporate and business law. Mr. Lombardo is also a certified public accountant with over six years of audit and tax experience with Deloitte & Touche. Mr. Lombardo received his law degree from Wayne State University Law School and a Bachelor of Science degree in Business Administration, with a major in Accounting, from Central Michigan University.

Bradley J. Timon has served as Corporate Controller and Chief Accounting Officer since April 2004. Prior to joining us, Mr. Timon worked as a financial consultant. From June 1998 to October 2001, Mr. Timon was with

CORE, INC. serving as the Corporate Controller and then later as Acting Chief Financial Officer. Between September 1995 and May 1998, Mr. Timon served as a Controller for James Hardie Industries. Before entering private industry, Mr. Timon was with the public accounting firm KPMG from 1989 to 1995. Mr. Timon has a Bachelor of Arts degree in accounting from California State University, Fullerton and is a Certified Public Accountant.

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 16 and 18 to our Consolidated Financial Statements in Part IV, Item 15(a)(1) of this 2010 Annual Report.

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 would likely suffer significantly. In such case, the value of our common stock could decline and adversely affect our ability to raise additional capital.***

RISKS RELATED TO LIQUIDITY AND CAPITAL RESOURCES

We have a history of operating losses and negative cash flow and we anticipate that we will need to raise additional funds to finance operations.

We have a history of operating losses and negative cash flow. We have incurred recurring net losses, including net losses from continuing operations of $28.0 million in fiscal 2009, and $46.3 million in fiscal 2010. We used $16.9 million and $14.7 million of cash for continuing operating activities during fiscal 2009 and fiscal 2010, respectively.

We expect to continue to make significant expenditures and incur substantial expenses as we continue our product development efforts, further commercialize our products and systems, fund renewable energy projects such as solar and wind, and develop facilities to expand the production capacity for our products. As a result, we expect to continue to incur significant losses as we execute our strategies and may never achieve or maintain profitability. We believe that we have 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 alternative energy or hybrid vehicle market conditions or any other assumptions we used in formulating our business strategy, our long-term strategy may not be successful and we may not be able to achieve and maintain profitability. As a result, investors could lose confidence in our company and the value of our common stock, which could cause our stock price to decline and adversely affect our ability to raise additional capital. Although our current operating plan anticipates increased revenues and improved profit margins over the next two years, we expect to incur operating losses for the foreseeable future.

We have funded our operations primarily with proceeds from public and private offerings of our common stock and secured and unsecured debt instruments. We cannot provide any assurances that we will be able to secure additional funding from public or private offerings on terms acceptable to us, if at all. Our inability to

achieve our current operating plan or raise capital to cover any potential shortfall would have a material adverse affect on our ability to meet our obligations as they become due without substantial disposition of assets or other similar actions outside the ordinary course of business If we are not able to secure the additional funding we need, we would need to curtail our operations or take other action in order to continue to operate as a going concern.

We will need to raise additional funds to take advantage of strategic business opportunities, to complete product and application development, to fund our wind and solar initiatives, future operating activities and contractual commitments, and/or pay off or refinance debt.

We will need to raise additional capital to meet our expected cash needs. Our cash needs will depend on numerous factors, including our revenues, completion of our product development activities, our ability to commercialize our advanced propulsion and fuel systems, market acceptance of electric, plug-in electric and fuel cell vehicles, customer and market acceptance and use of our products, the development of an infrastructure to support electric, plug-in electric and fuel cell vehicles, increase in customer programs and product development, and our ability to control costs. We expect to devote substantial capital resources to fund expected losses, continue development programs, developing a manufacturing infrastructure for our products, build out our portfolio of wind and solar energy farms, start up our planned solar module manufacturing plant, and meeting our debt obligations. If we are unable to secure such additional financing, it will have a material adverse effect on our business and we may have to limit operations in a manner inconsistent with our development and commercialization plans. If additional funds are raised through the issuance of equity securities or convertible debt securities, it will be dilutive to our stockholders and could result in a decrease in our stock price.

We have three convertible notes outstanding with an aggregate principal and accrued interest balance of $11.2 which mature on July 31, 2011 and which we may be unable to repay at maturity.

We have three convertible notes outstanding to our senior lender which are secured by substantially all of our assets which are due on July 31, 2011. The convertible notes accrue interest at the rate of 11.5% through September 1, 2010 and 9.5% thereafter, which is paid semi-annually on January 1 and July 1 by adding such interest to the then outstanding principal amount. We may not have the funds to repay the convertible notes at maturity. If we do not have the funds to repay the notes at maturity and we are unable to extend the maturity dates or otherwise refinance the convertible notes, we would be in default and the holder of the notes would have rights senior to those of our common stockholders. Further, a default in the convertible notes would have a material adverse effect on our ability to continue as a going concern.

Our shareholders are subject to significant dilution upon the occurrence of certain events.

Since May 1, 2009, we have issued a cumulative total of approximately 84.2 million shares in connection with capital raising transactions, debt conversions, payments on our term debt obligations, warrant exercises and our acquisition of Schneider Power. Further, as of June 14, 2010, we had approximately 85.2 million shares of our common stock reserved for future issuance. In addition, we have two demand obligations owed to our senior lender in the aggregate principal amount of $8.6 which we have the right, subject to certain conditions, to pay using shares of our common stock and we do intend to pay such debt using shares. Based on our stock price on June 14, 2010, we would have to issue approximately 13.8 million shares of our common stock to fully satisfy those debt obligations. The actual number of shares issued in payment of such debt obligations could be much higher or lower depending on our share price at the time demand for payment is made. Further, we may from time to time make an offer to our warrant holders to exchange their outstanding warrants for shares of our common stock, a fewer number of warrants with more favorable terms, or a combination thereof.

Included in the shares of common stock designated for future issuance discussed above are approximately 7.1 million shares that are subject to warrant contracts issued on October 27, 2006 that as of June 14, 2010 were exercisable at $0.55 per share (the "October 2006 Warrants") and approximately 18.5 million shares subject to warrant

contracts issued on August 25, 2008 that as of June 14, 2010 were exercisable at $2.92 per share (the "August 2008 Warrants"). The October 2006 warrants and the August 2008 Warrants contain provisions which, subject to certain exceptions, resets the exercise prices of such warrants if at any time while such warrants are outstanding we sell or issue (or are deemed to sell or issue) shares of our common stock or rights, warrants, options or other securities or debt convertible, exercisable or exchangeable for shares of our common stock at a price below the then current exercise price per share for such warrants; provided, however, the exercise price for the August 2008 Warrants cannot be reset below $1.93. In the event of future price resets, the number of shares of our common stock that are subject to such warrants increase so that the aggregate purchase price payable applicable to the exercise of the warrants after the reset of the exercise price is the same as the aggregate purchase price payable immediately prior to the reset. Any future resets to the exercise price of the October 2006 Warrants and/or the August 2008 Warrants will have a further dilutive effect on our existing stockholders and could result in a decrease in our stock price.

Future sales of substantial amounts of our common stock into the public and the issuance of the shares reserved for future issuance, in payment of our term debt, and/or in exchange for outstanding warrants will be dilutive to our existing stockholders and could result in a decrease in our stock price.

We are not in compliance with Nasdaq's minimum bid requirement.

On March 8, 2010, we received notification from The Nasdaq Stock Market that we were not in compliance with Nasdaq's continued listing rule 5450(a)(1) because the closing bid price for a share of our common stock was below $1.00 for 30 consecutive trading days. In order to regain compliance with the minimum bid price rule, the closing stock price of a share of our common stock must be at least $1.00 per share for a minimum of ten consecutive business days prior to September 1, 2010.

If we are unable to regain compliance with the $1.00 minimum bid requirement prior to September 1, 2010, Nasdaq will provide us with written notification that our common stock will be delisted from the Nasdaq Global Market. At that time, we may appeal the delisting determination, or, alternatively, we may apply to transfer our common stock to the Nasdaq Capital Market provided that we satisfy the Nasdaq Capital Market's requirements for initial listing, other than the $1.00 minimum bid price requirement. In the event of such a transfer, we will be afforded an additional 180 calendar days to comply with the $1.00 minimum bid price requirement while listed on the NASDAQ Capital Market. No assurance can be given that we will be eligible for the additional 180-day compliance period or, even if eligible, that we will regain compliance during any additional compliance period.

Based on the fact that our stock price is currently well below the $1.00 minimum bid price requirement, we expect that we will have to seek stockholder approval to allow our board of directors to implement a reverse stock split in the near future in order to regain compliance. Such approval requires the affirmative vote of a majority of our issued and outstanding shares. We cannot provide any assurance that we would be able to obtain the requisite stockholder vote.

The delisting of our common stock from trading on Nasdaq may have a material adverse effect on the market for, and liquidity and price of, our common stock and impair our ability to raise capital. Delisting from Nasdaq could also have other negative results, including, without limitation, the potential loss of confidence by customers and employees, the loss of institutional investor interest and fewer business development opportunities. If our common stock is delisted from trading on Nasdaq and if our common stock is not eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of or obtain accurate quotations for the price of our common stock, and there may also be a reduction in our coverage by security analysts and the news media, which may cause the price of our common stock to decline further.

We may not be able to maintain compliance with NASDAQ's continued listing requirements.

In addition to Nasdaq's $1.00 minimum bid price rule, there are a number of other continued listing requirements that we must satisfy in order to maintain our listing on Nasdaq. Our failure to maintain compliance with the NASDAQ Global Market continued listing standards could result in the delisting of our common stock and could adversely affect the per share price of our common stock and impair our ability to raise capital that is needed for future operations.

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

Prior to July 2002, there was no trading market for our common stock. Since our common stock began trading in July 2002, its market price and trading volume have 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 prospectus 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.

We may not be able to obtain waivers of potential defaults in the future from our senior lender if we do not meet future requirements associated with our amended credit facility and convertible promissory note.

We received waivers of defaults from our senior lender on March 12, 2009, January 16, 2008 and December 14, 2007 related to our non-compliance with certain required debt service payments and covenants. We cannot provide any assurance that our senior lender would provide us with a waiver should we not be in compliance in the future. A failure to maintain compliance along with our senior lender not agreeing to a waiver for the non-compliance would cause the outstanding borrowings to be in default and payable on demand which would have a material adverse effect on our ability to continue as a going concern.

We have a commitment to provide a guaranty to an affiliate's credit facility that could be called upon if the affiliate defaults on the credit facility in the future.

In connection with our acquisition of an ownership interest in our German solar affiliate, Asola, we committed to provide a 1.0 million euro guaranty to Asola's bank to support an increase in Asola's bank debt. Once the guaranty is put in place, if Asola were to default on the credit facility in the future, we could be called upon to repay the credit facility up to the limit of our guaranty.

The change in value of our derivative liabilities could have a material effect on our financial results.

Included on our balance sheet at April 30, 2010 are derivative liabilities related to embedded features contained within a written put option under the $10.0 million Lender Commitment (see Note 10 of the consolidated financial statements) received from an affiliate of our senior lender and certain warrant contracts. At each reporting period, we are required to determine the fair value of such derivatives and record the fair value adjustments as 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. Additional factors that impact the value of the derivative instruments include the volatility of our stock price, our credit rating, discount rates, and stated interest rates. Due to the volatile nature of our share price, we expect that we will recognize non-cash gains or losses on our derivative instruments each reporting period and that the amount of such gains or losses could be material.

OTHER RISKS RELATED TO OUR BUSINESS

Fisker Automotive represents a substantial portion of our existing and anticipated future revenues and these future revenues will depend on Fisker Automotive's success.

A large percentage of our revenue is typically derived from a small number of customers, in particular, Fisker Automotive, and we expect this trend to continue. During fiscal 2009 and fiscal 2010, our revenues from Fisker Automotive comprised 59% and 46%, respectively, of our total revenues. We expect our revenues from Fisker Automotive in fiscal year 2011 to again represent a substantial portion of our total revenues. If there is a significant unfavorable change in our agreements with Fisker Automotive or if there are delays in the development and/or production schedule of the Fisker Karma vehicle platform or the number of Fisker Karma vehicles sold does not meet expectations, it would have a material adverse affect on our business operations and financial results.

Fisker Automotive's success and, in turn, our success and ability to reach profitability, is highly dependent on Fisker Automotive's ability to access the full amount of a $528 million Department of Energy loan.

Our ability to achieve profitability is highly dependent on the success of Fisker Automotive. Fisker Automotive intends to use the proceeds of a Department of Energy loan ("DOE Loan") to complete the development, testing and tooling for its Karma vehicle platform and future vehicle platforms. Fisker Automotive's ability to access the DOE Loan is subject to a number of conditions and covenants. If Fisker Automotive is unable to satisfy the DOE Loan conditions or violates any of the DOE Loan covenants, it may not be able to access the full amount of the DOE Loan, which could have a material adverse effect on Fisker Automotive's ability to bring the Karma and other vehicle models to production. Failure or delays in bringing the Fisker Karma to production would have a material adverse effect on our business operations and financial results.

Schneider Power, Inc. (SPI) will need substantial additional capital in order to fund its renewable energy projects.

Our wholly-owned subsidiary, SPI, will need substantial capital in order to complete the development of its wind and solar energy projects. If SPI is unable to obtain financing for such projects, then it could result in significant delays in the development and construction of such projects or the sale or other disposition of such projects, which could have a material adverse effect on SPI's business, its ability to repay any intercompany loans made by us and our ability to realize the expected value we paid to acquire SPI.

SPI's success is highly dependent on its ability to obtain permits, approvals, authorization, power purchase agreements and retain its land rights.

In order for SPI to successfully develop and construct the wind and solar energy projects in its development pipeline it will need to obtain a number of various permits, approvals and authorizations from various federal, provincial and municipal governmental agencies and power purchase agreements with the Ontario government or other parties and must maintain its land access rights for such projects. We cannot provide any assurances that it will be able to obtain and maintain such permits, approvals, authorizations, agreements or land rights. Failure to obtain and maintain such permits, approvals, authorizations, agreements and land rights could result in significant delays or termination of the development projects, which could have a material adverse effect on SPI's business and our investment in SPI.

Development and construction of wind and solar energy projects is subject to a number of risks and uncertainties.

Development and construction of wind and solar projects is dependent on site assessment and the successful planning, testing and installation of the wind turbines and solar module arrays, which includes the foundation and interconnection structures. There is always the risk that a project will sustain delays and incur material cost

overruns. In addition, wind and solar potential for a particular renewable energy farm is based on historical data and weather patterns which may change significantly and have an adverse impact on future energy output and the projects profitability and cash flow for any given period.

The Credit Agreement with our senior lender contains certain negative covenants that could restrict our ability to implement our business plan.

Pursuant to the terms of the Credit Agreement with our senior lender, we must first obtain the consent of our senior lender before entering into certain transactions or undertaking certain activities including, without limitation, incurring additional debt outside the ordinary course of business, acquiring the stock or assets of another business or entity, and selling or leasing our assets other than in the ordinary course of business. In connection with our acquisition of SPI, our senior lender required us to pay a consent fee of $3.0 million which we satisfied by our delivery of a promissory note which is described in our financial statements as the Consent Fee Term Note. In the event that our business plan contemplates transactions or activities that are prohibited under the Credit Agreement and our senior lender is unwilling to give its consent, then we will either have to pay our senior lender a fee in order to get its consent or, alternatively, revise our business plan.

Fluctuations in the Euro Dollar could have a material effect on SPI's business and operations.

SPI purchases its wind turbines and a majority of its other capital equipment from foreign suppliers that transact in the euro dollar currency and which have long lead times. Unfavorable fluctuations in the euro dollar could have a significant adverse effect on SPI's financial results and it would incur higher cost of acquisition for capital equipment purchased from such foreign suppliers.

Our fuel cell vehicle development and production revenue depends on our relationship with General Motors and General Motors' viability and commitment to the commercialization of fuel cell vehicles.

General Motors has represented a significant portion of our historical revenues and although our relationship with General Motors under our strategic alliance continues, certain of our programs with General Motors have been delayed indefinitely and others have experienced funding restraints. Although we continue to provide services to General Motors, the level of such services was significantly reduced in fiscal year 2009 and fiscal 2010 compared to prior years and we cannot determine when such activities and revenues will increase, if ever.

We have commitments under a corporate alliance agreement with General Motors that require us to spend up to $4 million annually for research and development projects directed by General Motors.

Pursuant to our corporate alliance agreement with General Motors, we are required to spend up to $4.0 million annually on joint research and development projects directed by General Motors over a ten-year term that commenced in July 2002. Although this commitment was waived or partially waived by General Motors for calendar years 2002 through 2009 and is expected to be fully or partially waived for 2010, we cannot provide any assurance that General Motors will continue to waive this commitment in whole or part in the future. The annual commitment under our agreement with General Motors could be financially burdensome and may impact our ability to achieve profitability in the future.

We depend on third-party suppliers for the supply of materials and components for our products.

We depend on third-party suppliers for the supply of materials and components for our products. These companies may experience product development, resource and funding constraints that could impact their ability to supply components in a timely manner, if at all. Further, a prolonged downturn in the automotive industry could have a crippling effect on the automotive supplier chain which, in turn, could result in failures and disruptions in the supply of parts and components to us and materially affect our ability to meet our supply obligations to Fisker Automotive and other customers.

Our business depends on the growth of hybrid electric, hydrogen, and alternative fuel based vehicles and the renewable energy industry.

Our future success depends on the continued expansion of hybrid electric, hydrogen and alternative fuel based vehicles and the renewable energy industry. The market for these types of vehicles and for renewable energy technologies and products is influenced by and our sales may be negatively impacted by a number of factors some of which include the level of oil prices, battery durability improvements, levels of investment tax credits and regulation, availability of raw materials for photovoltaic module production, capital formation, interest rates and consumer disposable income.

The development, growth and acceptance of alternative fuel based vehicles and renewable energy initiatives is highly dependent on macro-economic conditions, specifically oil prices and the overall health of the economy. We believe when oil prices fall, the general attention placed on the development of advanced technology vehicles diminishes. Similarly, we believe consumers are less willing to spend a "technology premium" when faced with economic uncertainty. The downturn in the world economy is placing a tremendous strain on the automotive industry, including slowing demand for vehicles and limited funding for alternative fuel vehicle programs outside of governmental grant and loan programs.

Additionally, we cannot provide any assurances that the markets for hybrid electric vehicles and other alternative energy based vehicles will gain broad acceptance in any economic environment or, if they do, that they will result in increased sales of our hybrid vehicles and advanced fuel system products. Our business depends on auto manufacturers' timing for pre-production development programs and commercial production. If there are delays in the advancement of OEM alternative fuel technologies or in our OEM customers' internal plans for advanced vehicle commercialization, our financial results could be adversely affected.

Our ability to design and manufacture powertrain and fuel systems for hybrid, hydrogen and fuel cell applications that can be integrated into new vehicle platforms will be critical to our business and our ability to successfully complete existing development programs.

We are currently developing and integrating an advanced hybrid propulsion system for a production intent vehicle. This hybrid electric drive system is being designed to meet strict design and packaging requirements of Fisker Automotive. In addition, we currently offer packaged fuel systems, which include tanks, brackets, electronics, software and other components required to allow these products to operate in fuel cells, hybrids, or other alternative fuel applications. Customers for these systems require that these products meet either their strict design standards or OEM 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 OEM or customer specifications on a timely basis, our existing or future relationships with our OEM and other customers may be harmed, which would have a material adverse effect on our business, results of operations and financial condition.

To be commercially viable, our products and systems generally must be integrated into products manufactured by OEMs. We can offer no assurance that OEMs will manufacture appropriate products or, if they do manufacture such products, that they will choose to use our hybrid and fuel cell products and systems. Any integration, design, manufacturing or marketing problems encountered by OEMs could adversely affect the market for our hybrid and fuel cell products and systems, and our business, results of operations and financial condition.

Decrease in demand or price for solar cells could have an adverse effect on our financial statements.

We, through our affiliate Asola, have entered into a long-term supply agreement under which we have agreed to purchase solar cells with a cumulative power of 77.5 mega watts (MW) through December 31, 2017 at pre-determined quantities that could cause us to hold larger than expected quantities of inventory on hand as a

result of future decreased demand, and at pre-determined prices that could be above market rates in the future that could cause us to incur losses on the sale of products manufactured utilizing the solar cells. The spot trading prices for solar cell deliveries have decreased to levels that are currently below prices that we have secured for this applicable period under our long-term supply agreement. As a result, Asola demanded an adjustment to the stated pricing under the supply agreement in a fair and reasonable manner to account for the change in economic circumstances under a "loyalty clause" contained in the supply agreement. Asola's demand and the subsequent negotiations were not successful and the matter is now in litigation in Germany. We cannot provide any assurance that the matter will be resolved in Asola's favor. If the matter is resolved unfavorably to Asola and it is determined that a loss is probable on our remaining commitments to purchase the solar cells, we will be required to record a charge in the future for the difference between our remaining unconditional commitments and our estimated net realizable value and that charge could be material.

Past acquisitions and any future acquisitions, equity investments, joint ventures, strategic alliances or other similar transactions may not be successful.

We have consummated and may continue to consummate acquisitions, equity investments, joint ventures and strategic alliances in order to provide increased capabilities to our existing products, supply new products and services or enhance our distribution channels. We expect to continue to make strategic acquisitions of and investments in other businesses that offer complementary products, services and technologies, augment our market segment coverage, geographic locations, or enhance our technological capabilities. We may also enter into strategic alliances or joint ventures to achieve these goals. If we fail to integrate acquired businesses successfully into our existing businesses, or incur unforeseen expenses in consummating future acquisitions or other investments, we could incur unanticipated expenses and losses.

Any transactions or relationships will be accompanied by the risks commonly encountered with those matters. Risks that could have a material adverse affect on our business, results of operations or financial condition include, among other things:

- the difficulty of assimilating the operations and personnel of acquired businesses;
- the potential disruption of our ongoing business;
- the distraction of management from our business;
- the unexpected loss of customers of the acquired business;
- the potential inability of management to maximize our financial and strategic position as a result of an acquisition or investment;
- the potential for costs and delays in implementing, and the potential difficulty in maintaining uniform standards, controls, procedures and policies, including the integration of different information systems;
- the impairment of relationships with employees and customers as a result of any integration of new management personnel;
- the risk of entering market segments in which we have no or limited direct prior experience and where competitors in such market segments have stronger market segment positions;
- the risk that there could be deficiencies in the internal controls of any acquired company or investments that could result in a material weakness in our overall internal controls taken as a whole;
- the potential loss of key employees of an acquired company; and
- the potential dilution of earnings through acquisitions and options granted to employees of acquired companies or businesses.
- the potential for shareholder lawsuits.

Failure to secure financing for Quantum Solar could adversely affect our operating results.

We have a long-term lease agreement for our 88,000 square foot facility located in Irvine, California, which is currently underutilized. We intend for our subsidiary, Quantum Solar, to use that facility as a solar panel manufacturing facility. We also have made deposits totaling approximately $2.1 million on solar manufacturing equipment to be used by Quantum Solar. If we are unable to secure sufficient capital to fund the commissioning of solar manufacturing plant and Quantum Solar's operations, the cost associated with maintaining the Irvine facility will adversely affect our operations as long as it continues to be underutilized and we could forfeit the equipment deposits.

A mass market for plug-in electric hybrid and hydrogen products and systems may never develop or may take longer to develop than anticipated.

Plug-in electric hybrid, fuel cell and hydrogen systems represent emerging technologies, and we do not know whether consumers will adopt these technologies on a large scale or whether OEMs will incorporate these technologies into their products. In particular, if a mass market fails to develop, or develops more slowly than anticipated, for plug-in electric hybrid and hydrogen powered transportation applications, we may be unable to recover our expenditures to develop our fuel systems for hydrogen applications and may be unable to achieve or maintain profitability, any of which could negatively impact our business. Estimates for the development of a mass market for fuel cell products and systems have lengthened in recent years and we believe may continue to lengthen as a result of the success of hybrid and electric-based vehicle technologies. Many factors that are beyond our control may have a negative effect on the development of a mass market for fuel cells and our fuel systems for hydrogen applications. These factors include the following:

- downturn in the economic environment which may continue to put downward pressure on the price of oil and negatively impact hydrogen and fuel cell vehicle development spending;
- cost competitiveness and physical size of fuel cell systems and "balance of plant" components (fuel metering and regulation, bi-directional flow monitoring, sensors, etc.);
- availability, future costs and safety of hydrogen, natural gas and other potential fuel cell fuels;
- consumer acceptance of hydrogen or alternative fuel products;
- government funding and support for the development of hydrogen vehicles and hydrogen fuel infrastructure;
- the willingness of OEMs to replace current technology;
- consumer perceptions of hydrogen systems;
- regulatory requirements; and
- emergence of newer, breakthrough technologies and products within the automotive 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 hybrid and hydrogen fuel cell technology, 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.

The terms and enforceability of many of our strategic partner relationships are uncertain.

We have entered into relationships with strategic partners for design, product development and distribution of our existing products, and products under development, some of which may not have been documented by a

definitive agreement. Where definitive agreements govern the relationships between us and our partners, the terms and conditions of many of these agreements allow for termination by the partners. Termination of any of these agreements could adversely affect our ability to design, develop and distribute these products to the marketplace. Although substantially all of our current revenues are attributable to enforceable written or verbal agreements, we do have several strategic relationships that are governed by a nonbinding memorandum of understanding or letters of intent. We cannot provide any assurance that we will be able to successfully negotiate and execute definitive agreements with any of these potential partners, and failure to do so may effectively terminate the relevant relationship.

We currently face and will continue to face significant competition.

Our products face and will continue to face significant competition. New developments in technology may negatively affect the development or sale of some or all of our products or make our products uncompetitive or obsolete. Other companies, many of which have substantially greater resources, are currently engaged in the development of plug-in electric hybrid, hydrogen and electric hybrid propulsion products and technologies that are similar to, or may be competitive with, certain of our products and technologies.

Because the plug-in electric hybrid, fuel cell and hybrid propulsion technologies have the potential to replace existing power sources, competition for plug-in electric, fuel cell and hybrid products will come from current power technologies, from improvements to current power technologies and from new alternative power technologies. Increases in the market for alternative fueled vehicles may cause OEMs to find it advantageous to develop and produce their own hybrid propulsion or fuel management equipment rather than purchase the equipment from us. In addition, greater acceptance of plug-in electric hybrid, electric vehicles and alternative fuel engines or fuel cells may result in new competitors. Furthermore, there are competitors, including OEMs, working on developing other plug-in electric, fuel cell and hybrid vehicle technologies in our targeted markets. A large number of corporations, national laboratories and universities in the United States, Canada, Europe and Japan possess plug-in electric, fuel cell and hybrid vehicle technology and/or are actively engaged in the development and manufacture of plug-in electric, fuel cells and hybrid vehicles. Each of these competitors has the potential to capture market share in various markets, which would have a material adverse effect on our position in the industry and our business, results of operations and financial condition. Many of our competitors have financial resources, customer bases, businesses or other resources which give them significant competitive advantages.

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 may result in the loss of exclusivity 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 or patent application, 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 failure to obtain or maintain the right to use certain intellectual property may negatively affect our business.

Our future success and competitive position depends in part upon our ability to obtain or maintain certain proprietary intellectual property used in our principal products. This may be achieved, in part, by prosecuting claims against others who we believe are infringing our rights and by defending claims of intellectual property infringement brought by others. While we are not currently engaged in any material intellectual property litigation, in the future we may commence lawsuits against others if we believe they have infringed our rights, or we may become subject to lawsuits alleging that we have infringed the intellectual property rights of others. For example, to the extent that we have previously incorporated third-party technology and/or know-how into certain products for which we do not have sufficient license rights, we could incur substantial litigation costs, be forced to pay substantial damages or royalties, or even be forced to cease sales in the event any owner of such technology or know-how were to challenge our subsequent sale of such products (and any progeny thereof). In addition, to the extent that we discover or have discovered third-party patents that may be applicable to products or processes in development, we may need to take steps to avoid claims of possible infringement, including obtaining non-infringement or invalidity opinions and, when necessary, re-designing or re-engineering products. However, we cannot assure you that these precautions will allow us to successfully avoid infringement claims. Our involvement in intellectual property litigation could result in significant expense to us, adversely affect the development of sales of the challenged product or intellectual property and divert the efforts of our technical and management personnel, whether or not such litigation is resolved in our favor. In the event of an adverse outcome in any such litigation, we may, among other things, be required to:

- pay substantial damages;
- cease the development, manufacture, use, sale or importation of products that infringe upon other patented intellectual property;
- expend significant resources to develop or acquire non-infringing intellectual property;
- discontinue processes incorporating infringing technology; or
- obtain licenses to the infringing intellectual property.

We cannot assure you that we would be successful in any such development or acquisition or that any such licenses would be available upon reasonable terms, if at all. Any such development, acquisition or license could

require the expenditure of substantial time and other resources and could have a material adverse effect on our business, results of operations and financial condition.

We have limited experience manufacturing hybrid propulsion and fuel systems for fuel cell applications on a commercial basis.

We have limited experience manufacturing propulsion and fuel systems for hybrid, plug-in electric hybrid, fuel cell and hydrogen applications on a commercial basis. In order to produce propulsion systems for hybrid and fuel cell applications at affordable prices, we will have to produce hybrid and fuel cell drive systems through high volume automated 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 propulsion systems for hybrid and fuel cell applications. Even if we, or our suppliers, are successful in developing our high volume manufacturing capability and processes, we do not know whether we will do so in time to meet our product commercialization schedules or to satisfy the requirements of 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 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.

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. We do not maintain a key person life insurance policy on our chairman of the board, our chief executive officer, or our chief financial officer. 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.

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 as our products go to production 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 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 OEMs, 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 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.

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

We must obtain product certification from governmental agencies, such as the U.S. Environmental Protection Agency and the California Air Resources Board, 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 management products that are certified to meet existing and future air quality and energy standards. We cannot assure you that our products will continue to meet these standards. The failure to comply with these certification requirements could result in the recall of our products or in civil or criminal penalties.

We anticipate that regulatory bodies will establish certification procedures and impose regulations on fuel cell enabling technologies, which may impair our ability to distribute, install and service these systems. 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.

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.

New technologies could render our existing products obsolete.

New 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 plug-in electric hybrid, fuel cell, hydrogen, hybrid or other technologies on which our automotive business is currently focused. Our success depends upon our ability to design, develop and market new or modified hybrid and fuel cell 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.

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

The market for 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.

Our renewable energy projects are also subject to a number of environmental laws, rules and policies related to noise, air, water and other aspects of the environment and the surrounding habitat which must be adhered to in order to obtain the permits necessary to develop, construct and operate the project related such as noise, air, and other impacts on the environment and surrounding habitat. Any change in such laws, rules and policies could result in significant cost-overruns and delays or termination of such project.

The development of uniform codes and standards for hydrogen fuel cell vehicles and related hydrogen refueling infrastructure may not develop in a timely fashion.

Uniform codes and standards do not currently exist for fuel cell systems, fuel cell components or the use of hydrogen as a vehicle fuel. Establishment of appropriate codes and standards is a critical element to allow fuel cell system developers, fuel cell component developers and hydrogen storage and handling companies to develop products that will be accepted in the marketplace.

All fuels, including hydrogen, pose significant safety hazards, and hydrogen vehicles have not yet been widely used under "real-world" driving conditions. Ensuring that hydrogen fuel is safe to use by the car-driving public requires that appropriate codes and standards be established that will address certain characteristics of hydrogen and the safe handling of hydrogen fuels.

The development of fuel cell and hydrogen fuel applicable standards is being undertaken by numerous organizations, including the American National Standards Institute, the American Society of Mechanical Engineers, the European Integrated Hydrogen Project, the International Code Council, the International Standards Organization, the National Fire Protection Association, the National Hydrogen Association, the Society of Automotive Engineers, the Canadian Standards Association, the American National Standards Institute and the International Electrotechnical Commission. Given the number of organizations pursuing hydrogen and fuel cell codes and standards, it is not clear whether universally accepted codes and standards will result and, if so, when.

Although many organizations have identified as a significant priority the development of codes and standards, we cannot assure you that any resulting codes and standards would not materially affect our revenue or the commercialization of our products.

The recently completed restatement of our historical financial statements has already consumed, and may continue to consume, a significant amount of our resources and may have a material adverse effect on our business and stock price.

In October 2009, we announced that our previously issued consolidated financial statements for the fiscal years ended April 30, 2007 and April 30, 2008 on Form 10-K and each of the quarterly condensed consolidated financial statements on Form 10-Q for the periods ended October 31, 2006 through January 31, 2009 could no longer be relied upon due to errors identified in the accounting for and classification of derivative instruments associated with debt arrangements and warrant contracts. The restatement process was highly time and resource-intensive and involved substantial attention from management and significant legal and accounting costs. Although we have now completed the restatement, we cannot guarantee that we will have no further inquiries from the SEC or NASDAQ regarding our restated financial statements or matters relating thereto.

Further, many companies that have been required to restate their historical financial statements have experienced stockholder lawsuits related thereto. Any future inquiries from the SEC as a result of the restatement of our historical financial statements will, regardless of the outcome, likely consume a significant amount of our resources in addition to those resources already consumed in connection with the restatement itself.

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.

In our Annual Report on Form 10-K for the year ended April 30, 2009, we reported that we had a material weakness over the accounting for and disclosure of derivatives associated with debt and warrant instruments because we lacked the technical expertise and did not maintain adequate procedures to ensure that the accounting for derivative financial instruments was appropriate under U.S. generally accepted accounting principles (GAAP). Procedures related to identifying derivative instruments and disclosing derivative instruments at April 30, 2009 did not operate properly and this material weakness resulted in a restatement of our prior financial statements. Since April 30, 2009, we developed and implemented a remediation plan to address the identified material weakness as follows: (i) we increased our technical expertise of GAAP associated with accounting for derivative instruments and (ii) we enhanced internal procedures to better identify derivative financial instruments.

Although we believe that these efforts have strengthened our internal control over financial reporting and address the concern that gave rise to the material weakness as of April 30, 2009, we cannot be certain that our expanded knowledge and revised internal control practices will ensure that we maintain adequate internal control over our financial reporting in future periods. Any failure to maintain such 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 NASDAQ, we could face severe consequences from those authorities. In either case, there could result a material adverse affect on our business. Inferior 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.

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

Provisions in our 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 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 Certificate of Incorporation and Bylaws, and requiring the affirmative vote of 80% of our outstanding voting stock to amend certain other provisions of our 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.

These anti-takeover provisions could substantially impede the ability of public stockholders to benefit from a change in control or to change our management and the Board of Directors.

Item 1B. Unresolved Staff Comments.

Not Applicable.

Item 2. Properties.

Our corporate headquarters is located in Irvine, California. The facility in Irvine is leased from Cartwright, LLC (Cartwright) and another party. Our chief executive officer and an irrevocable trust established by our chairman of the board own 50% and 36.67%, respectively, of Cartwright LLC. The remaining 13.33% of Cartwright LLC is owned by an unrelated party.

Our facility in Lake Forest, California conducts the research and development for our *Q-Drive* hybrid electric propulsion system and other hybrid technologies, production of systems and technologies that enable the use of gaseous fuels in internal combustion engines and fuel cells, including 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. Our facility in Toronto, Ontario houses the administrative offices of our wholly-owned subsidiary, SPI.

As of June 21, 2010, we utilize manufacturing, research and development and general office facilities in the locations set forth below:

Location	Approximate Square Footage	Owned or Leased	Lease Expiration Date	Principal Uses
Irvine, California	88,000	Leased	10/31/15	Corporate offices
Lake Forest, California	156,000	Leased	5/31/15	Manufacturing, assembly, design, research and development, and testing
Toronto, Ontario	5,000	Leased	2/28/13	Administrative offices—SPI

We believe our facilities are presently adequate for our current core product manufacturing operations and OEM development programs and production; however, our existing facilities are currently underutilized. Specifically, our facilities in Lake Forest, California include a 60,000 light industrial building that is unoccupied and we only utilize approximately 20% of our available space in our Irvine, California facility for our corporate offices. We anticipate that the unoccupied portions of our facilities will be fully utilized as we expand our operations in the hybrid vehicle and solar industries. If we require additional facilities, we believe we will be able to obtain suitable space on commercially reasonable terms.

Item 3. Legal Proceedings.

From time to time, we receive claims of and become subject to product liability, employment, intellectual property and other commercial litigation related to the conduct of our business. Such litigation, regardless of its merit or outcome, could be costly and time consuming and could divert our management and other key personnel from our business operations. The uncertainty of litigation increases the risks associated with it. In connection with such litigation, we may be subject to significant damages or equitable remedies relating to the operation of our business. Any such litigation may materially harm our business, results of operations and financial condition.

We are one of several defendants in a lawsuit filed in June 2008 in Oakland County Circuit Court, State of Michigan, by a former shareholder of Wheel to Wheel, LLC, a former tier 2 subsidiary of ours prior to our disposition of the Tecstar Automotive Group (TAG) business segment. The other defendants include Wheel to Wheel, LLC (W2W), TAG, our senior lender (Lender), an affiliate of the Lender to whom we transferred the TAG business segment in January 2008, Richard C. Anderson (Anderson), the Estate of Jeffrey P. Beitzel (Beitzel Estate), and Douglass C. Goad (Goad). The plaintiff alleges that W2W breached the terms of a Stock Redemption Agreement and Consulting Agreement, both dated April 30, 2003, and is seeking approximately $3 million in damages. Anderson, Beitzel Estate and Goad are being sued as guarantors of the W2W obligations. Plaintiff is alleging that we, WB QT, LLC (affiliate of Lender) and WB Automotive, Inc. (affiliate of Lender) are also liable to plaintiff under a successor liability theory. Anderson, Goad and Beitzel Estate asserted cross-claims against us, WB QT, LLC and WB Automotive, Inc. claiming they are entitled to indemnification. The court dismissed those claims as premature. Anderson has also asserted breach of contract claims against TAG alleging he is entitled to severance benefits under an employment agreement between Anderson and TAG and against us alleging we are liable for such severance benefits under successor liability and piercing the corporate veil theories. The case is currently in the discovery process. A trial date has not been set but it is anticipated to be in

the first half of calendar year 2011. We believe the claims against us are without merit and we intend to vigorously defend all such claims but cannot provide any assurance as to the outcome of the case.

Other than the case discussed above, we are not currently a party to any other material legal proceeding.

Item 4. Reserved.

PART II

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

Our common stock has been traded on the Nasdaq Global Market (f/k/a the Nasdaq National Market) under the symbol "QTWW" since July 23, 2002. Our Series B common stock is not publicly traded. The table below sets forth, for the periods indicated, the high and low daily sales prices for our common stock as reported on the Nasdaq Global Market:

	High	Low
Fiscal Year Ended April 30, 2009		
Quarter ended July 31, 2008	$3.22	$1.15
Quarter ended October 31, 2008	2.24	0.64
Quarter ended January 31, 2009	1.33	0.53
Quarter ended April 30, 2009	0.95	0.58
Fiscal Year Ended April 30, 2010		
Quarter ended July 31, 2009	$0.88	$0.65
Quarter ended October 31, 2009	1.77	0.62
Quarter ended January 31, 2010	1.42	0.72
Quarter ended April 30, 2010	0.87	0.60

On June 21, 2010, the last reported sale price for our common stock as reported by the Nasdaq Global Market was $0.59 per share and there were approximately 917 holders of record of our common stock and one holder of record of our Series B common stock.

Dividend Policy

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 fourth quarter of fiscal 2010. Item 12 of Part III of this Annual Report on Form 10-K contains information concerning securities authorized for issuance under equity compensation plans.

Item 6. Selected Financial Data.

The following table summarizes certain historical financial information at the dates and for the periods indicated prepared in accordance with U.S. Generally Accepted Accounting Principles. The Consolidated Statement of Operations data for the years ended April 30, 2008, 2009 and 2010 and the Consolidated Balance Sheet data as of April 30, 2009 and 2010 have been derived from our audited consolidated financial statements included elsewhere in this 2010 Annual Report. The Consolidated Statement of Operations data for the years ended April 30, 2006 and 2007 and the Balance Sheet data as of April 30, 2006, 2007 and 2008 have been derived from audited financial statements not included in this 2010 Annual Report. Certain reclassifications have been made to amounts for fiscal years 2006 through 2009 to conform to the fiscal 2010 presentation. The selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes thereto, which are included elsewhere in this 2010 Annual Report.

	Year Ended April 30,				
	2006	2007	2008	2009	2010(3)
	(all amounts in thousands, except per share amounts)				
Statement of Operations Data:					
Revenue:					
Net product sales	$ 8,830	$ 10,663	$ 11,856	$ 975	$ 1,450
Contract revenue from affiliate	—	—	2,178	13,752	4,455
Contract revenue from non-affiliates	10,952	7,016	12,463	8,531	3,700
Total revenue	19,782	17,679	26,497	23,258	9,605
Cost and expenses:					
Cost of product sales	9,308	9,484	10,016	2,288	1,573
Research and development	17,775	14,146	17,499	25,177	13,534
Selling, general and administrative	10,333	15,811	16,077	13,889	14,986
Amortization and impairment of intangibles	1,661	1,674	1,676	7,021	16
Operating loss	(19,295)	(23,436)	(18,771)	(25,117)	(20,504)
Interest income (expense), net	894	(16)	(2,557)	(3,691)	(2,415)
Fair value adjustments of derivatives	—	1,248	(611)	27,693	(10,574)
Loss on modification of derivative instruments	—	—	—	(23,834)	(14,687)
Gain (loss) on settlement of derivative instruments	—	(281)	—	(4,294)	822
Minority interest in losses of subsidiary	56	811	1,719	—	—
Equity in earnings (losses) of affiliates	—	—	335	(733)	1,089
Other income (expense), net	1	7	(27)	1,985	(19)
Income tax expense	(2)	(2)	(2)	(2)	(6)
Loss from continuing operations	(18,346)	(21,669)	(19,914)	(27,993)	(46,294)
Loss from discontinued operations(1)	(17,187)	(118,184)	(66,886)	—	—
Net loss	$(35,533)	$(139,853)	$(86,800)	$(27,993)	$(46,294)
Per share data—basic and diluted:					
Loss from continuing operations	$ (0.35)	$ (0.35)	$ (0.26)	$ (0.30)	$ (0.36)
Loss from discontinued operations	(0.32)	(1.91)	(0.87)	—	—
Net Loss	$ (0.67)	$ (2.26)	$ (1.13)	$ (0.30)	$ (0.36)
Weighted average number of shares outstanding—basic and diluted(2)	53,284	61,760	76,791	92,013	129,198

(1) Consists of the operations of Tecstar Automotive Group, Inc. since the acquisition date of March 3, 2005. All of the historical activities of the Tecstar Automotive Group business segment have been classified as discontinued operations in connection with the disposal of the businesses on January 16, 2008.

(2) See Note 15 of the notes to the consolidated financial statements included elsewhere in this Annual Report for an explanation of the method used to determine the number of shares used to compute the net loss per share.

(3) Includes the operations of Schneider Power, Inc. since the acquisition date of April 16, 2010.

	April 30,				
	2006	2007	2008	2009	2010(1)
	(all amounts in thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$ 4,769	$ 2,526	$ 6,024	$ 2,621	$ 4,027
Marketable securities held-to-maturity	15,000	—	—	—	—
Working capital (deficit)	26,435	15,159	(14,317)	(24,434)	(11,177)
Total assets	282,309	167,543	68,786	59,883	73,018
Derivative instruments	—	3,340	16,409	15,198	19,216
Long-term debt, less current portion	—	22,311	29,941	18,540	21,134
Total equity	191,593	80,198	1,786	5,132	24,003

(1) Includes the balances of Schneider Power, Inc (SPI). SPI was acquired on April 16, 2010.

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

You should read the following Management's Discussion and Analysis of Financial Condition and Results of Operations together with the consolidated financial statements and related notes included elsewhere in this 2010 Annual Report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those described under "Risk Factors" and elsewhere in this 2010 Annual Report.

Company Overview

We are a fully integrated alternative energy company—a leader in the development and production of advanced clean propulsion systems, and renewable energy generation systems and services. We believe that we are uniquely positioned to integrate advanced fuel system, electric drive, software control strategies and propulsion control system technologies for alternative fuel vehicles, in particular, plug-in electric hybrid, electric and hydrogen hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics, system control strategies and system integration.

Our Fuel Systems business segment provides powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and propulsion control systems for vehicles and other applications including fuel cells, hybrids, plug-in electric hybrid, alternative fuels, and hydrogen refueling stations and systems. We also design, engineer and manufacture hybrid and fuel cell vehicles.

Our portfolio of technologies and products include hybrid electric and plug-in hybrid electric powertrain systems, advanced battery control systems, electronic vehicle control systems and software, fuel storage and fuel delivery products and control systems for use in hybrid, fuel cell, and other alternative fuel vehicles. We also design and manufacture computerized controls, regulators and automatic shut-off equipment, lightweight, high-pressure hydrogen and natural gas storage tanks using advanced composite technology and hydrogen refueling systems.

With our recent acquisition of Schneider Power, Inc. (SPI) discussed further below, our business now includes the Renewable Energy business segment, which consists of development, construction and operation of wind and solar energy farms.

Acquisition of Schneider Power

On April 16, 2010 we completed our acquisition of Toronto, Ontario, Canada-based Schneider Power, Inc. (SPI) under the terms of a definitive Arrangement Agreement executed on November 24, 2009 (the "Arrangement Agreement") pursuant to which Quantum acquired all of the outstanding shares of SPI in a stock-for-stock exchange. Effective upon the closing of the Arrangement Agreement, we now operate SPI as a wholly-owned subsidiary. SPI is a renewable energy company that develops and constructs wind energy farms. SPI also owns and operates a wind farm in Ontario, Canada and has a significant portfolio of renewable wind and solar energy projects in North America and the Caribbean that it is currently developing.

In connection with the closing of the Arrangement Agreement, we issued a total of 16.8 million shares of our common stock to SPI shareholders (representing 0.236 of a Quantum common share for each SPI common share outstanding), which included 0.2 million of shares issued to holders of SPI in-the-money compensatory stock options at the time of closing. All outstanding SPI stock options and SPI warrants were cancelled effective upon the closing of the transaction. We provided the former SPI warrant holders with Quantum replacement warrants that allows these warrant holders to purchase up to 2.1 million shares of our common stock at exercise prices ranging from $0.48 to $2.41 per share that expire on dates through May 13, 2011. The shares issued in connection with the Arrangement Agreement represented approximately 10% of our total shares outstanding on a post-transaction basis. The closing of the Arrangement Agreement was accounted for as an acquisition of SPI by Quantum. Pursuant to the terms of the Arrangement Agreement, we appointed an individual nominated by SPI to fill a vacancy on our Board of Directors.

Financial Operations Overview

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, project costs and analysis, backlog of customer programs, and changes in levels of working capital. Non-financial factors include assessing the extent to which current 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 additional programs or new programs from our current or new OEM customers and the level of government funding we receive for propulsion systems and storage solutions. We also evaluate the number of units shipped as part of current and new programs and evaluate the operations of our affiliates.

Non financial factors for the Renewable Energy business segment include wind study 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 research and development when incurred. Research and development expense includes both customer-funded research and development and company-sponsored research and development. Customer-funded research and development consists primarily of expenses associated with contract revenue. These expenses include application development costs we funded under customer contracts. We will continue to require significant research and development expenditures over the next several years in order to commercialize our products for hybrid, hydrogen fuel cell and alternative fuel applications.

We classify our business operations into three reporting segments: Fuel Systems (formerly referred to as the Quantum Fuel Systems segment), Renewable Energy (beginning April 16, 2010) and Corporate. Prior to January 16, 2008, we also had a business segment referred to as the Tecstar Automotive Group. The Tecstar Automotive Group segment ceased operations on January 16, 2008 when we transferred substantially all of that segment's business operations to an affiliate of our senior lender. As a result of such transfer, the historical activities of the Tecstar Automotive Group business segment are now classified as discontinued operations.

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 and income taxes.

Fuel Systems Segment

Our Fuel Systems segment supplies advanced propulsion and fuel systems for alternative fuel vehicles to OEM customers for use by consumers and for commercial and government fleets. Since 1997, we have sold approximately 20,000 fuel systems for alternative fuel vehicles. We also provide our propulsion systems and hydrogen storage products for hybrid and fuel cell applications to major OEMs and certain governmental agencies through funded research and development contracts and on a prototype and production intent basis. This segment's business operations primarily consist of design, integration and supply of electric drive and control system technologies and manufacture and supply of packaged fuel systems for use in hybrid, plug-in electric hybrid, hydrogen, fuel cell, and other alternative fuel vehicles.

Our Fuel Systems segment generates product revenues through the sale of hydrogen fuel storage, fuel delivery, and electronic control systems to OEMs, the installation of our systems into OEM vehicles, and the sale of transportable hydrogen refueling stations. Product revenues are also generated through the sale of compressed natural gas (CNG), propane (LPG), and hydrogen fuel storage, fuel delivery, and electronic control systems for internal combustion engine applications.

Our Fuel Systems segment also generates contract revenue by providing engineering design and support to OEMs, primarily Fisker Automotive and General Motors, so that our advanced propulsion systems integrate and operate with the OEM's hybrid or fuel cell applications. Contract revenue is also generated from customers in the aerospace industry, military and other governmental entities and agencies, and other strategic alliance partners.

Renewable Energy

Our Renewable Energy segment consists solely of the business operations of SPI. SPI, headquartered in Toronto, Ontario, Canada, is an independent power producer, developer of renewable energy projects and provider of related development services. SPI is a licensed electricity generator and wholesaler. Our development of renewable energy projects involves several sequential stages of completion and advancement before a project becomes operational. We conduct feasibility studies to obtain sufficient data to validate the wind and/or solar energy capacity from a prospective project. We must negotiate with local landowners to obtain easements to allow for the development of an energy farm on their properties. Applications are submitted to local utility providers to obtain approvals for grid interconnections, and environmental assessments and feasibility studies must be completed and submitted to Federal, Provincial and Municipal governments to obtain permits for construction and commissioning. Finally, we secure Power Purchase Agreements ("PPAs") with a utility provider or power broker as a project approaches the operational stage.

An energy project may be financed with equity, debt or a combination thereof. Due to SPI's limited cash availability and the high cost of development and construction of a project, SPI has historically entered into strategic relationships to provide for project financing. SPI will evaluate its project portfolio and assess sell versus hold factors and the underlying opportunity to develop and retain ownership of its projects. If SPI decides to enter into strategic relationships to provide for project financing on certain of its projects, we anticipate that a typical strategic relationship would be structured such that SPI would transfer a majority interest (usually 80% to 90%) to a strategic partner in exchange for the strategic partner agreeing to fund the development and construction of the renewable energy project. We would anticipate that SPI and the strategic partner would also enter into a development agreement pursuant to which SPI would provide development services for the project and would receive a development fee in return. SPI has or is in the process of developing renewable energy projects with Energy Farming International and Greta Energy Inc.

In addition to energy sales on our existing wind farm and future wind and solar energy farms that we are currently developing, we anticipate generating revenues and cash flows through the sale of ownership interests in our renewable energy projects and through development and construction services for renewable energy projects owned by third parties.

Corporate Segment

The Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel 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 the our board of directors.

In connection with the transfer of the Tecstar Automotive Group's assets to our senior lender in January 2008, certain historical indirect expenses of the Corporate segment that were directly attributable to the Tecstar Automotive Group business activities and would not have been incurred had the Tecstar Automotive Group business segment not existed, have been reclassified and are reported as discontinued operations.

On August 27, 2008, start-up activities were initiated in Quantum Solar Energy, Inc. (Quantum Solar), a new venture based in Irvine, California and formed by us along with Asola's majority shareholder, ConSolTec GmbH, for the production and distribution of mono and poly-crystalline silicon solar modules with an initial capacity of 45 MW. We currently own 85.0% of Quantum Solar and the remaining 15.0% is owned by ConSolTec Gmbh. All activities of the consolidated subsidiary are included in our Corporate segment and to date principally consist of partial payments on long lead assembly equipment under construction for solar module production capability. Once Quantum Solar commences its manufacturing operations, we anticipate that we will report these activities under a new business segment separate from the Fuel Systems, Renewable Energy and Corporate reporting segments.

Tecstar Automotive Group Segment

Prior to its disposal in January 2008, the Tecstar Automotive Group segment was comprised of virtually all of the business activities acquired via the merger with Tecstar Automotive Group in March 2005, and subsequent specialty vehicle business acquisitions. In January 2008, we transferred substantially all the assets of our Tecstar Automotive Group segment to an affiliate of our senior lender pursuant to a strict foreclosure under Article 9 of the Uniform Commercial Code. As a result of the transfer, the Tecstar Automotive Group business segment (formerly consisting of all of the Tecstar businesses and operating units) ceased operations for purposes of our financial reporting. The Tecstar Automotive Group segment, prior to its disposal, engineered and integrated specialty equipment products into motor vehicle applications, primarily General Motors' pick-up trucks and sport utility vehicles, provided vehicle build capabilities associated with military vehicle projects and provided design and powertrain services for high performance cars.

As a result of the disposal of the Tecstar businesses, all historical activities of the Tecstar Automotive Group business segment have been classified as discontinued operations in the accompanying consolidated statements of operations and consolidated statements of cash flows. Additionally, certain historical indirect expenses of the Corporate segment that were directly attributable to the Tecstar Automotive Group business activities and would not have been incurred had the Tecstar Automotive Group business segment not existed, have been reclassified and reported as discontinued operations.

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 U.S. generally accepted accounting principles and are included elsewhere in this report. The preparation of these consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates, including those related to bad debts, inventories, goodwill and intangible asset impairment valuations, warranty and recall obligations, debt obligations, derivatives, long-term service contracts, and contingencies and litigation, 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:

- 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 collectibility is reasonably assured. We include the costs of shipping and handling, when incurred, in cost of goods sold. 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.

- We conduct a major portion of our business with a limited number of customers. For fiscal 2010 and for the foreseeable future, our affiliate, Fisker Automotive, has represented and is expected to continue to represent, a significant portion of our revenues and accounts receivables. 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.

- 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 Systems segment provides product warranties in certain circumstances depending on the platform and model year. 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.

- 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.

- We account for our ownership interests in Fisker Automotive, Asola, ALP, PCD and Shigan Quantum under the equity method of accounting in accordance with Accounting Standards Codification (ASC) Topic No. 323 "Investments—Equity Method and Joint Ventures" (ASC 323) as a result of our ability to exercise significant influence over the operating and financial policies of these affiliates. Under ASC 323, investments of this nature are recorded at original cost and adjusted periodically to recognize our proportionate share of the entity's net income or losses after the date of investment. When net losses from an investment accounted for under the equity method exceed its carrying amount, the investment balance is reduced to zero and additional losses are not recorded. We resume accounting for the investment under the equity method when the entity subsequently reports net income and our share of that net income exceeds the share of net losses not recognized during the period the equity method was suspended. Investments are written down only when there is clear evidence that a decline in value that is other than temporary has occurred. Our foreign based affiliates have functional currencies other than

the US dollar. As such, translation adjustments may result from the process of translating our affiliates' financial statements from their functional currency to US dollars, which we account for in accordance with ASC Topic No. 830 "Foreign Currency Matters."

- We periodically evaluate our long-lived assets for impairment, particularly 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, 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 industry 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.

- We account for embedded conversion features within certain of our debt instruments and provisions contained within certain of our 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 the share price of our common stock or the passage of time are recognized as fair value adjustments of derivative instruments on our consolidated statements of operations as other income or expense. The fair value adjustments can have a material impact on our financial condition and results of operations.

- 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 senior lender has for economic or legal reasons related to our financial condition, granted us a concession that our senior 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.

- 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. Under this standard, 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 share-based payments. 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 share-based awards 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 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.

- 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 assets and liabilities and any valuation allowance recorded against our deferred tax assets. We have recorded a 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.

Recent Accounting Pronouncements Adopted

Effective May 1, 2009, we adopted the FASB's Accounting Standards Codification (ASC) and the Hierarchy of Generally Accepted Accounting Principles (Codification). This authoritative guidance established the Codification, which officially launched on July 1, 2009, to serve as the source of authoritative GAAP recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the Securities and Exchange Commission (SEC) under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. The subsequent issuances of new standards will be in the form of Accounting Standards Updates (ASUs) that will be included in the Codification. Generally, the Codification is not expected to change GAAP. All other accounting literature excluded from the Codification will be considered

non-authoritative. This guidance is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The adoption of this guidance did not have a significant impact on our consolidated financial statements or related footnotes.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 805, "Business Combinations" (ASC 805). ASC 805 retains the fundamental requirements of prior accounting guidance that the purchase method of accounting be used for all business combinations, that an acquirer be identified for each business combination and for goodwill to be recognized and measured as a residual. ASC 805 expands the definition of transactions and events that qualify as business combinations to all transactions and other events in which one entity obtains control over one or more other businesses. ASC 805 broadens the fair value measurement and recognition of assets acquired, liabilities assumed, and interests transferred as a result of business combinations. ASC 805 also increases the disclosure requirements for business combinations in the financial statements. The adoption of ASC 805 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 810, "Consolidation" (ASC 810). ASC 810 changes the accounting and reporting for minority interests, which are recharacterized as noncontrolling interests and classified as a component of equity. This new consolidation method significantly changes the accounting for transactions with minority interest holders. The adoption of ASC 810 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 470, "Debt" (ASC 470). ASC 470 requires that the liability and equity components of convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) be separately accounted for in a manner that reflects an issuer's nonconvertible debt borrowing rate. As a result of the embedded multiplier features, share settlement provisions and below market interest rate structures, we consider both Term Note B, originally issued on January 16, 2008, and the Consent Fee Term Note, issued on November 24, 2009, to be convertible debt instruments in applying applicable accounting guidance (see Note 10 of consolidated financial statements). We may settle these instruments in cash or shares, and as such, these notes are within the scope of ASC 470; however, due to certain contractual provisions contained within Term Note B and the Consent Fee Term Note as of May 1, 2009, the embedded features under the two notes were classified as liabilities and measured at fair value under the guidance of ASC 815 (discussed below). As such, the adoption of ASC 470 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 815, "Derivatives and Hedging" (ASC 815). ASC 815 provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. The remaining outstanding warrants issued in October 2006 and August 2008 as discussed further in Note 14 contain certain exercise price reset provisions which result in the instruments not meeting the definition of "indexed to the entity's own stock" under the guidance of ASC 815. However, due to certain provisions whereby we may have to pay cash upon settlement and it is outside of our control, the October 2006 and August 2008 were already classified as liabilities and measured at fair value under the previous GAAP guidance. The adoption of the new guidance under ASC 815; therefore, did not impact the accounting treatment of the October 2006 and August 2008 warrants. The August 2009 and September 2009 warrants (as discussed further in Note 14 of consolidated financial statements) contain cashless warrant exercise provisions whereby the settlement calculation may incorporate variables other than those used to determine the fair value of a fixed-for-fixed forward or option on equity shares and are therefore not considered "indexed to the Company's own stock" under the new guidance of ASC 815. As such, the August 2009 and September 2009 Warrants have been classified as derivative liabilities effective upon their issuance. The fair value of the derivative liabilities associated with warrants as of April 30, 2010 and the changes in fair value of the derivatives during fiscal 2010 are disclosed in Note 11 of consolidated financial statements.

In August 2009, the FASB issued ASU No. 2009-05, "*Measuring Liabilities at Fair Value*," (ASU 2009-05) which provides clarification that in circumstances where a quoted market price in an active market for an

identical liability is not available, a reporting entity must measure fair value of the liability using one of the following techniques: 1) the quoted prices for similar liabilities or similar liabilities when traded as assets; or 2) another valuation technique, such as a present value technique or the amount that the reporting entity would pay to transfer the identical liability or would receive to enter into the identical liability that is consistent with the provisions of ASC 820, "*Fair Value Measurements and Disclosures.*" We adopted this statement effective November 1, 2009. The adoption of ASU 2009-05 did not have a material impact on our financial position or results of operations.

Recent Accounting Pronouncements Issued

In September 2009, the FASB reached a consensus on ASU No. 2009-13, "*Revenue Recognition (Topic 605)—Multiple-Deliverable Revenue Arrangements,*" (ASU 2009-13). ASU 2009-13 modifies the requirements that must be met for an entity to recognize revenue from the sale of a delivered item that is part of a multiple-element arrangement when other items have not yet been delivered. ASU 2009-13 eliminates the requirement that all undelivered elements must have either: i) vendor specific objective evidence (VSOE) or ii) third-party evidence (TPE), before an entity can recognize the portion of an overall arrangement consideration that is attributable to items that already have been delivered. In the absence of VSOE or TPE of the standalone selling price for one or more delivered or undelivered elements in a multiple-element arrangement, entities will be required to estimate the selling prices of those elements. Overall arrangement consideration will be allocated to each element (both delivered and undelivered items) based on their relative selling prices, regardless of whether those selling prices are evidenced by VSOE or TPE or are based on the entity's estimated selling price. The residual method of allocating arrangement consideration has been eliminated. Early adoption is permitted. This new update is effective for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Based on the current nature of our operations, we do not expect the adoption of this requirement will have a material impact on our consolidated financial statements.

In June 2009, the FASB issued ASC No. 810-10-05, "*Consolidations-Variable Interest Entities,*" (ASC 810-10-05) which changes the approach to determining the primary beneficiary of a variable interest entity (VIE) and requires companies to more frequently assess whether they must consolidate VIEs. ASC 810-10-05 is effective for annual periods beginning after November 15, 2009. Based on the current nature of our operations, we do not expect the adoption of this requirement will have a material impact on our consolidated financial statements.

Results of Operations

Years Ended April 30, 2009 and 2010

Total revenues and operating loss for our continuing business segments and gross profit (loss) on our product sales for the years ended April 30, 2009 and 2010 were as follows (in thousands):

	Year Ended April 30,	
	2009	2010
	(in thousands)	
Total Revenue		
Fuel Systems	$ 23,258	$ 9,590
Renewable Energy	—	15
Corporate	—	—
Total	$ 23,258	$ 9,605
Operating Loss		
Fuel Systems	$(14,398)	$(10,911)
Renewable Energy	—	(77)
Corporate	(10,719)	(9,517)
Total	$(25,117)	$(20,505)
Product Gross Profit (Loss)		
Fuel Systems & Renewable Energy:		
Net product sales	$ 975	$ 1,450
Cost of product sales	(2,288)	(1,573)
Product gross profit (loss)	$ (1,313)	$ (123)

Revenues decreased $13.7 million, from $23.3 million in fiscal 2009 to $9.6 million in fiscal 2010. The decrease in revenue in fiscal 2010 is primarily related to delays at Fisker Automotive related to the Fisker Karma development program.

Fisker Automotive comprised 59% and 46%, General Motors comprised 13% and 12%, and U.S. Army—TARDEC comprised 13% and 11%, of the total Fuel Systems segment revenue reported for the fiscal years ended April 30, 2009 and 2010, respectively.

Our overall operating loss decreased $4.6 million, from $25.1 million in fiscal 2009 to $20.5 million in fiscal 2010. The decrease in operating loss was primarily due to the amortization and impairment of the remaining unamortized intangible asset associated with General Motors that was written off in the third quarter of fiscal 2009, which amounted to charges of $7.0 million incurred in fiscal 2009 and none in fiscal 2010. Excluding the effects of the amortization and impairment charges, the operating loss would have increased $2.4 million during fiscal 2010 which is attributable to the lower revenues generated in the current year.

Fuel Systems Segment

Product revenue for the Fuel Systems segment increased $0.4 million, or 40%, from $1.0 million in fiscal 2009 to $1.4 million in fiscal 2010. We expect product revenue to increase significantly in fiscal 2011 as a result of anticipated sales of components to Fisker Automotive related to our *Q-Drive* hybrid drive systems which are anticipated to begin in the second half of fiscal 2011.

Contract revenue for the Fuel Systems segment decreased $14.1 million, or 63%, from $22.3 million in fiscal 2009 to $8.2 million in fiscal 2010. Contract revenue is derived primarily from system development and application engineering of our products under funded Fisker Automotive contracts, OEM contracts, and other

funded contract work with the U.S. military and other government agencies. We began the third phase of the Fisker Karma development program in April 2009, which includes services related to system validation, certification and other pre-production development activities that we expect will culminate in a certified, saleable, production release vehicle near the end of calendar 2010. The significant decline in contract revenue in fiscal 2010 compared to fiscal 2009 was primarily due to program delays at Fisker Automotive due to their funding restraints. In September 2009, Fisker Automotive announced that they had received a conditional commitment from the U.S. Department of Energy (DOE) for $528.0 million in low interest loans. However, the loan was not finalized and Fisker Automotive was unable to draw upon the loan until the spring of 2010. As a result, Fisker Automotive suspended much of its activities related to the Fisker Karma program including many of the activities covered under our phase three statement of work. Now that Fisker Automotive has secured the DOE and other funding, we expect our development activities under the phase three statement of work for the Fisker Karma program to increase during the first half of fiscal year 2011. Accordingly, we expect our overall contract revenue to likewise be higher during the first half of fiscal year 2011.

For fiscal 2011 and for the foreseeable future, we anticipate that Fisker Automotive will represent a majority of our overall revenues for the Fuels Systems segment as we continue our development activities for the Fisker Karma vehicle platform.

Cost of product sales for the Fuel Systems segment decreased $0.7 million, or 30%, from $2.3 million in fiscal 2009 to $1.6 million in fiscal 2010. This improvement was mainly due to lower levels of obsolescence inventory reserves in fiscal 2010 as compared to fiscal 2009. During fiscal 2009, we recognized higher than usual charges for inventory reserves in connection with the deterioration of the automotive industry and reduced turnover of our inventory of automotive component parts.

Gross profits on product sales for the Fuel Systems segment improved $1.2 million from a negative $1.3 million in fiscal 2009 to a negative $0.1 million in fiscal 2010. The negative gross margins were primarily due to unabsorbed manufacturing overhead costs. We expect to realize continued improvement in our gross margins for fiscal 2011 as we anticipate that we will begin shipping components to Fisker Automotive related to our *Q-Drive* hybrid drive system during the second half of fiscal 2011.

Research and development expense associated with development contracts decreased $10.2 million, or 60%, from $16.9 million in fiscal 2009 to $6.7 million in fiscal 2010. The decrease is primarily related to decreased levels of design and engineering services performed in connection with the Fisker Automotive Karma program during fiscal 2010 as a result of the program delays at Fisker Automotive.

Internally funded research and development expense for the Fuel Systems segment decreased $1.6 million, or 19%, from $8.3 million in fiscal 2009 to $6.7 million fiscal 2010. Our internally funded research effort has shifted away from hydrogen storage, injection and regulation programs and is now more focused on solid-state components, hybrid control strategies and proprietary software designed to precisely control hybrid propulsion and vehicle performance. The reduction in fiscal 2010 is primarily due to personnel related cost reductions implemented during fiscal year 2010.

Selling, general and administrative expenses for the Fuel Systems segment increased $2.2 million, from $3.2 million in fiscal 2009 to $5.4 million in fiscal 2010. The increase during fiscal 2010 primarily relates to a $1.2 million non-recurring gain that was recognized during the second quarter of fiscal 2009 related to an insurance settlement associated with facility damages and a charge of $0.9 million recognized for the fourth quarter of fiscal 2010 associated with the full impairment of our advances made to ALP. In June 2010, certain secured creditors of ALP had a receiver appointed pursuant to the terms of a General Security Agreement between ALP and such secured creditors and as a result, ALP ceased operations. As a result, we recorded a charge to write off the entire balance of advances provided to ALP that were associated with undelivered products and services still owed to us.

Amortization and impairment of intangibles in the prior year period relates to our strategic alliance agreement with General Motors. Amortization and impairment expense in fiscal 2009 was $7.0 million. On January 31, 2009, the remaining unamortized balance of the intangible asset was written off in connection with an impairment analysis performed due to the deterioration of the automobile industry. As a result of the impairment, there has been no amortization expense recognized in fiscal 2010.

Operating loss for the Fuel Systems segment decreased $3.5 million, from $14.4 million in fiscal 2009 to $10.9 million in fiscal 2010. The decrease in loss was primarily due to the non-recurring amortization and impairment charges associated with the General Motors intangible asset that were incurred in fiscal year 2009 which was partially offset by the decline in net contract revenues.

Renewable Energy Segment

Our results of operations for fiscal 2010 include the activities of our wholly owned subsidiary, SPI, for the period of time subsequent to our acquisition of SPI (April 17, 2010 through April 30, 2010). During that two week period, SPI recognized $15 thousand of revenue from energy sales related to its Providence Bay Wind Farm and recognized operating expenses of $0.1 million. We expect revenues to increase during fiscal 2011 as additional renewable energy projects are developed in addition to development and construction management service fees for non-owned projects. We expect this operating segment to be near or slightly below operating breakeven during the first half of fiscal 2011 and then recognize positive operating income from its operations beginning in the second half of fiscal 2011.

Corporate Segment

Corporate expenses decreased $1.2 million in fiscal 2010 from $10.7 million in fiscal 2009 to $9.5 million in fiscal 2010. Corporate expenses reported for this segment reflect the general and administrative expenses that indirectly support our ongoing Fuel Systems operating segment, our Renewable Energy segment and any future operating 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. Corporate expenses as a percentage of total consolidated revenues increased to 99% in fiscal 2010 as compared to 46% in fiscal 2009, primarily due to lower revenues generated in fiscal 2010. We expect the amount of corporate expenses as a percentage of total consolidated revenues for fiscal 2011 to be significantly lower as we anticipate that our consolidated revenues will increase substantially in fiscal 2011.

Non-Reporting Segment Results

Interest Expense. Interest expense, net of interest income, amounted to $2.4 million in fiscal 2010 as compared to $3.7 million recognized in fiscal 2009. Interest expense primarily relates to debt instruments payable to our senior lender. The decline in expense during fiscal 2010 is primarily related to lower levels of outstanding debt.

Fair Value Adjustments of Derivative Instruments. Derivative instruments consist of embedded features contained within our convertible notes, our Term Note B debt instrument, our Consent Fee Term Note, the written put option under the $10.0 million Lender Commitment, and warrant contracts referred to in our financial statements as the October 2006 Warrants, the June 2007 Warrants, the August 2008 Warrants, the August 2009 Warrants and the September 2009 Warrants. Fair value adjustments of derivative instruments, which represent non-cash unrealized gains or losses, amounted to a loss of $10.6 million in fiscal 2010, compared to a gain of $27.7 million in fiscal 2009. The share price of our common stock represents the primary underlying variable that impacts the value of the derivative instruments. Additional factors that impact the value of the derivative instruments include the volatility of our stock price, our credit rating, discount rates, and stated interest rates. The unrealized gain recognized in fiscal 2009 was primarily attributable to the significant decrease in our share price over the course of fiscal 2009 ($1.32 at April 30, 2008 and $0.72 at April 30, 2009) that materially decreased the

fair value of the derivative instrument liabilities year over year. The unrealized loss recognized in fiscal 2010 resulted in part from higher volatility rates of our share price at the end of fiscal 2010 as compared to the end of fiscal 2009 that has the effect, all other factors being equal, of increasing the value of the derivative instrument liabilities, and in part to the timing of certain debt conversions and debt principal demands on behalf of the senior lender near the midpoint of fiscal 2010 when our share price was higher ($1.19 at October 31, 2009) than our share price at the end of fiscal 2010 ($0.70 at April 30, 2010) which negated a portion of the offsetting effects of a lower share price at the end of the fiscal year with respect to the fair value calculations. Due to the volatile nature of our share price, we expect that we will continue to recognize gains or losses on our derivative instruments each period and that the amount of such gains or losses could be material.

Loss on Modification of Debt and Derivative Instruments. We have recognized losses on contractual modifications of our debt and derivative instruments issued to our senior lender amounting to $23.8 million in fiscal 2009 and $14.7 million in fiscal 2010, respectively. These contractual modifications, discussed further in Note 10 to the consolidated financial statements, are as follows:

- On May 30, 2008, certain modifications to the embedded derivative feature contained within Term Note B immediately increased the fair value of the derivative instrument by $23.8 million.
- On July 10, 2009, the derivative features embedded within our existing and two new convertible note instruments issued on this date increased in fair value by $7.0 million as a result of certain modifications that included setting the fixed conversion price on the debt to $0.71 per share and pushing out the stated maturity dates on the outstanding balances.
- On August 3, 2009, we modified the $10.0 million Lender Commitment by fixing the conversion price under the convertible note structure available to the senior lender under its written put option that previously had been a price that would equal the market price on the date the senior lender exercised the put option. This modification to set a fixed conversion price of $0.71 cents per share prior to the exercise of the senior lender's put option resulted in an immediate charge of $2.6 million.
- On November 24, 2009, we recognized a combined charge of $5.1 million from the implied exchange of debt instruments in connection with obtaining our senior lender's consent of the proposed SPI acquisition and for amendments to certain of the outstanding debt instruments with the senior lender. The significant components of the charge were as follows : (i) amended the stated maturity dates on our three convertible notes from August 31, 2010 to March 31, 2011 (which immediately increased the fair values of these debt instruments over their existing carrying values by $1.3 million); (ii) extended the expiration date of the $10.0 million Lender Commitment from August 31, 2010 to March 31, 2011 (which immediately increased the fair value of the senior lender's put option by $0.4 million); and (iii) issued a new debt instrument in satisfaction of a fee negotiated with our senior lender to obtain the senior lender's consent (the "Consent Fee Term Note"), as required by our credit facilities, in connection with the planned acquisition of SPI that had a fair value of $3.5 million.

Loss on Settlement of Debt and Derivative Instruments. During fiscal 2009 and 2010 we settled a total of $10.2 million and $20.5 million of debt principal and extinguished $4.2 million and $10.5 million of derivative liabilities associated with our debt instruments with the issuance of shares of our common stock. As a result of these settlements and related extinguishments, we recognized a net loss of $4.3 million in fiscal 2009 and a gain of $0.8 million in fiscal 2010 that are described in more detail below:

- During fiscal 2009, $10.2 million of principal was converted at the option of the holder under Convertible Note I on various dates throughout the period which we satisfied with the issuance to the holder of a combined total of 10.3 million shares. The fair value of the embedded derivative instruments associated with the convertible notes is reduced on a proportional basis to the amount of debt principal converted by the holder. For example, if 10% of the outstanding debt principal just prior to the conversion is converted, we reduce the fair value of the derivative instrument on the conversion date by 10%. In connection with shares issued to settle debt principal conversions during fiscal 2009,

the derivative instrument associated with Convertible Note I was reduced by $4.2 million and a net loss on the settlement of the debt principal and derivative instruments of $4.3 million, which represented the difference between the fair value of shares issued ($18.7 million) and the settlement of the liabilities ($10.2 million of debt principal and $4.2 million of derivative instruments), was recognized.

- During fiscal 2009, $0.5 million of the derivative instrument liabilities associated with the October 2006 Warrants were extinguished in connection with the exercise of warrants to purchase 0.4 million shares of our common stock. The difference between the fair value of the shares issued of $0.4 million (net of the cash received upon exercise of the warrants) and the amount of derivative liabilities extinguished resulted in the recognition of a gain of $0.1 million on the settlement of these derivative warrant liabilities.

- During fiscal 2010, $6.9 million of principal was converted at the option of the holder under three convertible notes ($0.51 million, $1.03 million and $1.37 million under Convertible Note I on September 23, 2009, October 13, 2009 and November 24, 2009, respectively; $2.72 million under Convertible Note II on November 24, 2009, and $1.23 million under Convertible Note III on November 24, 2009) which we satisfied with the issuance to the holder of a combined total of 9.7 million shares. In connection with shares issued to settle debt principal conversions during fiscal 2010, the derivative instruments associated with the three convertible notes were reduced by $6.9 million and a net gain on the settlement of the debt principal and derivative instruments of $1.4 million, which represented the difference between the fair value of shares issued ($12.4 million) and the settlement of the liabilities ($6.9 million of debt principal and $6.9 million of derivative instruments), was recognized.

- During fiscal 2010, $4.4 million of principal was repaid under Term Note B ($3.9 million on November 24, 2009 and $0.5 million on February 9, 2010) which we satisfied with the issuance to the holder of a combined total of 6.7 million shares. The fair value of the embedded derivative instrument associated with Term Note B is reduced on a proportional basis to the amount of debt principal settled in a manner consistent with the methodology used to extinguish derivative liabilities under the convertible notes. Accordingly, the derivative instrument associated with Term Note B was reduced by $3.6 million and a net loss on the settlement of the debt principal and derivative instrument of $0.1 million, which represented the difference between the fair value of shares issued ($8.1 million) and the settlement of the liabilities ($4.4 million of debt principal and $3.6 million of derivative instrument), was recognized.

- During fiscal 2010, $9.2 million of debt was repaid under Term Note A and Term Note C ($1.12 million under Term Note A on June 15, 2009; $3.75 million, $2.50 million and $1.80 million under Term Note C on May 1, 2009, October 1, 2009 and November 2, 2009, respectively) which we satisfied with the issuance to the holder of a combined total of 10.5 million shares. The shares had a combined fair value of $9.6 million on the settlement dates. The difference between the fair value of the shares issued and the reduction of the principal was recognized as a net loss on settlement of $0.4 million.

- During fiscal 2010, $1.6 million of the derivative instrument liabilities associated with the October 2006 Warrants were extinguished in connection with the exercise of warrants to purchase 1.2 million shares of our common stock. The fair value of the shares issued was also $1.6 million; therefore, there was no gain or loss on the settlement of these derivative warrant liabilities.

Equity in Earnings of Affiliates. During fiscal year 2010, we recognized net earnings of $1.1 million representing our equity share in earnings of our affiliate, Asola, that we account for under the equity method. For fiscal 2009, we recognized a net loss of $0.7 million representing income of $0.1 million for our share of Asola's earnings and charges of $0.8 million for our share of ALP's losses. Our ownership in Fisker Automotive is also under the equity method of accounting; however, we have not recognized any losses realized by Fisker Automotive under the equity method as our net investment balance is zero and we have no obligation to fund

deficit balances of the business. Our share of earnings or losses for the operating activities of PCD and Shigan Quantum, in which our equity interests were obtained in fiscal 2010, were not significant for the twelve month period ended April 30, 2010.

Other Income (Expense). We recorded other income of $2.0 million during fiscal 2009 in connection with a life insurance settlement payment. No significant other income or expense was recognized during fiscal 2010.

Income Taxes. Our income tax expense is minor for both fiscal periods presented primarily as a result of our lack of earnings history. As a result of our historical losses, we have generated significant net operating losses that we can carry forward to offset taxable earnings that we generate in the future. We expect that income taxes will continue to be nominal for fiscal 2011.

Results of Operations

Years Ended April 30, 2008 and 2009

Total revenues and operating loss for our continuing business segments and gross profit (loss) on our product sales for the years ended April 30, 2008 and 2009 were as follows (in thousands):

	Year Ended April 30,	
	2008	2009
	(in thousands)	
Total Revenue		
Fuel Systems	$ 26,497	$ 23,258
Corporate	—	—
Total	$ 26,497	$ 23,258
Operating Loss		
Fuel Systems	$ (7,340)	$(14,398)
Corporate	(11,431)	(10,719)
Total	$(18,771)	$(25,117)
Product Gross Profit (Loss)		
Fuel Systems:		
Net product sales	$ 11,856	$ 975
Cost of product sales	(10,016)	(2,288)
Product gross profit (loss)	$ 1,840	$ (1,313)

Revenues decreased in fiscal 2009 primarily related to a significant decline in product shipments and engineering services provided to General Motors in fiscal 2009 compared to fiscal 2008. The decline was partially offset by increased development program activities provided to Fisker Automotive in fiscal 2009 versus the prior fiscal year.

Fisker Automotive comprised 8% and 59%, General Motors comprised 64% and 13%, and U.S. Army—TARDEC comprised 10% and 13%, of the total Fuel Systems segment revenue reported for the fiscal years ended April 30, 2008 and 2009, respectively.

Our overall operating loss increased $6.3 million, from $18.8 million in fiscal 2008 to $25.1 million in fiscal 2009 primarily as a result of a non-cash charge of $5.8 million in the third quarter of fiscal 2009 for the impairment of the unamortized balance of the intangible asset associated with our Strategic Alliance Agreement with General Motors, in addition to our overall lower revenues generated in fiscal 2009 as compared to the prior year.

Fuel Systems Segment

Product sales for the Fuel Systems segment decreased $10.9 million, or 92%, from $11.9 million in fiscal 2008 to $1.0 million in fiscal 2009. Product sales in fiscal 2008 included shipments of hydrogen fuel storage systems associated with General Motors' Equinox fuel cell vehicle program. Product sales declined significantly in fiscal 2009 as a result of the last shipment of all units ordered under General Motors' Equinox program at the end of the fourth quarter of fiscal 2008. Internal resources previously dedicated to the Equinox production program were redirected near the beginning of fiscal 2009 to the development of General Motors' next generation vehicle programs, military programs and development of the *Q-Drive* for Fisker Automotive.

Cost of product sales for the Fuel Systems segment decreased $7.7 million, or 77%, from $10.0 million in fiscal 2008 to $2.3 million in fiscal 2009 mainly due to the lower overall product sales volume, partially offset by an increase in inventory reserves and write-offs related to certain discontinued or cancelled hydrogen and fuel cell vehicle programs.

Gross profits on product sales for the Fuel Systems segment decreased $3.1 million from positive $1.8 million in fiscal 2008 to negative $1.3 million in fiscal 2009 mainly attributable to the lower overall product sales volume, increases in inventory reserves, and reduced product margins as a result of higher absorption of fixed overhead costs per unit shipped.

Contract revenue for the Fuel Systems segment increased $7.7 million, or 53%, from $14.6 million in fiscal 2008 to $22.3 million in fiscal 2009. Contract revenue is derived primarily from system development and application engineering of our products under funded Fisker Automotive contracts, OEM contracts, and other funded contract work with the U.S. military and other government agencies. Contract revenue is recognized as work progresses on fixed price contracts using the percentage-of-completion method, which relies on estimates of total expected contract revenue and costs. Recognized revenue is subject to revisions as the contracts progress to completion. Near the beginning of our third quarter of fiscal 2009, activities on behalf of General Motors associated with next generation hydrogen fuel system programs declined or were terminated by General Motors with indications that existing and proposed new programs could experience extended delays. Activities under the Fisker Automotive program to develop the hybrid electric powertrain for the Fisker Karma were expanded during fiscal 2009 and revenues in fiscal 2009 represent twelve months of services provided to Fisker Automotive as compared to approximately four months of services provided to this affiliate in fiscal 2008. We began the third phase of the Fisker Karma development program in April 2009 that includes system validation, certification and other pre-production development activities.

Research and development expense associated with development contracts increased $8.1 million, or 92%, from $8.8 million in fiscal 2008 to $16.9 million in fiscal 2009 primarily related to increased levels of design and engineering activities associated with the Fisker Automotive Karma program during fiscal 2009 and activities associated with General Motors' next generation vehicle programs in the first half of fiscal 2009.

Internally funded research and development expense for the Fuel Systems segment decreased $0.4 million, or 5%, from $8.7 million in fiscal 2008 to $8.3 million in fiscal 2009 mainly due to personnel related cost reductions implemented during fiscal 2009.

Selling, general and administrative expenses for the Fuel Systems segment decreased $1.4 million or 30%, from $4.6 million incurred in fiscal 2008 to $3.2 million incurred in fiscal 2009 and primarily related to a $1.2 million gain recognized during the second quarter of fiscal 2009 for an insurance settlement associated with facility damages and costs stemming from a flooding incident occurring in September 2007 that is included as an offset to selling, general and administrative expenses in the Fuel Systems segment.

Amortization and impairment of intangibles for the Fuel Systems segment related to the strategic alliance agreement with General Motors. The amortization expense in the first nine months of fiscal year 2009 was

comparable to the first nine months of fiscal 2008 and amounted to $1.2 million. On January 31, 2009, the remaining unamortized balance of the intangible asset of $5.8 million was written off in connection with an impairment analysis. As a result of the impairment, there was no amortization expense recognized in the fourth quarter of fiscal 2009 nor will there be any thereafter associated with the strategic alliance agreement.

Operating loss for the Fuel Systems segment increased $7.1 million, from $7.3 million in fiscal 2008 to $14.4 million in fiscal 2009, primarily due to the impairment of the intangible asset in the third quarter of fiscal 2009 and lower levels of revenues generated during fiscal 2009.

Corporate Segment

Corporate expenses decreased by $0.7 million in fiscal 2009 from $11.4 million in fiscal 2008 to $10.7 million in fiscal 2009. Certain historical indirect expenses of the Corporate segment that were directly attributable to the Tecstar Automotive Group business activities and would not have been incurred had the Tecstar Automotive Group business segment not existed, have been reclassified and reported as discontinued operations on the accompanying consolidated statements of operations. Corporate expenses as a percentage of total consolidated revenues increased slightly to 46% for fiscal 2009 as compared to 43% for fiscal 2008.

Non-Reporting Segment Results

Interest Expense. Interest expense, net of interest income, amounted to $3.7 million in fiscal 2009 as compared to $2.6 million incurred in fiscal 2008 and primarily relates to debt instruments, as amended, payable to our current senior lender in which proceeds were initially provided in January 2007. Interest expense for fiscal 2009 includes $0.2 million of additional expense related to amortization of debt origination costs which equaled the amortization expense incurred in fiscal 2008. Interest earned on cash deposits was nominal during fiscal 2008 and was $0.3 million for fiscal 2009.

Fair Value Adjustments of Derivative Instruments. Derivative instruments consisted of embedded features contained within our Convertible Note I and Term Note B debt instruments and warrant contracts referred to as the October 2006 Warrants, the June 2007 Warrants and the August 2008 Warrants. Fair value adjustments of derivative instruments amounted to a gain of $27.7 million in fiscal 2009 as compared to a loss of $0.6 million in fiscal 2008. In fiscal 2009, the gain was primarily attributable to the significant decline in our share price over the course of the fiscal year that reduced the fair value of the derivative instrument liabilities.

Loss on Modification of Derivative Instruments. As a result of contractual modifications executed on May 30, 2008 to the embedded derivative feature contained within Term Note B that immediately increased the fair value of the derivative instrument liability by $23.8 million, a loss on modification of debt was recognized in fiscal 2009.

Loss on Settlement of Derivative Instruments. During fiscal 2009, our senior lender requested conversions of $10.2 million of debt principal under the provisions of a convertible note. In connection with the issuance of our common shares (which had a fair value of $18.7 million on the settlement dates) in satisfaction of the principal converted and shares required pursuant to a Make-Whole Amount provision contained in the note, portions of the derivative instrument liability associated with the conversion feature were also extinguished in the total amount of $4.2 million. The difference between the fair value of the shares issued and the extinguishment of the liabilities during fiscal 2009 was recognized as a loss on settlement of $4.3 million. During fiscal 2009, $0.5 million of the derivative instrument liabilities associated with the October 2006 Warrants were extinguished in connection with the exercise of warrants to purchase 0.4 million shares of our common stock. The difference between the fair value of the shares issued of $0.4 million (net of the cash received upon exercise of the warrants) and the amount of derivative liabilities extinguished resulted in the recognition of a gain of $0.1 million on the settlement of these derivative warrant liabilities. There were no conversions by the senior lender or warrant exercises associated with derivative instruments in fiscal 2008 and therefore, no gain or loss was recognized in the prior year for settlements of derivative instruments.

Minority Interest in Losses of Subsidiaries. During fiscal 2008, our net losses were reduced by $1.7 million for the portion of losses incurred by our affiliate, ALP, which was allocated to ALP's minority equity interests through the period that we consolidated our ownership interest in ALP. As a result of dilution in our equity voting interests in ALP below a controlling level on April 10, 2008, we deconsolidated ALP and began recording our ownership interest in ALP under the equity method of accounting.

Equity in Earnings (Losses) of Affiliates. During fiscal 2009 we recognized negative $0.8 million representing our equity share in losses of ALP as compared to zero recognized in fiscal 2008. We recognized $0.1 million in fiscal 2009 representing our share of Asola's profits for the 12 month period ending April 30, 2009 as compared to $0.3 million that we recognized in the prior fiscal year representing our share of Asola's profits for the four month period subsequent to our acquisition of our equity interest in Asola in January 2008. Our ownership in our affiliate, Fisker Automotive, since its formation in August 2007, is also under the equity method of accounting; however, we have not recognized any losses realized by Fisker Automotive under the equity method as our net investment balance in this affiliate is zero and we have no obligation to fund deficit balances of the business.

Other Income (Expense). We recorded other income of $2.0 million during fiscal 2009 in connection with a life insurance settlement payment. No significant other income or expense was recognized during fiscal 2008.

Income Taxes. Our income tax expense is minor for both fiscal periods presented primarily as a result of our lack of earnings history. As a result of our historical losses, we have generated significant net operating losses that we can carry forward to offset taxable earnings that we generate in the future.

Discontinued Operations—Tecstar Automotive Group Segment

The Tecstar Automotive Group business segment ceased operations on January 16, 2008 in connection with the transfer of substantially all of its assets. Accordingly, the activities of the Tecstar Automotive Group reporting segment are reported as a single line item in the accompanying consolidated statements of operations as loss from discontinued operations.

The discontinued operations of the Tecstar Automotive Group business segment generated income (losses), net of tax effects, of $66.9 million of losses for fiscal 2008. Included in fiscal 2008 was a gain of $8.6 million recognized in connection with the disposal.

Liquidity and Capital Resources

Cash Flow Activities

Net cash used in operating activities of our continuing operations during fiscal 2010 was $14.7 million as compared to $16.9 million used during fiscal 2009. The cash used during fiscal 2010 is primarily due to a net loss from operations of $17.7 million before the non-cash effects of changes in fair value of derivative instruments, depreciation, and amortization, impairment of intangible asset, share-based compensation charges, and other non-cash items. Cash increased $3.0 million as a result of net changes in operating assets and liabilities during fiscal 2010, mainly due to a reduction in accounts receivable resulting from customer collections and a reduced level of inventory. We expect that the level of cash required to be used for operations during fiscal 2011 will be less than the level of cash used during fiscal 2010 primarily due to anticipated higher revenues and improved operating performance.

Net cash used in investing activities of our continuing operations during fiscal 2010 was $0.6 million as compared to net cash used of $9.7 million during fiscal 2009. Net cash used for investing activities in fiscal 2010 was primarily associated with the net effects of (i) an advance of $0.6 million provided by us to SPI in November 2009; (ii) an increase in cash of $0.6 million that we acquired upon the completion of the merger with SPI in

April 2010; (iii) $0.4 million used by us for capital equipment purchases over the course of the fiscal year; and (iv) $0.2 million used to acquire equity interest in PCD. Cash used in fiscal 2009 was primarily related to payments provided to Asola totaling $4.9 million and capital equipment purchases of $4.8 million.

Net cash provided by financing activities of our continuing operations during fiscal 2010 was $16.8 million as compared to $23.2 million during fiscal 2009. Cash provided during fiscal 2010 consisted principally of net proceeds of (i) $10.7 million from a private placement transaction in September 2009; (ii) $3.1 million from a private placement transaction in April 2010; and (iii) $3.0 million in proceeds received from our senior lender in July 2009 under a new convertible note arrangement.

Capital Resources

From our inception through April 30, 2010, we have funded our operations and strategic investments primarily with proceeds from public and private offerings of our common stock and borrowings with financial institutions and our current senior lender. During the three year period covered by these consolidated financial statements, we have completed the following capital transactions:

- On June 22, 2007, we completed a private placement offering that yielded gross proceeds of $18.75 million from the sale of 12.5 million shares of our common stock at a price of $1.50 per share. The investors also received warrants in connection with the private placement transaction. We allocated $11.8 million of the net proceeds from the transaction to the warrants that are classified as derivative instruments.
- On January 16, 2008, we transferred substantially all the assets of the Tecstar Automotive Group business segment to an affiliate of our senior lender in satisfaction of Tecstar Automotive Group's debt obligations under a certain senior subordinated convertible note issued on July 12, 2004 (Tecstar Convertible Note). In connection therewith, our outstanding debt instruments payable to the senior lender were restructured in a manner that resulted in (i) the replacement of the Tecstar Convertible Note, with an outstanding principal and interest balance of $16.2 million, with a new $16.2 million debt instrument issued by Quantum that had similar terms (Convertible Note I), (ii) the elimination or release of $20.5 million of debt and (iii) incremental net borrowing capacity for Quantum of $1.9 million. The elimination or release of debt included approximately $15.5 million secured by Tecstar Automotive Group's assets under the revolving line of credit and a $5.0 million term note issued by Tecstar Automotive Group to the senior lender on November 6, 2007 (Tecstar Term Note). The revolving line of credit, with a remaining availability of approximately $8.1 million after the transfer of the Tecstar business assets to the senior lender, was terminated and replaced with a new $10.0 million term note (Term Note B).
- On May 30, 2008, we received $7.5 million in proceeds from our senior lender under a term note that was set to mature on August 31, 2009 (Term Note C) and secured a $10.0 million unconditional commitment (Lender Commitment) from an affiliate of our senior lender that allows us to draw on the commitment at our option and also allows the senior lender to fund the commitment at the senior lender's option under certain defined structures. The option for either party under the Lender Commitment, as last modified on November 24, 2009, expires on March 31, 2011. To date, neither we nor the senior lender have exercised the option under the Lender Commitment.
- On August 25, 2008, we completed a registered direct offering that yielded gross proceeds of $19.1 million from the sale of 9.0 million shares of our common stock at a price of $2.12 per share. The investor also received warrants in connection with the transaction. The net amount received by us from the transaction, after deducting placement agent fees and offering expenses, was approximately $17.7 million. We allocated $7.3 million of the net amount received from the transaction to the warrants that are classified as derivative instruments.
- On July 10, 2009, we and our senior lender agreed to a series of modifications to our credit facilities and incremental borrowings that are discussed in more detail in Note 10 of consolidated financial

statements. In connection with the modifications, the amount of outstanding principal and unpaid interest on Term Note A of $6.6 million was replaced with a new convertible note in that amount issued to the senior lender (Convertible Note II) and we received an additional $3.0 million in proceeds in exchange for a new convertible note issued to the senior lender (Convertible Note III).

- On September 4, 2009, we completed a private placement offering that raised cumulative gross proceeds of $12.3 million from the sale of 20.1 million shares of our common stock at a price of $0.61 per share. The investors and placement agent also received warrants in connection with the transactions. The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $10.8 million.
- On various dates from April 30, 2010 through June 14, 2010 we raised cumulative gross proceeds of $10.6 million in connection with a private placement offering from the sale of 19.3 million shares of our common stock at a price of $0.55 per share. The investors and placement agent also received warrants in connection with the transactions. The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $9.1 million (of which $6.0 million was received subsequent to the latest reported balance sheet date of April 30, 2010). The private placement offering remained opened as of June 14, 2010.

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 as the twelve month period ending as of April 30, 2011. 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.

Our principal sources of liquidity amount to $20.0 million, consisting of $4.0 million of cash and cash equivalents at April 30, 2010, $6.0 million in net proceeds obtained in the private placement offering that closed on various dates through June 14, 2010, and $10.0 million under the Lender Commitment that is available to be drawn upon through March 31, 2011.

We have incurred operating losses and negative cash flows from operating activities in each of the three fiscal years presented in the consolidated financial statements. Specifically, we have used $16.9 million and $14.7 million in cash for continuing operating activities for the years ended April 30, 2009 and 2010, respectively. Although we expect to use a significant amount of cash in our continuing operations over the next year, our current operating plan anticipates increased revenues and improved profit margins for the twelve month period which we expect will reduce the level of cash required for our continuing operating activities in fiscal 2011 as compared to fiscal 2010.

As discussed further in Note 10 to the consolidated financial statements, we have $21.7 million of outstanding long-term debt obligations as of April 30, 2010; however, substantially all of the outstanding debt instruments have structures that allow for the settlement of any required principal reductions through at least July 31, 2011 in shares of our common stock, subject to certain restrictions. We have no obligation to use our cash or other working capital to satisfy any potential debt principal conversions or debt principal demands made by our senior lender on our outstanding convertible and term note instruments, respectively, over the next twelve months ending April 30, 2011. As a result, we are only contractually required to use $0.1 million in cash or other working capital to satisfy our scheduled debt principal obligations over the course of fiscal 2011. In addition, we expect to be able to maintain compliance with the provisions of our debt instruments during this period. Further, although we have classified $12.5 million of derivative instrument liabilities associated with certain warrant holders as current liabilities at April 30, 2010, bringing our total reported current liabilities to a level that exceeds

our reported current assets by $11.2 million as of this date, we do not anticipate that we will be required to use any cash or other working capital to satisfy potential exercises or contractual provisions under the warrant contracts prior to at least April 30, 2011.

Based on current projections and estimates, we believe that our available working capital and principal sources of liquidity are sufficient to fund our operating activities and obligations through at least April 30, 2011. To meet these funding requirements, we may have to draw down on some or all of the Lender Commitment or alternatively raise additional capital through public or private offerings of equity or debt securities.

Although we believe we have sufficient available capital to cover our existing operations and obligations through at least April 30, 2011, we will need to raise additional capital in order to complete our planned solar module manufacturing operation in Irvine, California, to further develop the next generation of our *Q-Drive* hybrid electric propulsion system, and to develop renewable energy projects. We anticipate that we will be able to raise sufficient additional capital for these initiatives over the coming months through public or private offerings of equity or debt securities and/or through federal and state governmental grants or loans; however, we cannot provide any assurances that we will be able to secure additional funding on terms acceptable to us, if at all.

In addition, we will need to increase revenues and improve profit margins for our business to be sustainable over the long term. An inability by us to achieve our current operating plan or raise sufficient capital to cover any shortfall would have a material adverse affect on our ability to meet our obligations as they become due without substantial disposition of assets or other similar actions outside the ordinary course of business.

Contractual Obligations

The following table contains supplemental information regarding total contractual obligations as of April 30, 2010 (see Notes 4, 10 and 13 of the Notes to Consolidated Financial Statements).

	Payments due by Period				
Contractual Obligations	**Total**	**Less Than One Year**	**1-3 Years**	**3-5 Years**	**More Than 5 Years**
Operating Lease Obligations	$ 15,581,690	$ 2,837,702	$ 5,952,000	$ 5,393,879	$ 1,398,109
Long-Term Debt	21,167,224	130,491	21,026,473	10,260	—
Scheduled Interest Payments	2,444,526	1,746,468	698,058	—	—
Employment Agreements(1)	5,830,870	5,496,760	334,110	—	—
Purchase Obligations(2)	150,011,110	18,369,113	40,961,466	37,784,106	52,896,425
Total	$195,035,420	$28,580,534	$68,972,107	$43,188,245	$54,294,534

(1) Includes agreements in place as of May 1, 2010 and consists of the estimated minimum contractual obligations under the arrangements assuming a termination of employment without cause initiated by the Company and benefit continuation assuming a cost to the Company of 15% of base salaries. All agreements remain in place until terminated by either of the parties. For further information about the specific terms of the employment agreements with executive officers, see the text of the employment agreements, the filing dates of which are referenced as exhibits to this report.

(2) Consists of our unconditional obligations to purchase solar cells from Asola and to provide our share of prepayments to Asola associated with a solar cell purchase arrangement (see *Off-Balance Sheet Disclosures* below).

Research and Development Funding Commitment. Pursuant to our strategic alliance agreements with General Motors (which were assumed by General Motors LLC as part of the bankruptcy reorganization) we have committed to spend $4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of our fuel cell related products. Since this commitment was waived or

partially waived by General Motors for each of the calendar years 2002 through 2009, we anticipate that this commitment will be waived or partially waived in the future. During fiscal 2010, there were no directed research and development activities pursuant to the agreement.

Royalties. We are obligated to provide revenue sharing payments to General Motors based on a percentage of gross revenue derived from sales of applications developed under the strategic alliance agreement. The revenue sharing payments will equal 5% of applicable gross revenue through July 23, 2015, 4% for the ten-year period ending July 23, 2025, 3% for the ten-year period ending July 23, 2035, and 2% for the ten-year period ending July 23, 2045. On July 23, 2045, we will also be obligated to provide a final revenue sharing payment to General Motors equal to the present value of future revenue sharing payments that would otherwise be payable to General Motors on an annual basis assuming an income stream to General Motors of 2% of our gross revenues in perpetuity. As of April 30, 2010, no revenue sharing payments have been applicable.

Quantitative and Qualitative Disclosures About Market Risk

As of April 30, 2010, we are exposed to market risk from changes in our common stock pursuant to the terms of our derivative instrument liabilities associated with our Lender Commitment (as further described in Note 10 of the financial statements) and warrants issued in October 2006, June 2007, August 2008, August 2009 and September 2009 (as further described in Note 14 of the financial statements). The share price of our common stock represents the "underlying" variable that primarily gives rise to the value of our derivative instruments. In accordance with U.S. GAAP, 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 the share price of our common stock or the passage of time are recognized as fair value adjustments of derivative instruments on our consolidated statements of operations as other income or expense. The change in fair values of our derivatives can have a material impact on our earnings or loss each period. For example, if our share price immediately increased 10% above the closing price of $0.70 per share on April 30, 2010, the fair value of our derivative instruments would increase and a charge in the amount of $2.3 million related to the increase in fair value of the derivatives would be recognized as follows:

Derivative Financial Instrument:	Fair Value Reported at April 30, 2010	Effect of 10% Pro forma Share Price Increase	Pro forma Fair Value
Written Put Option under $10.0 million Lender Commitment	$ 5,518,000	$ 796,000	$ 6,314,000
Warrant contracts issued in October 2006	4,160,000	312,000	4,472,000
Warrant contracts issued in June 2007	4,100,000	639,000	4,739,000
Warrant contracts issued in August 2008	4,287,000	432,000	4,719,000
Warrant contracts issued in Aug/Sept 2009	1,151,000	163,000	1,314,000
	$19,216,000	$2,342,000	$21,558,000

We are also exposed to risk from fluctuating currency exchange rates, primarily the U.S. dollar against the euro and against the Canadian dollar. Specifically, we are at risk that a future decline in the U.S. dollar against the euro will increase the amount that we will have to pay to satisfy requirements of our long-term supply agreement with Asola and other obligations that we enter into with European-based suppliers. On April 30, 2010, one euro was equal to 1.32 U.S. dollars. We have a remaining commitment to purchase solar cells with a cumulative power of 77.5 MW and make prepayments through December 31, 2017 at a fixed price of 113.3 million euro, or US$150.0 million, based on the currency exchange rate at April 30, 2010; a 10% decline in the U.S. dollar against the euro could require us to pay an additional US$15.0 million over the course of the remaining agreement. We face transactional currency exposures that arise when our foreign subsidiaries and affiliates enter into transactions denominated in currencies other than their own local currency. We also face currency exposure that arises from translating the results of our Canadian and German operations to the U.S. dollar.

We are not exposed to market risk from changes in interest rates due to the fixed nature of interest rates associated with our debt instruments.

To date, we have not used any derivative financial instruments for the purpose of reducing our exposure to adverse fluctuations in interest rates but we have entered into currency exchange arrangements for the purpose of reducing our exposure to adverse changes in currency exchange rates. As of April 30, 2010, we had no outstanding contractual commitments to purchase foreign currency. Net foreign currency transaction gains or losses were not significant during fiscal 2010.

Off Balance Sheet Disclosures

Our affiliate, Asola, has a certain long-term solar cell supply agreement dated November 1, 2007 (Supply Agreement) with one of its suppliers of solar cells for Asola's solar module manufacturing operations. We have a related unconditional commitment under a November 2007 agreement with Asola to purchase one-half of the solar cells and to provide our share of prepayments (totaling 4.5 million euro) to Asola in connection the Supply Agreement. As of April 30, 2010, we had provided Asola with 3.0 million euro for our share of prepayments under the Supply Agreement. The remaining 1.5 million euro was due on September 1, 2009 but, as discussed in more detail below, the Supply Agreement is currently in dispute. We have not purchased any solar cells under our agreement with Asola and we are still obligated to provide an additional 1.5 million Euros to Asola to satisfy our share of the September 1 prepayment required under the Supply Agreement. Asola has not initiated or threatened to take any action against us in connection with our obligations to under the agreement with Asola.

Over the course of calendar 2009, the worldwide supply of solar cells increased and suppliers in the industry lowered prices for both the immediate delivery of solar cells and for longer term solar cell purchase arrangements. As a result of these price declines, the spot rates of solar cells for immediate delivery are currently below the purchase price for calendar 2009 and 2010 that is specified under the Supply Agreement. The Supply Agreement includes a "loyalty clause" that states that if a provision of the Supply Agreement proves to be unreasonable for one of the parties to the agreement, then any such circumstance will be taken account of in a fair and reasonable way. Pursuant to the Supply Agreement, Asola was required to take delivery of solar cells with a combined power of 4.0 million watts for calendar 2009 at a price of 1.73 euros per watt. Through December 31, 2009, Asola had only taken delivery of cells with approximately 0.1 million watts of power and had not provided its supplier with the prepayment that was due in September 2009. Further, Asola has not taken delivery of any cells in calendar 2010 to date. During calendar 2009, Asola communicated to its supplier that it believed the "loyalty clause" was applicable under the economic conditions that existed at the time and engaged in extensive dialogue with the supplier in an effort to modify pricing and purchase commitments under the Supply Agreement. Negotiations reached an impasse in the fall of 2009 and the matter is currently working its way through the German legal system. Prior to the impasse, Asola's cell supplier had indicated that it would: (i) agree to a modified level of pricing for calendar year 2009 that we anticipated would allow Asola and Quantum to take delivery of cells from Asola's supplier and still be able to manufacture and sell solar modules at or above net realizable values, (ii) agree to waive the September 2009 prepayment requirement, and (iii) be willing to modify prices in future years if they continue to be unreasonable. If Asola is unable to successfully modify its remaining commitments under the Supply Agreement we may have to record a charge in the future equal to the sum of our prepayments made to date, plus the remaining unconditional commitments, less the estimated net realizable value of the solar cells to be acquired under our agreement with Asola. This amount cannot be reasonably estimated at this time based on the dynamic changes in solar cell pricing which have not yet stabilized as of April 2010 and the associated uncertainty with forecasting future market prices over the remaining period of the Supply Agreement. However, we currently believe that the range of a potential charge that we could be required to recognize would be limited to $10.8 million, which amount represents the total of all solar cell prepayments and other advances made by us to Asola, plus our net investment in Asola at April 30, 2010.

We also have an unconditional commitment to guaranty up to $1.0 million of Asola's bank debt.

We anticipate establishing a solar photovoltaic module manufacturing operation in Irvine, California during calendar 2010 if we can obtain sufficient financing. As of April 30, 2010, this operation has used approximately $2 million to initiate construction of manufacturing equipment and will require approximately $10 million in additional capital for manufacturing equipment expenditures, facility improvements, and other costs to become operational. We do not plan to acquire these assets until we raise a level of additional capital to be able to fund these new assets and maintain sufficient levels of working capital for our overall business (see *Liquidity*).

We issued warrants to investors in October 2006 and in August 2008 that contain contractual provisions which, subject to certain exceptions, reset the exercise price of such warrants if at any time while such warrants are outstanding, we sell or issues shares of our common stock or rights, warrants, options or other securities or debt convertible, exercisable or exchangeable for shares of our common stock at a price below $2.36 for the October 2006 Warrants or $4.00 for the August 2008 Warrants, provided that the exercise price for the August 2008 Warrants cannot be reset below $1.93. Since the initial issuance of these warrants, we have completed capital raising transactions that resulted in the reset of the exercise price of the October 2006 Warrants and August 2008 Warrants to $0.55 and $3.13 as of April 30, 2010, respectively, and has further reset the exercise price of the August 2008 Warrants to $2.92 as of June 14, 2010.

The October 2006 Warrants and August 2008 Warrants also contain a provision that increases the number of shares of common stock subject to such warrants if and when the exercise price is reset so that the aggregate purchase price payable applicable to the exercise of the warrants after the reset of the exercise price is the same as the aggregate purchase price payable immediately prior to the reset. As a result of the exercise price resets, the number of shares subject to the October 2006 Warrants increased to 7.1 million as of April 30, 2010 and the number of shares subject to the August 2008 Warrants increased to 17.3 million and 18.5 million as of April 30, 2010 and June 14, 2010, respectively. Any resets to the exercise price of the October 2006 Warrants and/or August 2008 Warrants in the future will have an additional dilutive effect on our existing shareholders.

We evaluate the warrants provided in connection with each of our private placement or public offerings in accordance with ASC 815 and we have concluded that liability classification is appropriate for warrants issued in October 2006, June 2007, August 2008, August 2009 and September 2009. We have further concluded that equity classification is appropriate for the warrants that we issued in June 2006 and warrants issued in connection with the private placement that covered the period from April 30, 2010 through June 14, 2010 (the "Spring 2010 Warrants") due to the fact that these warrants 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 from the transactions in June 2006 and in the spring of 2010 that gave rise to these warrants have been allocated to the stock and the warrants based on their relative fair values. However, we aggregate the values for financial reporting purposes as both types of instruments issued in June 2006 and in the spring of 2010 have been classified as permanent equity. The classification as equity for the June 2006 Warrants and the Spring 2010 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 these warrants is required in the future, the warrants would be treated as derivatives, brought onto 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.

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 appear under the heading "Quantitative and Qualitative Disclosures About Market Risk" in Item 7 of Part II hereof, and is incorporated herein by this reference.

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.

(a) Evaluation of Disclosure Controls and Procedures.

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

Based on their evaluation as of April 30, 2010, the Chief Executive Officer and Chief Financial Officer of the Company have concluded that the Company's 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 the Company in the reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms.

(b) Design and Evaluation of Internal Control Over Financial Reporting.

Management's Annual 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;
- 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 principals. 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.

Status of Management's Remedial Action for Material Weakness Reported as of April 30, 2009

In our Annual Report on Form 10-K for the year ended April 30, 2009, we reported that we had a material weakness over the accounting for and disclosure of derivatives associated with debt and warrant instruments because we lacked the technical expertise and did not maintain adequate procedures to ensure that the accounting for derivative financial instruments was appropriate under U.S. generally accepted accounting principles (GAAP). Procedures related to identifying derivative instruments and disclosing derivative instruments at April 30, 2009 did not operate properly and this material weakness resulted in a restatement of our prior financial statements. Since April 30, 2009, we developed and implemented a remediation plan to address the identified

material weakness as follows: (i) we increased our technical expertise of GAAP associated with accounting for derivative instruments and (ii) we enhanced internal procedures to better identify derivative financial instruments.

Management's Evaluation of Internal Controls as of April 30, 2010

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 April 30, 2010, based on the framework in *Internal Control—Integrated Framework* 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 did not include the internal controls of Schneider Power, Inc. (a business we acquired on April 16, 2010), which is included in our fiscal 2010 consolidated financial statements and constituted $16,807,560 and $12,724,441 of our total and net assets, respectively, as of April 30, 2010 and $15,064 and $78,952 of our revenues and net loss, respectively, for the year then ended.

Based on our evaluation under the framework in *Internal Control–Integrated Framework*, management concluded that our internal control over financial reporting was effective as of April 30, 2010.

Independent Auditor's Evaluation of Internal Controls as of April 30, 2010

Ernst & Young LLP, our independent registered public accounting firm, audited the effectiveness of our internal controls over financial reporting and, based on that audit, issued their report which follows on the next page.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries

We have audited Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries' internal control over financial reporting as of April 30, 2010, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

As indicated in the accompanying Management's Annual Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Schneider Power, Inc., which is included in the 2010 consolidated financial statements of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries and constituted $16,807,560 and $12,724,441 of total and net assets, respectively, as of April 30, 2010 and $15,064 and $78,952 of revenues and net loss, respectively, for the year then ended. Our audit of internal control over financial reporting of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries also did not include an evaluation of the internal control over financial reporting of Schneider Power, Inc.

In our opinion, Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of April 30, 2010, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries as of April 30, 2010 and 2009, and the related consolidated statements of operations, equity, and cash flows for each of the three years in the period ended April 30, 2010 and our report dated July 12, 2010 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Orange County, California
July 12, 2010

(c) Changes in Internal Control Over Financial Reporting

Other than the remediation plan that is discussed in (b) above, there have been no other changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

Private Placement of Common Stock Units

On June 24, 2010, June 29, 2010 and July 1, 2010, we entered into Subscription Agreements with certain "accredited investors" (each, an "Investor" and collectively, the "Investors"), as such term is defined in Rule 501(a) of Regulation D under the United States Securities Act of 1933, as amended (the "Securities Act"), for the purchase and sale of approximately 449 common stock units ("Units"). Each full Unit consisted of 1,000 shares of the Registrant's common stock and a warrant ("Warrant") to purchase up to 200 additional shares of the Registrant's common stock. The purchase price for each full Unit was $550. The Registrant received gross proceeds of $247,000 and issued 449,091 shares of common stock ("Shares") and Warrants entitling the Investors to purchase a maximum of 89,816 shares of the Registrant's common stock ("Warrant Shares"). The foregoing description of the Subscription Agreements is qualified by reference to the complete terms of such agreements, the form of which was filed as Exhibit 10.1 to the Current Report on Form 8-K filed on May 6, 2010. We paid our placement agent a cash fee of $32,110 for services rendered in connection with these transactions.

The Warrants have an exercise price of $0.91 per share, cannot be exercised for six months, and have a five year term. The Warrants permit the holder to exercise on a cashless basis unless the shares underlying the Warrants have been registered under the Securities Act, in which case, they must be exercised for cash, and contain standard anti-dilution provisions. The foregoing description of the Warrants is qualified by reference to the complete terms of such Warrants, the form of which was filed as Exhibit 10.2 to the Current Report on Form 8-K filed on May 6, 2010.

The Units, Shares, Warrants, and Warrant Shares (collectively, the "Securities") have not been registered under the Securities Act, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements under the Securities Act or any applicable state securities laws.

The Units were issued to "accredited investors" in transactions exempt from registration pursuant to Rule 506 of Regulation D of the Securities Act and similar exemptions under applicable state securities laws. The sale of the Securities did not involve a public offering and was made without general solicitation or general advertising. The Investors have represented that they are accredited investors, as that term is defined in Regulation D, and that they have acquired the Securities for investment purposes only and not with a view to or for sale in connection with any distribution thereof.

Amendment to Convertible Notes and Consent Fee Note

On July 8, 2010, we and our senior lender entered into an agreement which (i) amended the maturity date on each of our three outstanding convertible notes from March 31, 2011 to July 31, 2011 and (ii) amended the Consent Fee Term Note to state that our senior lender cannot make demand for payment prior to July 31, 2010 if the volume weighted average price of our stock for the five (5) business days preceding the date demand for payment is made is below $0.50 per share. In consideration for our senior lender agreeing to the amendments to the convertible notes and the Consent Fee Note, we agreed to issue 1,660,000 shares of our common stock within seven (7) days. The shares issued by us to our senior lender in connection with the Agreement were issued to an accredited investor in a transaction exempt from Registration pursuant to Section 4(2) of the Securities Act of 1933. The transaction did not involve a public offering, was made without general solicitation or advertising, and there were no underwriting commissions or discounts.

As a result of the private placement transactions and amendments to the debt instruments described above, an anti-dilution price reset provision contained in the warrants issued by the Registrant on October 27, 2006 (October 2006 Warrants) and August 19, 2008 (August 2008 Warrants) was triggered. The exercise price for the October 2006 Warrants was reset from $0.5500 to $0.5290 and the number of shares subject to the October 2006 Warrants was increased from 7,087,155 to 7,368,497. The exercise price for the August 2008 Warrants was reset from $2.9205 to $2.8936 and the number of shares subject to the August 2008 Warrants was increased from 18,501,106 to 18,673,290.

PART III

Item 10. Directors, Executive Officer and Corporate Govenance.

Information regarding our board of directors, audit committee, audit committee financial expert and code of ethics is set forth under the caption "Election of Directors," in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated herein by reference. Information regarding Section 16(a) beneficial ownership compliance is set forth under the caption "Executive Compensation—Compliance with Section 16(a) of the Securities and Exchange Act" in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated by reference. A list of our executive officers is included in Part I, Item 1 of this Report under the heading "Executive Officers."

We have adopted a Code of Business Conduct and Ethics that applies to each of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Our Code of Business Conduct and Ethics is posted on our website at *www.qtww.com/about/corporate_goverance/coc.php*.

Item 11. Executive Compensation.

The information required by this item is set forth under the captions "Executive Compensation and Other Information" and "Election of Directors—Compensation of Directors" in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated herein by reference.

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

The information required by this item is set forth under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions and director Independence.

The information required by this item is set forth under the captions "Certain Relationships and Related Transactions" and "Compensation Committee Interlocks and Insider Participation" in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

The information required by this item is set forth under the caption "Ratification and Approval of the Appointment of Independent Accountants" in our definitive Proxy Statement to be filed in connection with our fiscal 2010 Annual Meeting of Stockholders and such information is incorporated herein by reference.

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.

(2) 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:

2.1	Arrangement Agreement by and among Quantum Fuel Systems Technologies Worldwide, Inc., 2224784 Ontario Inc., and Schneider Power Inc. dated November 24, 2009 (incorporated herein by reference to Exhibit 2.1 of Registrant's Current Report on Form 8-K filed on November 27, 2009).
10.1	Financial Representative Agreement, dated May 8, 2009, between Registrant and J.P. Turner & Co., L.L.C. (incorporated herein by reference to Exhibit 10.1 of Registrant's Quarterly Report on Form 10-Q filed on July 31, 2009).
10.2	Sixth Amendment to Credit Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on May 28, 2009).
10.3	Seventh Amendment to Credit Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on July 14, 2009).
10.4	Second Amended and Restated Convertible Promissory Note (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on July 14, 2009).
10.5	$6.6 million Convertible Promissory Note (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed on July 14, 2009).
10.6	$3.0 million Convertible Promissory Note (incorporated herein by reference to Exhibit 10.4 of Registrant's Current Report on Form 8-K filed on July 14, 2009).
10.7	$10.0 million Commitment Letter (incorporated herein by reference to Exhibit 10.5 of Registrant's Current Report on Form 8-K filed on July 14, 2009).
10.8	Third Amended and Restated Convertible Promissory Note (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on August 6, 2009).
10.9	Amended and Restated $6.6 Million Convertible Promissory Note (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on August 6, 2009).
10.10	Amended and Restated $3.0 Million Convertible Promissory Note (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed on August 6, 2009).
10.11	Amended and Restated $10 Million Commitment Letter (incorporated herein by reference to Exhibit 10.4 of Registrant's Current Report on Form 8-K filed on August 6, 2009).
10.12	Form of Subscription Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on August 7, 2009).
10.13	Form of Warrant (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on August 7, 2009).

10.14	Form of Subscription Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on September 11, 2009).
10.15	Investor Form of Warrant (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on September 11, 2009).
10.16	Form of Three Year Warrant Issued to JP Turner (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed on September 11, 2009).
10.17	Form of Retainer Warrant Issued to JP Turner (incorporated herein by reference to Exhibit 10.4 of Registrant's Current Report on Form 8-K filed on September 11, 2009).
10.18	Agreement and Consent Dated November 24, 2009 (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on November 27, 2009).
10.19	Promissory Note dated November 24, 2009 (incorporated herein by reference to Exhibit 10.2 of Registrant's Amended Current Report on Form 8-K/A filed on December 4, 2010).
10.20	Amendment to Convertible Notes dated November 24, 2009 (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed on November 27, 2009).
10.21	Eighth Amendment to Credit Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on May 4, 2010).
10.22	Amendment to Convertible Note Purchase Agreement (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on May 4, 2010).
10.25	Fourth Amended and Restated Convertible Promissory Note issued on April 30, 2010 (Convertible Note I).
10.26	Second Amended and Restated Convertible Promissory Note issued on April 30, 2010 (Convertible Note II).
10.27	Second Amended and Restated Convertible Promissory Note issued on April 30, 2010 (Convertible Note III).
10.28	Form of Subscription Agreement (incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed on May 6, 2010).
10.29	Form of Warrant (incorporated herein by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K filed on May 6, 2010).
10.30	Form of Retainer Warrant (incorporated herein by reference to Exhibit 10.3 of Registrant's Current Report on Form 8-K filed on May 6, 2010).
10.31	Financial Representative Agreement, dated March 16, 2010, between Registrant and J.P. Turner & Co., L.L.C.
10.32	Agreement, dated July 8, 2010, between Registrant and WB QT, LLC.
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
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.

[THIS PAGE INTENTIONALLY LEFT BLANK]

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries as of April 30, 2010 and 2009, and the related consolidated statements of operations, equity, and cash flows for each of the three years in the period ended April 30, 2010. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries at April 30, 2010 and 2009, and the consolidated results of their operations and their cash flows for each of the three years in the period ended April 30, 2010, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Quantum Fuel Systems Technologies Worldwide, Inc.'s internal control over financial reporting as of April 30, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated July 12, 2010 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Orange County, California
July 12, 2010

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	Year ended April 30,	
	2009	2010
ASSETS		
Current assets:		
Cash and cash equivalents	$ 2,621,215	$ 4,026,882
Accounts receivable from affiliates	2,430,093	1,449,062
Accounts receivable from non-affiliates, net	2,891,825	1,384,075
Inventories, net	3,050,953	1,766,420
Prepaids and other current assets	782,001	927,920
Total current assets	11,776,087	9,554,359
Property and equipment, net	6,880,130	7,965,638
Investment in and advances to affiliates	5,534,740	6,971,944
Assets held for sale	—	2,089,947
Intangible asset, net	—	8,575,518
Goodwill	30,400,000	32,858,914
Prepayments to affiliates	4,845,400	3,971,600
Deposits and other assets	446,447	1,030,207
Total assets	$ 59,882,804	$ 73,018,127
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 3,408,330	$ 4,167,199
Accrued payroll obligations	1,263,816	1,353,709
Deferred revenue	299,187	200,562
Accrued warranties	223,493	89,754
Derivative instruments	15,198,000	12,547,000
Other accrued liabilities	1,690,007	1,853,468
Current portion of long-term debt	14,127,337	519,243
Total current liabilities	36,210,170	20,730,935
Long-term debt, net of current portion	18,540,330	21,133,928
Deferred income taxes	—	481,330
Derivative instruments	—	6,669,000
Commitments and contingencies		
Equity:		
Stockholders' equity:		
Preferred stock, $.001 par value; 20,000,000 shares authorized; none issued and outstanding at April 30, 2009 and April 30, 2010	—	—
Series B common stock, $.001 par value; 2,000,000 shares authorized; 999,969 issued and outstanding at April 30, 2009 and April 30, 2010	1,000	1,000
Common stock, $.001 par value; 398,000,000 shares authorized; 97,627,955 issued and outstanding at April 30, 2009 and 169,155,324 issued and outstanding at April 30, 2010	97,628	169,155
Additional paid-in-capital	331,521,501	395,709,444
Accumulated deficit	(325,722,239)	(372,016,566)
Accumulated other comprehensive loss	(765,586)	(755,791)
Total stockholders' equity	5,132,304	23,107,242
Noncontrolling interests	—	895,692
Total equity	5,132,304	24,002,934
Total liabilities and equity	$ 59,882,804	$ 73,018,127

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended April 30,		
	2008	2009	2010
Revenue:			
Net product sales	$ 11,856,277	$ 975,098	$ 1,450,459
Contract revenue from affiliates	2,178,226	13,751,866	4,454,982
Contract revenue from non-affiliates	12,462,659	8,530,756	3,699,708
Total revenue	26,497,162	23,257,720	9,605,149
Costs and expenses:			
Cost of product sales	10,015,622	2,288,237	1,573,380
Research and development	17,499,221	25,177,261	13,533,987
Selling, general and administrative	16,077,527	13,888,843	14,985,898
Amortization and impairment of intangible assets	1,675,835	7,020,607	16,498
Total costs and expenses	45,268,205	48,374,948	30,109,763
Operating loss	(18,771,043)	(25,117,228)	(20,504,614)
Interest expense, net	(2,557,266)	(3,690,855)	(2,415,082)
Fair value adjustments of derivative instruments	(611,000)	27,693,000	(10,574,000)
Loss on modification of debt and derivative instruments	—	(23,834,000)	(14,686,955)
Gain (loss) on settlement of debt and derivative instruments, net	—	(4,294,000)	822,239
Equity in earnings (losses) of affiliates, net	335,500	(733,000)	1,089,000
Other income (expense), net	(27,443)	1,985,031	(18,691)
Loss from continuing operations before income tax expense	(21,631,252)	(27,991,052)	(46,288,103)
Income tax expense	(1,600)	(1,600)	(6,224)
Loss from continuing operations	(21,632,852)	(27,992,652)	(46,294,327)
Loss from discontinued operations, net of tax effects	(66,886,009)	—	—
Net loss	(88,518,861)	(27,992,652)	(46,294,327)
Remove portion of net loss above attributable to noncontrolling interests	1,718,813	—	—
Net loss attributable to stockholders	$(86,800,048)	$(27,992,652)	$ (46,294,327)
Per share data—basic and diluted:			
Loss from continuing operations attributable to stockholders	$ (0.26)	$ (0.30)	$ (0.36)
Loss from discontinued operations attributable to stockholders	(0.87)	—	—
Net loss	$ (1.13)	$ (0.30)	$ (0.36)
Number of shares used in per share calculation—basic and diluted	76,791,382	92,013,338	129,197,981
Amounts attributable to stockholders:			
Loss from continuing operations, net of tax	$(19,914,039)	$(27,992,652)	$ (46,294,327)
Loss from discontinued operations, net of tax	(66,886,009)	—	—
Net loss	$(86,800,048)	$(27,992,652)	$ (46,294,327)

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Series B Common Stock		Common Stock		Additional Paid-In-Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (loss)	Noncontrolling Interests	Total Equity	Comprehensive Income (loss)
	Shares	Amount	Shares	Amount						
Balance at April 30, 2007	999,969	$1,000	65,052,399	$ 65,052	$291,364,009	$(210,929,539)	$(301,717)	$ 103,608	$ 80,302,413	
Share-based compensation on stock option and restricted stock awards	—	—	420,000	420	2,956,382	—	—	—	2,956,802	
Issuance of common stock to investors	—	—	12,500,000	12,500	5,782,571	—	—	—	5,795,071	
Bifurcation of embedded derivative instrument from convertible note	—	—	—	—	(666,000)	—	—	—	(666,000)	
Contributions from noncontrolling interests	—	—	—	—	—	—	—	1,481,810	1,481,810	
Deconsolidation of subsidiary	—	—	—	—	—	—	—	133,395	133,395	
Comprehensive loss:										
Disposal and desconsolidation of subsidiary	—	—	—	—	—	—	203,359	—	203,359	$ 203,359
Foreign currency translation	—	—	—	—	—	—	98,358	—	98,358	98,358
Net loss	—	—	—	—	—	(86,800,048)	—	(1,718,813)	(88,518,861)	(88,518,861)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(88,217,144)
Add: comprehensive loss attributable to noncontrolling interests	—	—	—	—	—	—	—	—	—	1,718,813
Comprehensive loss attributable to stockholders	—	—	—	—	—	—	—	—	—	$(86,498,331)
Balance at April 30, 2008	999,969	$1,000	77,972,399	$ 77,972	$299,436,962	$(297,729,587)	$ —	$ —	$ 1,786,347	
Share-based compensation on stock option and restricted stock awards	—	—	(20,000)	(20)	1,944,244	—	—	—	1,944,224	
Issuance of common stock to investor	—	—	9,000,000	9,000	10,414,971	—	—	—	10,423,971	
Issuance of common stock in satisfaction of debt principal conversions	—	—	7,555,552	7,556	10,192,444	—	—	—	10,200,000	
Issuance of common stock in satisfaction of Make-Whole Amount provision associated with debt principal conversions	—	—	2,720,004	2,720	8,601,280	—	—	—	8,604,000	
Warrant exercises	—	—	400,000	400	931,600	—	—	—	932,000	
Comprehensive loss:										
Foreign currency translation	—	—	—	—	—	—	(765,586)	—	(765,586)	$ (765,586)
Net loss	—	—	—	—	—	(27,992,652)	—	—	(27,992,652)	(27,992,652)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	$(28,758,238)
Balance at April 30, 2009	999,969	$1,000	97,627,955	$ 97,628	$331,521,501	$(325,722,239)	$(765,586)	$ —	$ 5,132,304	
Share-based compensation on stock option and restricted stock awards	—	—	25,000	25	925,036	—	—	—	925,061	
Issuance of common stock to investors	—	—	26,699,986	26,700	12,363,550	—	—	—	12,390,250	
Issuance of common stock and warrants in connection with acquisition of Schneider Power, Inc.	—	—	16,811,029	16,811	11,919,909	—	—	—	11,936,720	
Noncontrolling interest associated with acquisition of Schneider Power, Inc.	—	—	—	—	—	—	—	897,881	897,881	
Issuance of common stock in satisfaction of debt and derivatives	—	—	26,887,911	26,888	30,116,551	—	—	—	30,143,439	
Issuance of common stock from cashless warrant exercises	—	—	1,098,443	1,098	1,559,902	—	—	—	1,561,000	
Option exercise	—	—	5,000	5	3,995	—	—	—	4,000	
Reclass of derivative instruments from liabilities to equity	—	—	—	—	7,299,000	—	—	—	7,299,000	
Comprehensive loss:										
Foreign currency translation	—	—	—	—	—	—	9,795	(2,189)	7,606	$ 7,606
Net loss	—	—	—	—	—	(46,294,327)	—	—	(46,294,327)	(46,294,327)
Total comprehensive loss										(46,286,721)
Add: comprehensive loss attributable to noncontrolling interests	—	—	—	—	—	—	—	—	—	2,189
Comprehensive loss attributable to stockholders	—	—	—	—	—	—	—	—	—	$(46,284,532)
Balance at April 30, 2010	999,969	$1,000	169,155,324	$169,155	$395,709,444	$(372,016,566)	$(755,791)	$ 895,692	$ 24,002,934	

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended April 30,		
	2008	2009	2010
Cash flows from operating activities:			
Net loss	$(88,518,861)	$(27,992,652)	$(46,294,327)
Add back: Loss from discontinued operations, net of income tax	66,886,009	—	—
Net loss from continuing operations	(21,632,852)	(27,992,652)	(46,294,327)
Adjustments to reconcile net loss from continuing operations to cash used in operating activities:			
Depreciation on property and equipment and amortization of intangibles	3,798,138	3,064,301	1,284,990
Impairment of intangible asset	—	5,775,775	—
Share-based compensation charges	2,858,620	1,944,224	925,061
Fair value adjustments of derivative instruments	611,000	(27,693,000)	10,574,000
Loss on modification of debt and derivative instruments	—	23,834,000	14,686,955
Loss on settlement of debt and derivative instruments	—	4,294,000	(822,239)
Provision for inventory obsolesence	186,318	1,294,945	618,357
Other non-cash items	1,146,301	1,880,107	1,261,038
Changes in operating assets and liabilities:			
Accounts receivable	(6,608,360)	4,342,833	2,532,202
Prepayments to affiliates	(722,600)	(4,657,850)	—
Inventories	1,977,971	1,634,572	666,176
Other assets	(515,923)	162,651	439,638
Accounts payable	858,456	63,928	(90,570)
Deferred revenue and other accrued liabilities	4,869,174	(4,826,510)	(516,866)
Net cash used in operating activities of continuing operations	(13,173,757)	(16,878,676)	(14,735,585)
Net cash used in operating activities of discontinued operations	(12,624,926)	—	—
Net cash used in operating activities	(25,798,683)	(16,878,676)	(14,735,585)
Cash flows from investing activities:			
Purchases of property and equipment	(1,630,914)	(4,820,315)	(445,821)
Advances to and payments associated with discontinued operations	(9,643,934)	—	—
Investment in and advances to affiliates	(1,296,348)	(4,863,000)	(165,000)
Loan provided to Schneider Power, Inc. prior to close of acquisition	—	—	(600,000)
Cash acquired upon close of acquisition of Schneider Power, Inc.	—	—	596,053
Other	9,698	(55,462)	—
Net cash used in investing activities of continuing operations	(12,561,498)	(9,738,777)	(614,768)
Net cash provided by investing activities of discontinued operations	6,362,908	—	—
Net cash used in investing activities	(6,198,590)	(9,738,777)	(614,768)
Cash flows from financing activities:			
Borrowings on notes and other obligations	10,181,906	7,614,776	3,021,610
Payments on notes and other obligations	(14,682)	(2,713,794)	(53,474)
Proceeds from issuance of common stock, net of transaction fees	5,795,071	10,423,971	12,390,250
Proceeds from issuance of warrants classified as derivative instruments	11,792,000	7,290,000	1,395,000
Proceeds from exercise of warrants and options	—	600,000	4,000
Contributions from minority interest holders	1,481,810	—	—
Net cash provided by financing activities of continuing operations	29,236,105	23,214,953	16,757,386
Net cash provided by financing activities of discontinued operations	4,757,014	—	—
Net cash provided by financing activities	33,993,119	23,214,953	16,757,386
Effect of exchange rate changes on cash of continuing operations	(3,447)	—	(1,366)
Effect of exchange rate changes on cash of discontinued operations	12,330	—	—
Net effect of exchange rate changes on cash	8,883	—	(1,366)
Net increase (decrease) in cash and cash equivalents	2,004,729	(3,402,500)	1,405,667
Cash and cash equivalents at beginning of year	4,018,986	6,023,715	2,621,215
Cash and cash equivalents at end of year	$ 6,023,715	$ 2,621,215	$ 4,026,882

Continued on following page

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS—(Continued)

	Year Ended April 30,		
	2008	2009	2010
Supplemental schedule of non-cash investing and financing activities of continuing operations:			
Exercise of warrants classified as derivative instruments:			
Decrease in derivative instruments associated with warrants	$ —	$ 480,000	$ 1,597,000
Increase in additional paid-in-capital	—	(480,000)	(1,561,000)
Decrease in accumulated deficit	—	—	(36,000)
Record initial value of embedded derivative instruments associated with debt and warrant issuances:			
Increase in long-term debt	—	—	(2,251,000)
Increase in derivative instrument liability	(666,000)	—	(1,240,000)
Decrease in additional paid-in-capital	666,000	—	—
Increase in accumulated deficit	—	—	3,491,000
Conversion of debt to equity:			
Decrease in debt principal and interest	—	10,200,000	20,486,458
Decrease in debt discount	—	—	(79,780)
Decrease in derivative instruments associated with debt obligations	—	4,162,000	10,523,000
Increase (decrease) in accumulated deficit	—	4,442,000	(786,239)
Increase in common stock and additional paid-in-capital	—	(18,804,000)	(30,143,439)
Reclass of derivative instruments from liability to equity:			
Decrease in derivative instrument liability	—	—	7,299,000
Increase in additional paid-in-capital	—	—	(7,299,000)
Acquisition of Schneider Power, Inc.:			
Fair value of tangible assets acquired	—	—	5,942,254
Goodwill and intangibles	—	—	11,077,925
Fair value of liabilities assumed	—	—	(4,185,578)
Noncontrolling interests	—	—	(897,881)
Increase in common stock and additional paid-in-capital	—	—	(11,936,720)
Deconsolidation of Advanced Lithium Power:			
Carrying value of assets deconsolidated	(628,769)	—	—
Carrying value of liabilities and minority interests deconsolidated	582,161	—	—
Carrying value of accumulated other comprehensive loss deconsolidated	46,608	—	—
Investment in Asola:			
Increase in investment in affiliate	1,869,000	—	—
Increase in obligations payable to affiliate	(1,869,000)	—	—
Supplemental disclosure information of continuing operations:			
Cash paid during the year for:			
Interest	$(1,367,217)	$ (2,740,729)	$ (609,292)
Income taxes	(1,600)	(1,600)	(3,125)

See accompanying notes.

1. Background and Basis of Presentation

Background

Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries (collectively referred to as "Quantum," "we," "our" or "us") is a fully integrated alternative energy company and a leader in the development and production of alternative fuel propulsion systems, energy storage technologies and alternative fuel vehicles. We believe that we are uniquely positioned to integrate advanced fuel system, electric drive, software control strategies and battery control system technologies for alternative fuel vehicles, in particular, plug-in electric hybrid, electric and hydrogen hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics, control strategies and system integration. With our recent acquisition of Schneider Power, Inc. (SPI) as discussed below and in Note 3, we are also now an independent power producer and developer of renewable energy projects and provider of related services.

We provide powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and battery control systems for vehicles and other applications including fuel cells, hybrids, plug-in electric hybrid, alternative fuels, and hydrogen refueling. We also design, engineer and manufacture hybrid and fuel cell vehicles.

Our portfolio of technologies include electronic controls, hybrid electric drive and control systems, hydrogen storage and metering systems, advanced lithium-ion battery control systems, and other alternative fuel technologies that enable fuel efficient, low emission hybrid, plug-in hybrid electric, fuel cell and other alternative fuel vehicles.

We were incorporated in the state of Delaware in October 2000 as Quantum Fuel Systems Technologies Worldwide, Inc., a wholly-owned subsidiary of IMPCO Technologies, Inc (IMPCO). We spun off from IMPCO and became a separate company on July 23, 2002.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles (GAAP). The consolidated financial statements include the accounts of Quantum Fuel Systems Technologies Worldwide, Inc., our wholly owned subsidiary, SPI, and our majority-owned subsidiary, Quantum Solar Energy, Inc. (Quantum Solar).

On April 16, 2010, we completed the acquisition of SPI, an alternative energy company with a portfolio of clean electricity generation development projects and advanced exploration projects and land positions in prospective wind and solar power areas in North America and the Caribbean (see Note 3).

On August 27, 2008, start-up activities were initiated in Quantum Solar, a solar panel distribution and manufacturing operation in Irvine, California. We currently own 85.0% of Quantum Solar and the remaining 15.0% is owned by the majority shareholder of our affiliate, asola Advanced and Automotive Solar Systems GmbH (Asola).

We also hold ownership interests in certain unconsolidated affiliates that are accounted for under the equity method of accounting. These interests include: (i) on September 3, 2009, we acquired an ownership interest in Shigan Quantum Technologies PVT LTD (Shigan Quantum), a start-up manufacturer of fuel injectors based in New Delhi, India, (ii) on October 6, 2009, we acquired an ownership interest in Power Control and Design, Inc.

(PCD), a power control electronics software developer based in Newbury Park, California, (iii) on January 4, 2008, we acquired an ownership interest in Asola, a solar module manufacturer located in Erfurt, Germany, (iv) on August 7, 2007, we co-founded Fisker Automotive, Inc. (Fisker Automotive) with Fisker Coachbuild, LLC, which was formed for the purpose of producing premium plug-in hybrid automobiles, and (v) on March 24, 2006, we obtained an ownership interest in Advanced Lithium Power Inc. (ALP). See further discussion of investments in affiliates at Note 4.

On January 16, 2008, the Company completed a series of transactions that resulted in the disposal of substantially all the assets of the Tecstar Automotive Group business segment. Prior to the disposal, the Tecstar Automotive Group business segment comprised all of the business activities acquired via the acquisition of Tecstar Automotive Group, Inc. ("Tecstar Automotive Group"), formerly known as Starcraft Corporation, that occurred on March 3, 2005 and subsequent specialty vehicle business acquisitions, including the February 8, 2006 acquisition of Regency Conversions, Inc. See Notes 16 and 20.

All significant intercompany accounts and transactions have been eliminated in consolidation. Certain reclassifications, including reclassification of all historical activities and balances of the Tecstar Automotive Group business segment as discontinued operations, have been made to fiscal year 2008 and 2009 amounts to conform to the fiscal year 2010 presentation.

In preparing the consolidated financial statements, we have evaluated subsequent events. Subsequent events are events that occur after the balance sheet date but before the consolidated financial statements are issued or are available to be issued.

From our inception through April 30, 2010, we have funded our operations and strategic investments primarily with proceeds from public and private offerings of our common stock and borrowings with financial institutions and our current senior lender. During the three year period covered by these consolidated financial statements, we have completed the following capital transactions:

- On June 22, 2007, we completed a private placement offering that yielded gross proceeds of $18.75 million from the sale of 12.5 million shares of our common stock at a price of $1.50 per share. The investors also received warrants in connection with the private placement transaction. We allocated $11.8 million of the net proceeds from the transaction to the warrants that are classified as derivative instruments.
- On January 16, 2008, we transferred substantially all the assets of the Tecstar Automotive Group business segment to an affiliate of our senior lender in satisfaction of Tecstar Automotive Group's debt obligations under a certain senior subordinated convertible note issued on July 12, 2004 (Tecstar Convertible Note). In connection therewith, our outstanding debt instruments payable to the senior lender were restructured in a manner that resulted in (i) the replacement of the Tecstar Convertible Note, with an outstanding principal and interest balance of $16.2 million, with a new $16.2 million debt instrument issued by Quantum that had similar terms (Convertible Note I), (ii) the elimination or release of $20.5 million of debt and (iii) incremental net borrowing capacity for Quantum of $1.9 million. The elimination or release of debt included approximately $15.5 million secured by Tecstar Automotive Group's assets under the revolving line of credit and a $5.0 million term note issued by Tecstar Automotive Group to the senior lender on November 6, 2007 (Tecstar Term Note). The revolving line of credit, with a remaining availability of approximately $8.1 million after the transfer of the Tecstar business assets to the senior lender, was terminated and replaced with a new $10.0 million term note (Term Note B).
- On May 30, 2008, we received $7.5 million in proceeds from our senior lender under a term note that was set to mature on August 31, 2009 (Term Note C) and secured a $10.0 million unconditional

commitment (Lender Commitment) from an affiliate of our senior lender that allows us to draw on the commitment at our option and also allows the senior lender to fund the commitment at the senior lender's option under certain defined structures. The option for either party under the Lender Commitment, as last modified on November 24, 2009, expires on March 31, 2011. To date, neither we nor the senior lender have exercised the option under the Lender Commitment.

- On August 25, 2008, we completed a registered direct offering that yielded gross proceeds of $19.1 million from the sale of 9.0 million shares of our common stock at a price of $2.12 per share. The investor also received warrants in connection with the transaction. The net amount received by us from the transaction, after deducting placement agent fees and offering expenses, was approximately $17.7 million. We allocated $7.3 million of the net amount received from the transaction to the warrants that are classified as derivative instruments.
- On July 10, 2009, we and our senior lender agreed to a series of modifications to our credit facilities and incremental borrowings that are discussed in more detail in Note 10. In connection with the modifications, the amount of outstanding principal and unpaid interest on Term Note A of $6.6 million was replaced with a new convertible note in that amount issued to the senior lender (Convertible Note II) and we received an additional $3.0 million in proceeds in exchange for a new convertible note issued to the senior lender (Convertible Note III).
- On September 4, 2009, we completed a private placement offering that raised cumulative gross proceeds of $12.3 million from the sale of 20.1 million shares of our common stock at a price of $0.61 per share. The investors and placement agent also received warrants in connection with the transactions. The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $10.8 million.
- On various dates from April 30, 2010 through June 14, 2010 we raised cumulative gross proceeds of $10.6 million in connection with a private placement offering from the sale of 19.3 million shares of our common stock at a price of $0.55 per share. The investors and placement agent also received warrants in connection with the transactions. The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $9.1 million (of which $6.0 million was received subsequent to the latest reported balance sheet date of April 30, 2010). The private placement offering remained opened as of June 14, 2010.

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 as the twelve month period ending as of April 30, 2011. 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.

Our principal sources of liquidity amount to $20.0 million, consisting of $4.0 million of cash and cash equivalents at April 30, 2010, $6.0 million in net proceeds obtained in the private placement offering that closed on various dates through June 14, 2010, and $10.0 million under the Lender Commitment that is available to be drawn upon through March 31, 2011.

We have incurred operating losses and negative cash flows from operating activities in each of the three fiscal years presented in the consolidated financial statements. Specifically, we have used $16.9 million and

$14.7 million in cash for continuing operating activities for the years ended April 30, 2009 and 2010, respectively. Although we expect to use a significant amount of cash in our continuing operations over the next year, our current operating plan anticipates increased revenues and improved profit margins for the twelve month period which we expect will reduce the level of cash required for our continuing operating activities in fiscal 2011 as compared to fiscal 2010.

As discussed further in Note 10, we have $21.7 million of outstanding long-term debt obligations as of April 30, 2010; however, substantially all of the outstanding debt instruments have structures that allow for the settlement of any required principal reductions through at least July 31, 2011 in shares of our common stock, subject to certain restrictions. We have no obligation to use our cash or other working capital to satisfy any potential debt principal conversions or debt principal demands made by our senior lender on our outstanding convertible and term note instruments, respectively, over the next twelve months ending April 30, 2011. As a result, we are only contractually required to use $0.1 million in cash or other working capital to satisfy our scheduled debt principal obligations over the course of fiscal 2011. In addition, we expect to be able to maintain compliance with the provisions of our debt instruments during this period. Further, although we have classified $12.5 million of derivative instrument liabilities associated with certain warrant holders as current liabilities at April 30, 2010, bringing our total reported current liabilities to a level that exceeds our reported current assets by $11.2 million as of this date, we do not anticipate that we will be required to use any cash or other working capital to satisfy potential exercises or contractual provisions under the warrant contracts prior to at least April 30, 2011.

Based on current projections and estimates, we believe that our available working capital and principal sources of liquidity are sufficient to fund our operating activities and obligations through at least April 30, 2011. To meet these funding requirements, we may have to draw down on some or all of the Lender Commitment or alternatively raise additional capital through public or private offerings of equity or debt securities.

Although we believe we have sufficient available capital to cover our existing operations and obligations through at least April 30, 2011, we will need to raise additional capital in order to complete our planned solar module manufacturing operation in Irvine, California, to further develop the next generation of our *Q-Drive*™ hybrid electric propulsion system, and to develop renewable energy projects. We anticipate that we will be able to raise sufficient additional capital for these initiatives over the coming months through public or private offerings of equity or debt securities and/or through federal and state governmental grants or loans; however, we cannot provide any assurances that we will be able to secure additional funding on terms acceptable to us, if at all.

In addition, we will need to increase revenues and improve profit margins for our business to be sustainable over the long term. An inability by us to achieve our current operating plan or raise sufficient capital to cover any shortfall would have a material adverse affect on our ability to meet our obligations as they become due without substantial disposition of assets or other similar actions outside the ordinary course of business.

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 April 30, 2011, 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 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 Translations

The books and records of our wholly-owned subsidiary, SPI, and our affiliate, Asola, are maintained in functional currencies that differ from the U.S. dollar functional currency that is reported in the accompanying consolidated financial statements. SPI's functional currency is the Canadian dollar and Asola's functional currency is the Euro.

SPI's assets and liabilities and our investment in and advances to Asola are translated at rates of exchange in effect at the end of the reporting period. SPI's revenues and expenses and our equity in earnings or losses of Asola are translated at the average rates of exchange for the period. Foreign currency translation gains or losses are accumulated within other comprehensive income or loss as a separate component of stockholders' equity.

Foreign currency gains and losses (transactions denominated in a currency other than SPI's local currency) are included in selling, general and administrative expenses.

Revenue Recognition

We generally manufacture products based on specific orders from customers. Revenue is recognized when the earnings process is complete and collectibility is reasonably assured, which for product sales is generally upon shipment. We include the costs of shipping and handling, when incurred, in cost of goods sold.

Contract revenue for customer funded research and development is principally recognized by 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. Revisions in profit estimates are charged to income in the period in which the facts that give rise to the revision become known. In certain circumstances, specific contracts in which we cannot reliably make estimates of total revenues and expenses are accounted for under the completed contract method. Under the completed contract method, all revenue and expenses attributable to the specific contract are deferred until the end of the project.

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. Consideration from multiple element arrangements is allocated among the separate elements based on their relative fair values.

Effective with our acquisition of SPI on April 16, 2010, our revenues now include energy generation sales associated with a wind farm which are recognized at the time of generation and delivery to the purchasing utility

provider as metered at the point of interconnection with the transmission system. The rate paid by the purchasing utility provider is established in the Power Purchase Agreement (PPA) executed between us and the utility provider.

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 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. We also report cash flow activities of our continuing business separate from cash flow activities of our discontinued operations. Consequently, cash flows from operating, investing and financing activities and effects of exchange rate changes on cash are presented separately for both continuing and discontinued operations in the accompanying consolidated statements of cash flows for the periods presented. Cash transfers from continuing operations to discontinued operations in the form of equity advances to fund operating losses through the January 2008 disposal date of the Tecstar Automotive Group business segment are reported as investing uses of cash for the continuing operations and as investing sources of cash for the discontinued operations.

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.

Property and Equipment

Property and equipment are stated at historical 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 over 7 years; power generation machinery and equipment over 20 years; information systems and

office equipment over periods of 3 to 7 years; and automobiles and trucks over 5 years. Amortization of leasehold improvements and equipment financed under borrowing facilities is provided using the straight-line method over the shorter of the assets' estimated useful lives or the lease terms.

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.

Equity Method Investments

Investments in common stock of non-consolidated affiliates are accounted for under the equity method of accounting as a result of our ability to exercise significant influence over the operating and financial policies of our affiliates. The ability to exercise significant influence is due in part to the level of our equity holdings and/or through our representation on the board of directors for these affiliates. Under the equity method of accounting, investments of this nature are recorded at original cost and adjusted periodically to recognize our proportionate share of the investee's net income or losses after the date of investment. When net losses from an investment accounted for under the equity method exceed its carrying amount, the investment balance is reduced to zero and additional losses are not recorded. We resume accounting for the investment under the equity method when the affiliated entity subsequently reports net income and our share of that net income exceeds the share of net losses not recognized during the period the equity method was suspended. Investments are written down only when there is clear evidence that a decline in value that is other than temporary has occurred.

Goodwill and Other Intangible Assets

Acquisitions meeting business combinations criteria often give rise to goodwill. We utilize the services of valuation consultants to assist in allocating purchase price to acquired assets and liabilities assumed in connection with acquisition activities.

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 annually for impairment (as of February 1) or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable.

We amortize specifically identified intangible assets using the straight-line method over the estimated useful lives of the assets. Impairment losses are recorded on long-lived assets used in operations when an indicator of impairment (significant decrease in market value of an asset, significant change in extent or manner in which the asset is used or significant physical change to the asset) is present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount.

Warranty Costs

We follow the policy of accruing an estimated liability for warranties at the time the warranted products are sold. Warranty is provided with terms similar to those offered by the OEM to its customers, which generally ranges from one to three years. Estimates are based, in part, on historical experience.

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 10, 11 and 14.

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 on the consolidated statements of operations as other income or expense. 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 on the consolidated statement of operations as other income or expense. 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.

Certain derivative instruments are presented as current liabilities on the consolidated balance sheet if the terms allow the holder to either exercise warrants or to convert debt principal or demand principal repayments associated with derivative instruments within the current operating cycle. These derivative instruments are similar in nature to demand obligations because the settlement could require cash payment due to events that are outside of our control.

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 as prescribed by GAAP. Under GAAP, the tax effects of a position are recognized only 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 by recognizing the estimated fair value of stock options and similar equity instruments issued to our employees over the requisite vesting period as an expense. We use the Black-Scholes option-pricing formula and record compensation expense on a straight-line amortization basis over the requisite vesting period of the option grants or other stock-based awards.

Segment Information

We classify our continuing business operations into three segments: Fuel Systems, Renewable Energy and Corporate (see Note 16).

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, as these amounts are recorded directly as an adjustment to stockholders' equity. The change in our accumulated other comprehensive loss for the periods presented is primarily associated with currency translation gains or losses.

Interest Expense

We recognize the amortization of deferred loan origination costs as interest expense under the effective interest method over the life of the arrangement.

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 long-term debt.

In March 2008, the Financial Accounting Standards Board (FASB) issued guidance that modified existing requirements to include qualitative disclosures regarding the objectives and strategies for using hedging derivatives, fair value amounts of gains and losses on derivative instruments and disclosures about credit-risk-related contingent features in derivative agreements. In addition, the guidance requires the cross-referencing of derivative disclosures within the financial statements and notes thereto.

We may use derivative financial instruments for the purpose of reducing our exposure to adverse fluctuations in interest and foreign exchange rates. While these instruments could be subject to fluctuations in value, such fluctuations are generally offset by the value of the underlying exposures being reduced. We have not used any derivative financial instruments for the purpose of reducing our exposure to adverse fluctuations in interest rates but have entered into currency exchange arrangements for the purpose of reducing our exposure to adverse changes in currency exchange rates. We are not a party to leveraged derivatives for investment or speculative purposes.

We conduct a major portion of our business with a limited number of customers. Fisker Automotive and General Motors (including subsidiaries of General Motors) represent a significant portion of our outstanding accounts receivable as of April 30, 2010. A single senior secured lender, WB QT, LLC, or affiliates of the senior secured lender (the "senior lender"), principally hold the majority of our long-term debt obligations. See further discussion of accounts receivable and long term debt obligations at Notes 5 and 10, respectively.

Fair Values Measurements

We determine fair values of our assets and liabilities in accordance with the fair value measurements method under GAAP. We elected not to adopt the fair value option for any of our financial assets or liabilities that were not already accounted for under the fair value method prior to the adoption of the fair value measurements method. Based on certain qualifying events, we may elect to adopt the fair value option in the future for certain financial assets and liabilities. See further discussion of fair value measurements at Note 11.

Recent Accounting Pronouncements Adopted

Effective May 1, 2009, we adopted the FASB's Accounting Standards Codification (ASC) and the Hierarchy of Generally Accepted Accounting Principles (Codification). This authoritative guidance established the Codification, which officially launched on July 1, 2009, to serve as the source of authoritative GAAP recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the Securities and Exchange Commission (SEC) under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. The subsequent issuances of new standards will be in the form of Accounting Standards Updates (ASUs) that will be included in the Codification. Generally, the Codification is not expected to change GAAP. All other accounting literature excluded from the Codification will be considered non-authoritative. This guidance is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The adoption of this guidance did not have a significant impact on our consolidated financial statements or related footnotes.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 805, "Business Combinations" (ASC 805). ASC 805 retains the fundamental requirements of prior accounting guidance that the purchase method of accounting be used for all business combinations, that an acquirer be identified for each business combination and for goodwill to be recognized and measured as a residual. ASC 805 expands the definition of transactions and events that qualify as business combinations to all transactions and other events in which one entity obtains control over one or more other businesses. ASC 805 broadens the fair value measurement and recognition of assets acquired, liabilities assumed, and interests transferred as a result of business combinations. ASC 805 also increases the disclosure requirements for business combinations in the financial statements. The adoption of ASC 805 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 810, "Consolidation" (ASC 810). ASC 810 changes the accounting and reporting for minority interests, which are recharacterized as noncontrolling interests and classified as a component of equity. This new consolidation method significantly changes the accounting for transactions with minority interest holders. The adoption of ASC 810 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 470, "Debt" (ASC 470). ASC 470 requires that the liability and equity components of convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) be separately accounted for in a manner that reflects an issuer's nonconvertible debt borrowing rate. As a result of the embedded multiplier features, share settlement provisions and below market interest rate structures, we consider both Term Note B, originally issued on January 16, 2008, and the Consent Fee Term Note, issued on November 24, 2009, to be convertible debt instruments in applying applicable accounting guidance (see Note 10). We may settle these instruments in cash or shares, and as such, these notes are within the scope of ASC 470; however, due to certain contractual provisions contained within Term Note B and the Consent Fee Term Note as of May 1, 2009, the embedded features under the two notes were classified as liabilities and measured at fair value under the guidance of ASC 815 (discussed below). As such, the adoption of ASC 470 did not have a material impact on our financial position or results of operations.

Effective May 1, 2009, we adopted new guidance under ASC Topic No. 815, "Derivatives and Hedging" (ASC 815). ASC 815 provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. The remaining outstanding warrants issued in October 2006 and August 2008 as discussed further in Note 14 contain certain exercise price reset provisions which result in the instruments not meeting the definition of "indexed to the entity's own stock" under the guidance of ASC 815. However, due to certain provisions whereby we may have to pay cash upon settlement and it is outside of our control, the October 2006 and August 2008 were already classified as liabilities and measured at fair value under the previous GAAP guidance. The adoption of the new guidance under ASC 815; therefore, did not impact the accounting treatment of the October 2006 and August 2008 warrants. The August 2009 and September 2009 warrants (as discussed further in Note 14) contain cashless warrant exercise provisions whereby the settlement calculation may incorporate variables other than those used to determine the fair value of a fixed-for-fixed forward or option on equity shares and are therefore not considered "indexed to the Company's own stock" under the new guidance of ASC 815. As such, the August 2009 and September 2009 Warrants have been classified as derivative liabilities effective upon their issuance. The fair value of the derivative liabilities associated with warrants as of April 30, 2010 and the changes in fair value of the derivatives during fiscal 2010 are disclosed in Note 11.

In August 2009, the FASB issued ASU No. 2009-05, "*Measuring Liabilities at Fair Value*," (ASU 2009-05) which provides clarification that in circumstances where a quoted market price in an active market for an identical liability is not available, a reporting entity must measure fair value of the liability using one of the

following techniques: 1) the quoted prices for similar liabilities or similar liabilities when traded as assets; or 2) another valuation technique, such as a present value technique or the amount that the reporting entity would pay to transfer the identical liability or would receive to enter into the identical liability that is consistent with the provisions of ASC 820, *"Fair Value Measurements and Disclosures."* We adopted this statement effective November 1, 2009. The adoption of ASU 2009-05 did not have a material impact on our financial position or results of operations.

Recent Accounting Pronouncements Issued

In September 2009, the FASB reached a consensus on ASU No. 2009-13, *"Revenue Recognition (Topic 605)—Multiple-Deliverable Revenue Arrangements,"* (ASU 2009-13). ASU 2009-13 modifies the requirements that must be met for an entity to recognize revenue from the sale of a delivered item that is part of a multiple-element arrangement when other items have not yet been delivered. ASU 2009-13 eliminates the requirement that all undelivered elements must have either: i) vendor specific objective evidence (VSOE) or ii) third-party evidence (TPE), before an entity can recognize the portion of an overall arrangement consideration that is attributable to items that already have been delivered. In the absence of VSOE or TPE of the standalone selling price for one or more delivered or undelivered elements in a multiple-element arrangement, entities will be required to estimate the selling prices of those elements. Overall arrangement consideration will be allocated to each element (both delivered and undelivered items) based on their relative selling prices, regardless of whether those selling prices are evidenced by VSOE or TPE or are based on the entity's estimated selling price. The residual method of allocating arrangement consideration has been eliminated. Early adoption is permitted. This new update is effective for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Based on the current nature of our operations, we do not expect the adoption of this requirement will have a material impact on our consolidated financial statements.

In June 2009, the FASB issued ASC No. 810-10-05, *"Consolidations-Variable Interest Entities,"* (ASC 810-10-05) which changes the approach to determining the primary beneficiary of a variable interest entity (VIE) and requires companies to more frequently assess whether they must consolidate VIEs. ASC 810-10-05 is effective for annual periods beginning after November 15, 2009. Based on the current nature of our operations, we do not expect the adoption of this requirement will have a material impact on our consolidated financial statements.

3. Acquisition of Schneider Power, Inc.

On April 16, 2010 we completed our acquisition of Toronto, Ontario, Canada-based Schneider Power, Inc. (SPI) under the terms of a definitive Arrangement Agreement executed on November 24, 2009 (the "Arrangement Agreement") pursuant to which Quantum acquired all of the outstanding shares of SPI in a stock-for-stock exchange. Effective upon the closing of the Arrangement Agreement, we now operate SPI as a wholly-owned subsidiary. SPI is a renewable energy company that develops and constructs wind energy farms. SPI also owns and operates a wind farm in Ontario, Canada and has a significant portfolio of renewable wind and solar energy projects in North America and the Caribbean that it is currently developing. We report the operations of SPI in the Renewable Energy business segment (see Note 16).

In connection with the closing of the Arrangement Agreement, we issued a total of 16.8 million shares of our common stock to SPI shareholders (representing 0.236 of a Quantum common share for each SPI common share outstanding), which included 0.2 million of shares issued to holders of SPI in-the-money compensatory stock options at the time of closing. All outstanding SPI stock options and SPI warrants were cancelled effective upon the closing of the transaction. We provided the former SPI warrant holders with Quantum replacement warrants that allows these warrant holders to purchase up to 2.1 million shares of our common stock at exercise prices ranging from $0.48 to $2.41 per share that expire on dates through May 13, 2011. The shares issued in connection with the Arrangement Agreement represented approximately 10% of our total shares outstanding on a post-transaction basis.

The closing of the Arrangement Agreement was accounted for as an acquisition of SPI by Quantum.

Pursuant to the terms of the Arrangement Agreement, we appointed an individual nominated by SPI to fill a vacancy on our Board of Directors.

Consideration and Measurement of Goodwill

The total fair value of the consideration provided by us on the closing date was $11.9 million and there is no further contingent consideration of other adjustments contemplated per the terms of the definitive business combination agreement. The fair value of the shares issued in connection with the acquisition was determined based on the closing share price of our common stock ($0.70 on April 16, 2010) on the date the transaction was completed. The fair value of the replacement warrants issued to former SPI warrant holders was based on option-pricing mathematical formulas generally referred to as "Black-Scholes" option-pricing models.

We have preliminarily identified $9.4 million of tangible and intangible assets at fair value as of the date of the closing, which was net of the fair value of liabilities assumed and non-controlling interests. As a result, we have preliminarily ascribed $2.5 million of the consideration related to the transaction as goodwill in the Renewable Energy business segment representing the expected synergies and other intangible value that the SPI acquisition brought to our overall alternative energy business strategy (see Notes 8 and 16). Because the transaction was completed near the end of our fiscal 2010 period, we have not yet finalized the fair values of the assets acquired and liabilities assumed in connection with the acquisition, including the finalization of deferred tax assets and liabilities associated with the new subsidiary.

The components of the consideration paid is as follows:

Quantum common shares issued and exchanged for SPI common shares	$11,620,031
Quantum common shares issued to former SPI option holders	147,689
Quantum warrants issued to former SPI warrant holders	169,000
Total consideration	$11,936,720

The preliminary fair value of the net assets acquired is as follows:

Tangible assets acquired at fair value:	
Cash and cash equivalents	$ 596,053
Accounts receivable	45,373
Prepaids and other current assets	608,060
Deposits and other assets	684,882
Property and equipment	1,912,829
Asset held for sale	2,095,057
Total tangible assets acquired	5,942,254
Intangible assets acquired at fair value:	
Renewable energy project assets	8,613,000
Goodwill ascribed to transaction	2,464,925
Total assets acquired	17,020,179
Liabilities assumed at fair value:	
Accounts payable	(1,213,675)
Accrued payroll obligations	(198,252)
Loan payable to Quantum	(624,510)
Other accrued liabilities	(357,529)
Long-term debt	(1,311,064)
Deferred income taxes	(480,548)
Total liabilities assumed	(4,185,578)
Non-controlling interests in SPI at fair value	(897,881)
Total liabilities assumed and non-controlling interests	(5,083,459)
Net assets acquired	$11,936,720

Pro Forma Data

The operating results of SPI have been included in our consolidated financial statements from the date of the acquisition. The pro forma financial data set forth below gives effect to our acquisition of SPI as if the acquisition had been completed on May 1, 2008. The pro forma financial data includes adjustments to reflect an increase in operating expenses associated with intangible asset amortization (resulting from the identification of renewable energy project intangible assets in connection with the acquisition that were not previously recorded) and an increase in the number of shares used in per share calculation as a result of shares issued in connection with the transaction. The pro forma financial data excludes those adjustments made to the book value of SPI's tangible assets acquired and liabilities assumed based on their estimated fair value at the date of acquisition.

	Year Ended April 30, 2009		Year Ended April 30, 2010	
	As Reported	Pro Forma (unaudited)	As Reported	Pro Forma (unaudited)
Total revenue	$ 23,257,720	$ 23,503,371	$ 9,605,149	$ 12,510,917
Operating loss	$(25,117,228)	$ (28,683,874)	$ (20,504,614)	$ (22,016,014)
Net loss attributable to stockholders	$(27,992,652)	$ (30,942,608)	$ (46,294,327)	$ (47,566,254)
Net loss per share—basic and diluted	$ (0.30)	$ (0.28)	$ (0.36)	$ (0.33)
Number of shares—basic and diluted	92,013,338	108,824,367	129,197,981	145,364,203

The pro forma financial information is for informational purposes only and is not indicative of what the actual consolidated results of operations might have been had the transaction occurred on May 1, 2008. Included in the as reported and pro forma results for fiscal 2010 were non-recurring expenses related to the acquisition of $0.7 million and $1.4 million, respectively. The acquisition costs are reported in selling, general and administrative costs in the accompanying consolidated statement of operations.

Investment in Grand Valley

Included in the SPI assets acquired is $2.1 million related to a renewable energy project asset that we have classified as held for sale. This asset represents the fair value of SPI's investment in a wind farm project that is under development and that we refer to as the Grand Valley Wind Farm. We have recorded the asset at its fair value, less estimated cost to sell. As of the closing date of the Arrangement Agreement, management of SPI had committed to a plan to sell the asset and the asset was available for immediate sale in its present condition subject only to terms that are usual and customary for this type of sale. Actions to locate a buyer have been initiated and the sale of the asset is considered probable within the next year.

4. Investments in Affiliates

We account for our affiliates, Fisker Automotive, Asola, PCD, Shigan Quantum, and ALP under the equity method of accounting. The combined total of $5.5 million and $7.0 million in the investment in and advances to affiliates on the accompanying consolidated balance sheets at April 30, 2009 and 2010, respectively, represents the sum of our investment in and advances to Asola of $5.5 million for 2009 and represents our investment in and advances to Asola of $6.8 million plus our investment in PCD of $0.2 million for 2010. Our investments in Fisker Automotive, Shigan Quantum and ALP are each carried at zero at April 30, 2009 and 2010 for the reasons discussed further below.

Fisker Automotive

On August 7, 2007, we and Fisker Coachbuild, LLC, launched a new venture, Fisker Automotive, Inc. (Fisker Automotive), to produce premium plug-in hybrid automobiles. Upon formation, we owned 62.0% of Fisker Automotive. Fisker Automotive has raised a level of capital that has resulted in the dilution of our direct ownership interest to approximately 1% at April 30, 2010.

Fisker Automotive's first scheduled production vehicle, the Fisker Karma, a four door hybrid-electric premium sports sedan that incorporates our plug-in hybrid electric vehicle architecture known as *Q-Drive*, is expected to have initial deliveries beginning near the end of calendar year 2010.

On January 15, 2010, Fisker Automotive announced that it had completed an equity raise in the amount of $115 million. In connection with the equity raise and our desire to transition into a role as an independent supplier of key sub-systems to Fisker Automotive, we agreed to immediately relinquish one of our two seats on Fisker Automotive's board of directors and to relinquish our remaining board seat if, and when, an independent nominee is elected to serve on Fisker Automotive's board. As of April 30, 2010, our Chief Executive Officer is serving as our representative on the Fisker Automotive board of directors.

On April 29, 2010, we executed a long-term production supply agreement with Fisker Automotive which sets forth the definitive terms pursuant to which we are the exclusive supplier of certain key sub-systems and control systems included in the *Q-Drive* powertrain system for the Fisker Karma production vehicle and we will also receive a royalty for each Fisker Karma vehicle sold that incorporates our *Q-Drive* technology (the "Fisker Production Agreement"). The Fisker Production Agreement covers the program life of the vehicle platform and outlines minimum volumes of 45,000 vehicles over this period.

We account for our equity interest in Fisker Automotive under the equity method of accounting. Due to the temporary nature of our majority interest in Fisker Automotive, we also accounted for our initial equity interest in Fisker Automotive under the equity method. Although Fisker Automotive is a variable interest entity as defined under GAAP, we are not the primary beneficiary, as we are not required to absorb a majority of current and potential future losses or to be considered the primary beneficiary of a gain generated by Fisker Automotive.

Fisker Automotive has an accumulated deficit since inception through April 30, 2010 (unaudited) as a result of funding the design and development activities for its vehicle platforms. We have not contributed any cash or other assets with a historical cost basis to Fisker Automotive and have no obligation to fund deficit balances. As a result, our initial investment balance and balances as of April 30, 2009 and 2010 are zero and there is no equity in losses of the affiliate to be reported in our consolidated statement of operations for the three fiscal years ended April 30, 2010.

We are currently providing services to Fisker Automotive under the third phase of the development of the Fisker Karma vehicle platform. Previously, we completed an initial concept analysis program in January 2008 for the Fisker Karma vehicle during the first phase of the development under a $1.0 million contractual arrangement and completed services under the second phase of the development in March 2009 under a second contract for $14.3 million. Under the second phase, we developed the powertrain and software control systems for the Fisker Karma. On April 2, 2009, we were awarded a third contract for $10.2 million covering the third phase of the development program which includes system validation, certification and other pre-production development activities.

We have received $19.0 million in cash from Fisker Automotive and have recognized $20.3 million in cumulative contract revenue through April 30, 2010 of which $2.2 million, $13.8 million and $4.4 million was recognized during fiscal years 2008, 2009 and 2010, respectively. Revenue recognized in excess of billing of $0.8 million is disclosed as "Customer accounts unbilled" in Note 5 and classified as part of "Accounts receivable from affiliate" on the accompanying consolidated balance sheet.

Asola

On January 4, 2008, we acquired a 24.9% ownership interest in asola Advanced and Automotive Solar Systems GmbH (Asola), a solar module manufacturer located in Erfurt, Germany. In exchange for the ownership interest, we provided the following consideration (i) 0.3 million euro (US$0.4 million), (ii) commitment to contribute an additional 1.2 million euro to provide for capital equipment for the planned expansion of Asola's annual manufacturing capacity to approximately 40 to 45 megawatts (MW), (iii) commitment to provide a guaranty to Asola's bank of 1.0 million euro related to an anticipated expansion of Asola's bank financing arrangement, and (iv) commitment to transfer 15.0% ownership interest in our solar venture in the United States, if and when such venture was established. We also have an option to increase our ownership interest in Asola by an additional 7.8% in exchange for 0.1 million euro. We account for our equity interest in Asola under the equity method of accounting.

On December 28, 2009, we provided Asola with written notice that we were exercising our right to increase our ownership interest to 32.66% in exchange for payment of 0.1 million euro. We are currently evaluating the impact such exercise may have on certain material contracts to which Asola is a party and reserved our right to withdraw the exercise until our evaluation is complete.

The conversion rate of one euro to one U.S. dollar was 1.33 to 1 as of April 30, 2009 and 1.32 to 1 as of April 30, 2010. We account for our equity interest in Asola under the equity method of accounting. Although Asola is a variable interest entity, we are not considered the primary beneficiary.

On May 8, 2008, we paid 1.2 million euro (US$1.9 million) to Asola to satisfy the commitment to provide funds for capital equipment noted in (ii) above. In August 2008, we satisfied the commitment noted in (iv) above by transferring 15.0% ownership in Quantum Solar to Asola's majority shareholder, ConSolTec GmbH (ConSolTec).

Asola maintains its books and records on a calendar year basis and has reported annual financial results under German generally accepted accounting principles for calendar 2009 (unaudited) and interim financial results for the first four months of calendar 2010 (unaudited) as follows:

	Year ended December 31, 2009	
	Euros	US Dollars
Current assets	€22,322,949	$31,995,000
Non-current assets	9,150,089	13,115,000
Current liabilities	19,620,875	28,123,000
Long-term liabilities	8,021,954	11,498,000
Product sales	38,682,329	54,882,000
Gross profit on product sales	9,639,944	13,677,000
Net income	1,429,501	2,028,000

	Four months ended April 30, 2010	
	Euros	US Dollars
Total assets	€32,357,000	$42,837,000
Total liabilities	27,555,000	36,480,000
Product sales	17,631,000	24,338,000
Net income	684,000	944,000

Our equity in net earnings of Asola was US$0.1 million and US$1.1 million for fiscal years 2009 and 2010, respectively. Our equity in net earnings differs from the 24.9% of the net loss shown in the table above due to adjustments to equity in net earnings related to German generally accepted accounting principles to GAAP differences. Such differences are adjusted for in calculating our equity in earnings under GAAP.

On November 7, 2007 we entered into an arrangement with Asola (Asola Arrangement) under which we agreed to purchase one-half of Asola's rights and obligations under a certain long-term solar cell supply agreement with one of Asola's solar cell suppliers dated November 1, 2007 to which Asola is a party (Supply Agreement). Asola's obligations under the Supply Agreement includes the required purchase by Asola of solar cells with a cumulative power of 155 MW for the period from January 1, 2008 through December 31, 2017 at predetermined fixed prices, with prepayments required by November 1, 2007 of 1.0 million euro, by September 1, 2008 of 3.0 million euro, and by September 1, 2009 of 5.0 million euro.

Our agreement to purchase one-half of Asola's rights and obligations under Asola's long-term Supply Agreement under the Asola Arrangement provides us with the rights to purchase 77.5 MW. In consideration for Asola's sale of one-half of its contract rights, we paid Asola 1.0 million euro (US$1.4 million) on October 29, 2007, representing the full amount of the November 17, 2007 prepayment requirement and agreed to pay up to 1.5 million euro of the prepayment due in September 2008 and up to 2.5 million euro of the prepayment requirements due in September 2009 under the Supply Agreement. We classified one-half of the 1.0 million euro payment made in October 2007 as prepayments to Asola and the remaining one-half as an advance to Asola. On July 17, 2008 and September 26, 2008, we made additional prepayments of 1.0 million euro (US$1.6 million) and 1.5 million euro (US$2.2 million), respectively, to Asola in connection with the Supply Agreement.

As of April 30, 2010, we had provided Asola with 3.0 million euro of the 4.5 million euro cumulative required by September 1, 2009 for our share of prepayments under the Supply Agreement. We have not purchased any solar cells under the Asola Arrangement and we are still obligated to provide an additional

1.5 million euros to Asola to satisfy our share of the prepayment requirement that was scheduled to be remitted by September 1, 2009. Asola has not initiated or threatened to take any action against us in connection with our obligations to Asola under the Asola Arrangement in light of Asola's contractual dispute with its cell supplier in calendar 2009 that remains unresolved and is discussed further below.

Over the course of calendar 2009, the worldwide supply of solar cells increased and suppliers in the industry lowered prices for both the immediate delivery of solar cells and for longer term solar cell purchase arrangements. As a result of these price declines, the spot rates of solar cells for immediate delivery are currently below the purchase price for calendar 2009 and 2010 that is specified under the Supply Agreement. However, the Supply Agreement includes a "loyalty clause" that requires if a provision of the Supply Agreement proves to be unreasonable for one of the parties to the agreement, then any such circumstance will be taken account of in a fair and reasonable way. Pursuant to the Supply Agreement, Asola was required to take delivery of solar cells with a combined power of 4.0 million watts for calendar 2009 at a price of 1.73 euros per watt. Through December 31, 2009, Asola had only taken delivery of cells with approximately 0.1 million watts of power and had not provided its supplier with the prepayment that was due in September 2009. Further, Asola has not taken delivery of any cells in calendar 2010 to date. During calendar 2009, Asola communicated to its supplier that it believed the "loyalty clause" was applicable under the economic conditions that existed at the time and engaged in extensive dialogue with its supplier in efforts to modify pricing and purchase commitments under its Supply Agreement; however, negotiations reached an impasse in the fall of 2009 and the matter is currently working its way through the German legal system. Prior to the impasse, Asola's cell supplier had indicated that it would: (i) agree to a modified level of pricing for calendar year 2009 that we anticipated would allow Asola and Quantum to take delivery of cells from Asola's supplier and still be able to manufacture and sell solar modules at or above net realizable values, (ii) agree to waive the September 2009 prepayment requirement, and (iii) be willing to modify prices in future years if they continue to be unreasonable. If Asola is unable to successfully modify its remaining commitments under the Supply Agreement in connection with the "loyalty clause," we may have to record a charge in the future equal to the sum of our prepayments made to date, plus the remaining unconditional commitments, less the estimated net realizable value of the solar cells to be acquired under the Asola Arrangement. This amount cannot be reasonably estimated at this time based on the dynamic changes in solar cell pricing which have not yet stabilized as of April 2010 and the associated uncertainty with forecasting future market prices over the remaining period of the Supply Agreement; however, we currently believe that the range of a potential charge that we could be required to recognize would be limited to $10.8 million, which amount represents the total of all solar cell prepayments and other advances made by us to Asola, plus our net investment in Asola at April 30, 2010.

Although we do not intend to purchase cells from Asola or make the scheduled prepayment that was due to Asola in September 2009 in connection with the Supply Agreement until the contractual matter discussed above is resolved, our unconditional remaining obligations, prior to any modifications discussed above, to purchase solar cells from Asola and provide our share of prepayments to Asola over the next five years (in Euros and in U.S dollars based on the currency exchange rate as of April 30, 2010) is as follows:

	Euros:	US Dollars:
Eight months ended December 2010	€ 13,875,000	$ 18,369,000
Twelve months ended December 2011	15,720,000	20,812,000
Twelve months ended December 2012	15,220,000	20,150,000
Twelve months ended December 2013	14,620,000	19,355,000
Twelve months ended December 2014	13,920,000	18,429,000
Thereafter	39,955,000	52,896,000
Total	€113,310,000	$150,011,000

We provided Asola with a loan in the amount of US$2.2 million on September 26, 2008 for the purpose of assisting Asola meet its September 2008 prepayment obligation under the Supply Agreement. The loan is evidenced by a promissory note and is guaranteed by Asola's majority shareholder, ConSolTec, which guaranty is secured by ConSolTec's pledge of all of its ownership interest in Quantum Solar. Per the stated terms of the note, the loan accrues interest at a 6.0% annualized rate and was set to mature upon the earlier of Asola's completion of a capital raise of at least 20.0 million euro or March 31, 2010. Although Asola has not repaid the loan in accordance with the stated terms and we do not expect repayment during our fiscal 2011, we still consider the outstanding balance to be fully collectible. As a result, we classify the loan in noncurrent assets as part of the investment in and advances to affiliate on the accompanying consolidated balance sheets at April 30, 2009 and 2010.

We recorded our initial investment in Asola at cost and adjust the carrying amount of the investment to recognize advances we provide to Asola, the impacts of foreign currency translation and our share of the earnings or losses of Asola after the date of acquiring the ownership interest. The activity and carrying balances for the period beginning with the acquisition of the initial ownership stake on January 4, 2008 through April 30, 2010 is as follows:

Investment In and Advances to Asola:	
Initial payment associated with ownership stake (0.3 million euro)	$ 444,360
May 2008 payment associated with ownership stake (1.2 million euro)	1,869,000
Transaction costs associated with ownership stake	131,666
Advance provided, unsecured	722,500
Equity in earnings for fiscal year 2008	335,500
Balance at April 30, 2008	$3,503,026
Advance provided in the form of note receivable, secured	$2,196,250
Foreign currency translation	(230,536)
Equity in earnings for fiscal year 2009	66,000
Balance at April 30, 2009	$5,534,740
Foreign currency translation	$ 49,614
Equity in earnings for fiscal year 2010	1,089,000
Accrued interest on advance	133,590
Balance at April 30, 2010	$6,806,944

Power Control and Design

On October 6, 2009, we acquired a 22% interest in Power Control and Design, Inc. (PCD) in exchange for a cash payment of $165,000. PCD designs and develops control software for use in motor control, solar-to-grid, wind-turbine, electric vehicle charges and power conversion products and applications for infrastructure, automotive, aerospace and industrial markets. We did not recognize any equity in earnings of PCD during fiscal 2010 as the net operating activities of this affiliate have been insignificant to date.

Shigan Quantum

On September 3, 2009, we acquired a 25% interest in Shigan Quantum Technologies PVT LTD (Shigan Quantum), a start-up company organized under India's Corporate Act, in exchange for transferring certain of our intellectual property to the new entity. Shigan Quantum intends to manufacture and sell gaseous fuel injectors using our technologies and variants thereof. We have not contributed any assets with a historical cost basis to the affiliate and have no obligation to fund deficit balances. The net operating activities of this affiliate have been insignificant to date. As a result, both our initial investment balance and our investment balance as of April 30, 2010 is zero and there is no equity in earnings or losses of the affiliate reported in our consolidated statement of operations for the fiscal year ended April 30, 2010.

Advanced Lithium Power

In March 2006, we obtained an ownership interest in Advanced Lithium Power Inc. (ALP), based in Vancouver, British Columbia. ALP was formed for the purpose of developing state-of-the-art lithium ion battery and battery management control systems that control state-of-charge and provide for thermal management. In June 2010, certain secured creditors of ALP had a receiver appointed pursuant to the terms of a General Security Agreement between ALP and such secured creditors and as a result, ALP ceased operations. As a result, we recorded a charge in the fourth quarter of fiscal 2010 to write off the entire balance of advances provided to ALP that were associated with undelivered products and services still owed to us in the amount of $0.9 million. The charge is included in selling, general and administrative expense on the accompanying consolidated statement of operations.

The accounts of ALP are included in our consolidated financial statements from the date of our initial ownership interest until April 10, 2008 (the "Consolidation Period") due to the nature of a controlling voting interest we previously had secured in ALP during the Consolidation Period. Our voting interests declined below 50% subsequent to the Consolidation Period to a level where we no longer maintained control of a majority of the voting interests in ALP. Accordingly, we deconsolidated ALP and began accounting for our equity stake under the equity method of accounting until the operations of ALP ceased effective at the end of our fiscal 2010.

5. Accounts Receivable

Net accounts receivable from non-affiliates consist of the following:

	April 30,	
	2009	2010
Customer accounts billed	$ 3,468,363	$ 1,189,097
Customer accounts unbilled	2,298,158	1,716,149
Allowance for doubtful accounts	(444,603)	(72,109)
Accounts receivable, net	5,321,918	2,833,137
Less: accounts receivable from affiliate	(2,430,093)	(1,449,062)
Accounts receivable from non-affiliates, net	$ 2,891,825	$ 1,384,075

The portion of accounts receivable that is due from affiliate is associated with billed and unbilled amounts due from Fisker Automotive and Shigan Quantum. We assess the collectability of receivables associated with our customers on an ongoing basis.

6. Inventories

Inventories consist of the following:

	April 30,	
	2009	2010
Materials and parts	$ 4,341,370	$ 3,670,420
Work-in-process	1,032	72,757
Finished goods	973,819	904,494
	5,316,221	4,647,671
Less: provision for obsolescence	(2,265,268)	(2,881,251)
Inventories, net	$ 3,050,953	$ 1,766,420

During fiscal 2009 and fiscal 2010, we increased our provision for obsolescence reserves associated with specific hydrogen fuel system component parts and materials as we expect that future sales to General Motors and other OEMs of our automotive fuel system products utilizing hydrogen components will continue to be negatively impacted as a result of the unfavorable economic conditions being experienced in the automotive industry.

7. Property and Equipment

Property and equipment consist of the following:

	April 30,	
	2009	2010
Land	$ —	$ 506,663
Tooling, dies and molds	3,018,290	3,043,520
Plant machinery and equipment	10,840,754	10,878,936
Power generation machinery and equipment	—	1,337,746
Information systems and office equipment	9,116,462	9,474,937
Automobiles and trucks	208,891	284,580
Leasehold improvements	5,278,809	5,385,115
Construction in progress	3,086,712	2,970,507
	31,549,918	33,882,004
Less accumulated depreciation and amortization	(24,669,788)	(25,916,366)
Net property and equipment	$ 6,880,130	$ 7,965,638

Total depreciation expense on property and equipment of continuing operations for fiscal years ended April 30, 2008, 2009 and 2010 was approximately $2.1 million, $1.8 million and $1.3 million, respectively.

8. Goodwill, Intangibles and Other Long-lived Assets

Goodwill

A roll-forward of goodwill for continuing operations, by reportable segment, for the three years ended April 30, 2010 is as follows:

	Fuel Systems Segment	Renewable Energy Segment(1)	Totals
Goodwill balance as of April 30, 2007	$30,400,000	$ —	$30,400,000
Change in carrying value during fiscal 2008	—	—	—
Goodwill balance as of April 30, 2008	30,400,000	—	30,400,000
Change in carrying value during fiscal 2009	—	—	—
Goodwill balance as of April 30, 2009	30,400,000	—	30,400,000
Acquisition of SPI on April 16, 2010 (see Note 3)	—	2,464,925	2,464,925
Foreign currency translation at April 30, 2010	—	(6,011)	(6,011)
Goodwill balance as of April 30, 2010	$30,400,000	$2,458,914	$32,858,914

(1) The Renewable Energy Segment was created upon the acquisition of SPI on April 16, 2010.

Intangibles

We amortize specifically identified intangible assets using the straight-line method over the estimated useful lives of the assets.

In connection with the acquisition of SPI, we identified $8.6 million of project assets associated with SPI's renewable energy portfolio that we have classified as an intangible asset of the Renewable Energy reporting segment. The intangible asset is being amortized over its estimated useful life of 20 years.

The issuance of shares in calendar 2002 related to our strategic alliance with General Motors was recorded as an intangible asset at the estimated fair market value on the dates of issuance and was being amortized over the ten-year term of the strategic alliance agreement with General Motors until the remaining balance of $5.8 million was written off in connection with an impairment assessment as of January 31, 2009.

Impairment of Long-lived Assets

We believe that no event or circumstance existed that would indicate impairment of the carrying values of goodwill, the intangible asset, or any other significant long-lived asset as of April 30, 2010.

9. Warranties

We offer a warranty for all of our alternative fuel products. The specific terms and conditions of those warranties vary depending on the platform and model year. Warranty is provided for under terms similar to those offered by the original equipment manufacturer (OEM) to its customers. 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 hydrogen fuel storage 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.

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

	Balance at Beginning of Year	Warranties Issued	Settlements Made(1)	Changes in Liability for Pre-Existing Warranties	Balance at End of Year
Fiscal 2008	$466	$1,183	$(403)	$(580)	$666
Fiscal 2009	666	20	(420)	(43)	223
Fiscal 2010	223	312	(474)	29	90

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

10. Long-Term Debt

Long-term debt consists of the following:

	April 30, 2009	April 30, 2010
Obligations to Senior Lender:		
Convertible Note I: $6,765,279 principal and $255,977 accrued interest in April 2009; $4,588,924 principal, $173,499 accrued interest and $263,608 of unamortized premium in April 2010	$ 7,021,256	$ 5,026,031
Convertible Note II: $4,248,595 principal, $160,632 accrued interest and $244,057 of unamortized premium in April 2010	—	4,653,284
Convertible Note III: $1,919,818 principal, $72,585 accrued interest and $110,282 of unamortized premium in April 2010	—	2,102,685
Term Note A	7,600,000	—
Term Note B	10,000,000	5,558,684
Term Note C	7,877,930	—
Consent Fee Term Note: $3,000,000 principal, less discount of $132,000 in April 2010	—	2,868,000
Obligations to Other Creditors:		
Bank Term Loan	—	1,302,312
Other obligations	168,481	142,175
Long-term debt, current and non-current	32,667,667	21,653,171
Less current maturities for scheduled cash payments and net amortization of premiums & discount	(14,127,337)	(519,243)
Long-term debt, non-current	$ 18,540,330	$21,133,928

We have entered into various borrowing arrangements with our senior lender over the course of the three year period covered by these financial statements. These arrangements have been modified on several occasions throughout this period as discussed below in order to enhance our borrowing capacity and to minimize the level of cash required to service the outstanding obligations over a reasonable period of time.

Fiscal 2010

The following disclosures: (i) reflect the status of the borrowing arrangements on an instrument by instrument basis as they existed at the beginning of fiscal 2010; (ii) provide a summary of the significant modifications and payment activities related to the outstanding debt instruments during fiscal 2010; (iii) discuss the assumption of a debt obligation related to our acquisition of SPI in April 2010; and (iv) discuss the modification of certain of the arrangements on July 8, 2010 and the impact that those modifications had on how we classified the outstanding balances of those amended instruments on our consolidated balance sheet as of April 30, 2010.

Convertible Note I

At April 30, 2009, the significant contractual terms of Convertible Note I were as follows: (i) annual interest rate of 11.5%, consisting of a required minimum payment-in-kind (PIK) of 5.0% and a cash or PIK option of 6.5%, which annual interest rate is reduced to 9.5% effective September 1, 2010, (ii) scheduled semi-annual

interest payment dates on January 1 and July 1 of each year until maturity and the principal cannot be prepaid in part or whole by us without consent of our senior lender (also referred to as the "holder"), (iii) scheduled maturity date of August 1, 2009, (iv) holder had the right to extend the scheduled maturity date, subject to proper notice by May 15, 2009, for an additional three years (if exercised, the required minimum PIK would have been thereafter lowered to 3.0%; thus reducing the annual interest rate to 9.5%), (v) outstanding principal under the note convertible into shares of our common stock at a fixed conversion price of $1.35 per share at any time until maturity at the option of the holder, and (vi) for conversions prior to the maturity date, additional shares to be provided to the holder pursuant to a "Make-Whole Amount" provision, a feature available to the holder as an incentive to convert all or part of the balance due under the note prior to its maturity.

The contractual provisions of Convertible Note I, as originally issued and including all amendments through April 30, 2010, also required us to (1) cause the shares delivered upon conversion of principal due under the Convertible Note I to be duly listed for trading on the Nasdaq Global Market (or any successor trading market) concurrently with the issuance of such shares and (2) ensure that the holder may resell such shares pursuant to Rule 144 of the Securities Act (subject to any applicable holding period). We determined that compliance with these contractual requirements was not within our control (for the period January 16, 2008 through April 30, 2010). Therefore, under GAAP, we had to assume net cash settlement could have been required to satisfy the value of the conversion feature as we could not ensure that we would be in compliance with the provisions at the time of conversion by the holder. As a result, the embedded conversion feature was bifurcated by us, classified as a derivative liability measured at fair value and the liability was marked to market each period, with changes in fair value recognized in the respective period's statement of operations until the note was modified on April 30, 2010 at which time the embedded conversion feature no longer met the definition of a derivative and was reclassified from debt to equity (discussed below).

On July 10, 2009, Convertible Note I was amended in connection with debt modifications to other existing debt instruments with our senior lender and additional financing received from the senior lender. The significant amendments were: (i) the conversion price was reset from $1.35 to $0.71 per share; (ii) the "Make-Whole Amount" provision was eliminated, (iii) the scheduled maturity date was extended from August 1, 2009 to August 31, 2010; and (iv) the holder of Convertible Note I was given the right to extend the scheduled maturity date (the similar right in the existing note had expired in May 2009) for an additional three years. If exercised, the required minimum PIK would thereafter be lowered to 3.0%; thus reducing the annual interest rate to 9.5%.

The modifications executed on July 10, 2009 immediately increased the value of the embedded derivative feature under Convertible Note I by $3.1 million which we recognized as a loss on modification of derivative instruments during the first quarter of fiscal 2010.

We determined that the amendments to Convertible Note I on July 10, 2009, in combination with modifications to other debt instruments that were negotiated together, were not substantial and did not represent an implied exchange of debt instruments. For purposes of this analysis, we excluded the impact that the modifications had on the embedded features accounted for as derivative instruments as the change in fair value of the derivative instruments resulting from the modifications was immediately recognized as a loss on modification of derivative instruments.

On November 24, 2009, Convertible Note I, together with Convertible Note II and Convertible Note III (discussed below), were amended to change the maturity dates from August 31, 2010 to March 31, 2011. All three of these convertible notes have the same remaining contractual terms and provisions. We determined that the amendments to the three convertible notes on November 24, 2009, in combination with the issuance of new debt (see "Consent Fee Term Note" discussed below) and modifications to other debt instruments that were

negotiated together, represented an implied exchange of debt instruments. As a result, we recognized a combined loss on modification of debt and derivative instruments of $5.1 million on November 24, 2009, of which $1.3 million represented the amount associated with the implied exchange of the convertible notes.

On April 30, 2010 the three convertible notes and Term Note B (discussed below) were amended. The convertible notes were amended to clarify that we would not be obligated under any circumstances to settle the value of the embedded conversion features of the notes in cash and that the exercise of the holder's conversion rights would be considered fully settled by the issuance of our shares (including "unregistered shares" and shares designated as "restricted"), regardless of any other characteristics of the shares. As a result of the modifications, the embedded conversion features no longer meet the definition of a derivative and the fair value of the conversion features were reclassified to equity effective as of the close of business on April 30, 2010 (see Note 11). We determined that the amendments to the three convertible notes and Term Note B on April 30, 2010 were not substantial and did not represent an implied exchange of debt instruments that would require extinguishment accounting on the modification date, nor did they change the fair value of the instruments by more than a nominal amount.

On July 8, 2010, the three outstanding convertible notes were further amended to revise the stated maturity dates from March 31, 2011 to July 31, 2011. As a result of these modifications, we no longer have any contractual requirement to remit cash to service any potential principal reductions on the three convertible notes during fiscal 2011, and accordingly, we have classified the unpaid principal amounts as non-current debt obligations on the accompanying consolidated balance sheet as of April 30, 2010.

Term Note A / Convertible Note II

At April 30, 2009, the significant contractual terms of Term Note A were as follows: (i) fixed interest rate of 18.0% payable monthly in arrears, (ii) scheduled maturity date of February 28, 2010, (iii) principal installment payments of $4.3 million due on May 15, 2009 and monthly installments of $0.4 million, beginning on June 15, 2009 and thereafter, until the balance was paid in full, (iv) we had the right to prepay all or part of the principal without penalty and had the option to repay the scheduled principal amounts or prepayments in cash or with shares of our common stock, subject to certain conditions, and (v) we had the right to defer scheduled payments for up to two months, subject to certain conditions.

Although we had the ability and the right to make any prepayments of principal or satisfy any scheduled principal installments in shares under Term Note A, we and our senior lender agreed to defer the scheduled May 15, 2009 principal installment payment and agreed to retime the installment payments and reduce the stated interest rate from 18.0% to 9.0%. Pursuant to an amendment executed on May 27, 2009, principal installments were revised to require monthly payments of $1.0 million effective beginning on June 15, 2009 and thereafter, until the balance was paid in full and the change in the stated interest rate was made effective as of May 20, 2009. In addition, our right to prepay the note in shares was revised to thereafter require that any prepayments could only be made in cash and our existing right to defer scheduled installment payments for up to two months was eliminated. We determined that the amendments to Term Note A in May 2009 were not substantial and did not represent an implied exchange of debt instruments that would require extinguishment accounting on the modification dates.

On June 15, 2009 we issued 1.5 million shares in satisfaction of a required payment of $1.1 million under Term Note A (which included $0.1 million of accrued interest).

On July 10, 2009 the outstanding principal balance and unpaid interest under Term Note A, amounting to $6.6 million, was reduced to zero and replaced in that same amount with a new convertible debt instrument referred to as Convertible Note II. The stated terms of Convertible Note II are identical to the terms of

Convertible Note I, as amended on July 10, 2009, November 24, 2009, April 30, 2010 and July 8, 2010. The replacement of the remaining balance on Term Note A with a new convertible note was executed in connection with debt modifications to other existing debt instruments with our senior lender and additional financing received from the senior lender.

Consistent with the treatment of the embedded conversion feature under Convertible Note I, the embedded conversion feature under Convertible Note II was bifurcated and classified as a derivative liability upon the issuance of the note up until the time the note was modified on April 30, 2010. The fair value of the derivative liability upon issuance, amounting to $2.9 million, was recognized by us as a loss on modification of derivative instruments during the first quarter of fiscal 2010.

Convertible Note III

On July 10, 2009, in connection with debt modifications to other existing debt instruments, we issued a new convertible note (Convertible Note III) to our senior lender and received proceeds of $3.0 million. The stated terms of Convertible Note III are identical to the terms of Convertible Note I, as amended on July 10, 2009, November 24, 2009, April 30, 2010 and July 8, 2010 except that the maturity date would have moved up to October 1, 2009 from August 31, 2010 if we were unable to raise at least $5.0 million in an equity offering of our shares prior to October 1, 2009. We satisfied this requirement with the private placement offering transaction completed on September 4, 2009 (see Note 1) in which proceeds from the transaction exceeded this required amount.

Consistent with the treatment of the embedded conversion features under Convertible Notes I and II, the embedded conversion feature under Convertible Note III was bifurcated and classified as a derivative liability upon the issuance of the note up until the time the note was modified on April 30, 2010. The fair value of the derivative liability upon issuance, amounting to $1.0 million (net of the implied discount on the host debt instrument of $0.3 million), was recognized as a loss on modification of derivative instruments during the first quarter of fiscal 2010.

Term Note B

At April 30, 2009, the significant contractual terms of Term Note B were as follows: (i) fixed interest rate of 6.5% payable monthly in arrears, (ii) scheduled maturity date of January 16, 2015, (iii) the note can be repaid in cash or shares at our option, subject to certain conditions, including that our share price must be at least $0.50 for five consecutive business days prior to the payment date (iv) the note has no scheduled principal amortization payments before maturity; however, our senior lender with proper notice had the option to demand all or part of the principal amount due under the note beginning on January 16, 2010, and (v) we had the right to make prepayments under the note beginning on January 17, 2010 (the "First Call Date").

When demand for payment or a prepayment is made, the principal amount that is due and payable is equal to the principal amount so demanded multiplied by the greater of (A) 1.0 and (B) 1.5 multiplied by the lesser of (x) the volume weighted average price (VWAP) for our common stock for the five business days immediately prior to the repayment date and (y) $3.50. The minimum amount of principal that is payable through the maturity date under the multiplier is $10.0 million and the maximum amount of principal that is payable under the multiplier is $52.5 million.

Term Note B has characteristics of and acts consistent with the types of debt securities generally considered to be convertible debt instruments primarily as a result of the embedded principal multiplier feature, share settlement provisions and below market interest rate structure. As such, we consider the note to be a convertible debt instrument in applying applicable accounting guidance.

On July 10, 2009, Term Note B was amended in conjunction with debt modifications to other existing debt instruments with our senior lender and additional financing received from the senior lender. The significant amendments were: (i) the requirement that our share price must be at least $0.50 for five consecutive business days prior to the payment date in order for us to have the right to issue shares in satisfaction of principal payments was changed to eliminate that requirement for any demands made prior to January 16, 2012, (ii) the First Call Date was changed from January 17, 2010 to January 16, 2012 and (iii) our option to make prepayments in shares was limited to $2.0 million in any ten business day period whereas there was no limit on share prepayments after the First Call Date prior to this most recent amendment.

We determined that the amendments to Term Note B on July 10, 2009 were not substantial and did not represent an implied exchange of debt instruments that would require extinguishment accounting on the modification date.

On November 24, 2009, our senior lender made demand for payment of $3.9 million of principal due under Term Note B and we agreed to waive the provision of the note which prohibited the senior lender from making demand for payment prior to January 16, 2010. This modification to waive the provision in the note, in combination with the issuance of new debt (see "Consent Fee Term Note") and modifications to other debt instruments that were negotiated together; represented an implied exchange of debt instruments. We recognized a gain on the implied exchange of Term Note B in the amount of $0.1 million on November 24, 2009.

In accordance with the multiplier feature contained in Term Note B, the actual amount required to be paid as a result of the November 24, 2009 demand for payment was equal to $7.4 million which was determined by multiplying the $3.9 million demanded by 1.5, with that product then multiplied by the lesser of (A) the 5 day volume-weighted average share price for the 5 business days immediately preceding the date demand for payment was made, and (B) $3.50. For purposes of this calculation, we and our senior lender agreed to use $1.25 as the 5 day VWAP. As permitted under Term Note B, we elected to pay the amount due under Term Note B using shares of our common stock and, as a result, issued 5.9 million shares in satisfaction of the amount due. The fair value of the embedded derivative instrument associated with Term Note B was reduced on a proportional basis to the amount of debt principal settled in a manner consistent with the methodology used to extinguish derivative liabilities under the convertible notes. In connection with shares issued to settle the debt principal demand on November 24, 2009, the derivative instrument was reduced by $3.4 million and a loss on the settlement of the debt principal and derivative instrument of $0.2 million was recognized, which represented the difference between the fair value of shares issued ($7.5 million) and the settlement of the liabilities ($3.9 million of debt principal and $3.4 million of derivative instrument).

On February 9, 2010, our senior lender demanded a principal reduction of $0.5 million related to Term Note B as allowed under the terms of the note. We elected to use our common stock to satisfy the demand, which amounted to 0.75 million shares issued to the senior lender. In connection with shares issued to settle the debt demand, the derivative instrument was reduced by $0.2 million and a gain on the settlement of the debt principal and derivative instrument of $0.1 million was recognized, which represented the difference between the fair value of shares issued ($0.6 million) and the settlement of the liabilities ($0.5 million of debt principal and $0.2 million of derivative instrument).

From the original issuance date of January 16, 2008 up until the time certain modifications were executed on April 30, 2010, Term Note B contained a contract provision that required us to deliver shares that may be resold pursuant to Rule 144 of the Securities Act (subject to any applicable holding period), if we elect to make the payment of the multiplier amount feature contained within the note using shares of our common stock. We determined that compliance with this contractual requirement was not within our control. Therefore, although we

had the option to make principal payments in shares of our common stock, we had to assume net cash settlement could have been required to satisfy the value of the principal multiplier feature as we could not control whether we would be in compliance with the share settlement provisions at the time of repayment. As a result, the embedded principal multiplier feature was bifurcated, classified as a derivative liability measured at fair value and the liability was marked to market each period, with changes in fair value being recognized in the respective period's statement of operations. However, on April 30, 2010, the note was modified to clarify that we would not be obligated under any circumstances to settle the value of the embedded principal multiplier feature of the note in cash and that issuance of our shares (including "unregistered shares" and shares designated as "restricted") in payment of the multiplier feature value would fully settle the embedded feature, regardless of any other characteristics of the shares. As a result of the modifications, the embedded feature no longer met the definition of a derivative and the fair value of the embedded feature was reclassified to equity effective as of the close of business on April 30, 2010.

Term Note C

At April 30, 2009, the significant contractual terms of Term Note C were as follows: (i) fixed interest of 9.0% per annum, payable monthly in arrears, in cash or PIK at our option, (ii) monthly principal installments of $1.25 million beginning on June 1, 2009 and thereafter, until the balance was paid in full, (iii) we had the right to defer scheduled payments for up to two months, subject to certain conditions, and (iv) we had the option to repay the scheduled principal reductions with shares of our common stock, subject to certain conditions, and the value of the shares delivered was determined based on the lower of: (a) 95% of the VWAP of our stock for the five business days prior to the payment date or (b) the closing share price on the day immediately preceding the payment due date.

The note was fully repaid in shares of our common stock in three installments as follows: (i) 5.5 million shares were issued on May 1, 2009 in satisfaction of $3.75 million of principal, (ii) 2.0 million shares were issued on October 1, 2009 in satisfaction of $2.5 million of principal, and (iii) 1.6 million shares were issued on November 1, 2009 in satisfaction of $1.8 million of principal (including $0.55 million of unpaid interest added to principal under our PIK option).

Consent Fee Term Note

The terms of our credit facilities with our senior lender required that we obtain the consent of our senior lender prior to entering into the Arrangement Agreement with SPI (see Note 3). On November 24, 2009, we and our senior lender executed a consent fee arrangement under which the senior lender agreed to give its consent to the proposed business combination. The consent fee was $3.0 million unless the business combination agreement was terminated in which case the consent fee would have automatically been reduced to $1.5 million. The consent fee was paid by delivery of a promissory term note (the "Consent Fee Term Note") on November 24, 2009. The note matures on January 16, 2015 and is payable upon demand by the senior lender beginning after July 1, 2010; however, under the terms of the original note, the senior lender could not make demand until March 31, 2011 if the VWAP for our common stock for the five business days preceding the date that a demand is made would have been below $0.50 at the time of the demand. We may call all or part of the principal amount due at any time after January 16, 2012. The note accrues interest at 0.0% per annum for the first full year and at 6.0% thereafter. The principal amount due under the Consent Fee Term Note is subject to upward adjustment based upon the VWAP for our common stock for the five business days immediately prior to the repayment date (the "VWAP Price"). When demand for payment is made by the senior lender or called by us, the actual amount required to be paid in satisfaction of the amount so demanded or called is equal to the greater of (a) the amount so demanded or called and (b) that amount determined by multiplying the principal amount so demanded or

called by 0.8, with that product then multiplied by the lesser of (x) the VWAP Price and (y) $2.50. We have the option to pay the amount due under the Consent Fee Term Note in cash or in restricted shares of our common stock; provided, however, to pay using shares, the VWAP Price must be at least $0.50. If we elect to pay in stock, then the number of shares to be issued is equal to the actual amount required to be paid (determined in accordance with the above formula) divided by the VWAP Price. Based on the foregoing formula, the principal multiplier only increases the amount payable above the face value of the note (i.e. has "intrinsic value") when our VWAP Price is above $1.25 per share and the maximum amount that we could be required to pay under the Consent Fee Term Note under the original terms of the note was $6.0 million (assuming that the VWAP Price is at or above $2.50). The VWAP Price of our common stock as of April 30, 2010 was $0.74 per share and as such, the principal multiplier feature under the note did not have any intrinsic value as of this date.

The Consent Fee Term Note has characteristics of and acts consistent with the types of debt securities generally considered to be convertible debt instruments primarily as a result of the embedded principal multiplier feature, share settlement provisions and below market interest rate structure. As such, we consider the note to be a convertible debt instrument in applying applicable accounting guidance.

The fair value of the note, including the embedded multiplier feature, was $3.5 million on the date of issuance and was recognized as part of the loss on modification of debt and derivative instruments on November 24, 2009 in connection with the implied exchange of debt instruments discussed above under Convertible Note I. The debt discount, initially recognized at $0.5 million, was amortized through July 1, 2010 which is the first possible date that the senior lender could demand repayment of the note.

Since the Consent Fee Term Note contained a contingent fee arrangement from the original issuance date up until the completion of the acquisition of SPI and the contingent fee amount was a variable other than those generally used to determine the fair value of a fixed-for-fixed forward or option on equity shares, the instrument was not considered to be indexed to our own stock and, therefore, the instrument could not be precluded from derivative instrument consideration until the contingency was resolved. As a result, the embedded principal multiplier feature under the Consent Fee Term Note was bifurcated, classified as a derivative liability and marked to market. The decrease in fair value of $0.7 million for the period from inception of the note on November 24, 2009 through the date that the contingency was resolved on April 16, 2010 with the completion of our acquisition of SPI was recognized in the consolidated statement of operations as a fair value adjustment of derivative instruments (see Note 11). As a result of the resolution of the contingency, the embedded principal multiplier feature no longer met the definition of a derivative and the fair value of the embedded feature was reclassified to equity effective as of the close of business on April 16, 2010.

On July 8, 2010, the earliest date specified in the original note that the senior lender could make a demand if our VWAP was below $0.50 was changed from March 31, 2011 to July 31, 2011. As a result of this modification, we no longer have any contractual requirement to remit cash to service any potential principal reductions on the Consent Fee Term Note during fiscal 2011, and accordingly, we have classified the unpaid principal amount as a non-current debt obligation on the accompanying consolidated balance sheet as of April 30, 2010.

Bank Term Loan

In connection with our acquisition of SPI on April 16, 2010, we assumed a bank term loan that had an original principal amount of CAD$1.5 million upon its inception on April 3, 2007. The note accrues interest at a fixed rate of 7.0%; requires fixed payments of CAD$13,482 per month in cash through March 10, 2012, with the remaining principal amount of CAD$1.2 million due in cash on the maturity date of April 3, 2012. The loan is secured by power generation machinery and equipment and other assets of SPI's Providence Bay Wind Farm project. The conversion rate of one Canadian dollar to one U.S. dollar was 0.995 to 1.0 as of April 30, 2010.

Lender Commitment

On May 30, 2008, we secured the $10.0 million Lender Commitment from an affiliate of our senior lender that allows us to draw on the commitment at our option and also allows the senior lender to fund the commitment at the senior lender's option under certain defined structures.

As of April 30, 2009, the option for either party under the commitment was set to expire on August 31, 2009 and consisted of the following terms: (a) should we choose to draw on the Lender Commitment, the senior lender had the right to make the investment under one of the following three investment structures: (i) receipt of our common stock at a 25.0% discount to market price with 100.0% warrant coverage at an exercise price equal to market price at the time of funding, (ii) a two year secured convertible note, the conversion price equal to a 10.0% discount to the market price and the coupon on the note equal to 12.0% payable in our common stock, and (iii) a senior secured straight note that redeems in cash at 120% of face value after one year; (b) in exchange for extending the commitment, we granted to the senior lender an option to make a $10.0 million investment, which, if exercised, would be structured as a non-interest bearing convertible note priced at 100.0% of par and redeemable at 120.0% of par two years after the funding date (referred to as the "put" option hereafter). The note under this put option structure would be convertible into our common stock at a price equal to the market price.

On July 10, 2009, the commitment was amended. The significant amendments were as follows: (i) the expiration date of the commitment was extended one year from August 31, 2009 to August 31, 2010 and (ii) if we exercise our option to borrow, the first of the three options that the senior lender could structure the note was eliminated and the terms of the other two options were modified.

On August 3, 2009, the commitment was further amended. The significant amendments were as follows: (i) our right to exercise our option to borrow up to $10.0 million was restricted in part to only allow us to draw upon the commitment up to $2.5 million within any 30 day period. The effect of the modification was that we could still borrow up to $10.0 million; however, we would require four draw downs over a three month period to gain the entire proceeds from the commitment, and (ii) the conversion price under the convertible note structures of either the exercise of the borrowing by us or a put by the senior lender, was changed from "market price" to a fixed conversion price of $0.71 per share. The amendment to fix the conversion price of the convertible note structure under the potential senior lender put option resulted in the recognition of a loss on modification of the instrument of $2.6 million.

On November 24, 2009, the expiration date of the commitment was amended from August 31, 2010 to March 31, 2011. The modifications executed on November 24, 2009 immediately increased the value of the embedded written put option under the Lender Commitment by $0.4 million which we recognized as a loss on modification of derivative instruments during the third quarter of fiscal 2010 in connection with the implied exchange of debt instruments discussed above under Convertible Note I.

To date, neither party has exercised its option under the amended Lender Commitment. The terms of the commitment, as last amended on November 24, 2009 are as follows: (a) should we choose to draw on the commitment, the senior lender has the right to make the investment as either: (i) a two year secured convertible note, the conversion price fixed at $0.71 per share, with the coupon on the note equal to 18.0% that can be added to the principle at our option under a PIK provision or (ii) a senior secured straight note that redeems in cash at 130% of face value after one year; (b) we may only exercise up to $2.5 million in any 30 day period and we are required to provide the senior lender with a five day notice period of our intent to draw on the commitment; (c) in exchange for extending the commitment, the senior lender has the "put" option to make a $10.0 million investment that will be structured as a non-interest bearing convertible note priced at 100.0% of par and redeemable at 120.0% of par two years after the funding date and the note under this structure would convert into our common stock at a fixed conversion price of $0.71 per share.

The written put option, which allows the senior lender to make a $10.0 million cash payment to us in exchange for a debt instrument in the form of a convertible note, is considered to be a derivative instrument. Accordingly, the fair value of the instrument is recognized as a non-current derivative liability and marked to market each period (see Note 11).

Recognition of Charges Associated with Debt Modifications

The following table summarizes the loss recognized during fiscal 2010 related to modifications of debt and derivative instruments:

Debt Instrument	Description of Modification	Date of Modification	Gain (Charge) Recognized
Convertible Notes	Amend terms of Convertible Note I	July 10, 2009	$ (3,092,000)
Convertible Notes	Exchange Term Note A with Convertible Note II	July 10, 2009	(2,858,000)
Convertible Notes	Issuance of Convertible Note III	July 10, 2009	(1,019,000)
Lender Commitment	Amend terms of senior lender put option	August 3, 2009	(2,570,000)
Convertible Notes	Amend maturity dates for each of the three convertible notes	November 24, 2009	(1,272,000)
Term Note B	Amend terms of term note and write off unamortized debt issuance costs	November 24, 2009	54,045
Consent Fee Term Note	Issuance of new term note in connection with acquisition consent	November 24, 2009	(3,491,000)
Lender Commitment	Amend expiration date of funding commitment	November 24, 2009	(439,000)
			$(14,686,955)

Conversions of Principal under Convertible Notes

During fiscal 2010, the holder converted a combined total of $6.9 million of principal under the three convertible notes ($0.51 million, $1.03 million and $1.37 million under Convertible Note I on September 23, 2009, October 13, 2009 and November 24, 2009, respectively; $2.72 million under Convertible Note II on November 24, 2009; and $1.23 million under Convertible Note III on November 24, 2009) which we satisfied with the issuance to the holder of a combined total of 9.7 million shares. The fair value of the embedded derivative instruments associated with the convertible notes is reduced on a proportional basis to the amount of debt principal converted by the holder. For example, if 10% of the outstanding debt principal just prior to the conversion is converted, we reduce the fair value of the derivative instrument on the conversion date by 10%. In connection with shares issued to settle debt principal conversions during fiscal 2010, the derivative instruments were reduced by $6.9 million and a net gain on the settlement of the debt principal and derivative instruments of $1.4 million was recognized, which represented the difference between the fair value of shares issued ($12.4 million) and the settlement of the liabilities ($6.9 million of debt principal and $6.9 million of derivative instruments).

During fiscal 2010, we elected to add the entire amount of accrued interest to principal under the three convertible notes that was payable on the scheduled semi-annual interest payment dates in accordance with the PIK provisions contained within the notes.

Shares in Lieu of Cash in Satisfaction of Principal under Term Note A and Term Note C

We issued shares in fiscal 2010 on various dates through November 1, 2009 to our senior lender in satisfaction of certain required principal obligations under Term Note A and Term Note C based on 95% of the VWAP of our common stock for the five business days prior to the applicable payment dates pursuant to the terms of the debt instruments. We considered Term Note A and Term Note C to be "stock-settleable" instruments as both instruments embodied unconditional obligations that we could settle by issuing a variable number of our shares and the value of the obligation was based on a fixed monetary amount that was known at inception. We performed a separate calculation each time we made a payment in shares under the term notes to determine whether the fair value of the shares provided was above or below the carrying value of the principal extinguished. To the extent that there was a difference, we recorded the amount immediately as a gain or loss on extinguishment of debt and the corresponding offset was recorded as additional paid-in-capital for the issued shares. The differences that were required to be recorded in fiscal 2010 for the shares, representing a net loss on settlement of the debt of $0.4 million, is included as part of the loss on settlement of debt and derivative instruments on the consolidated statement of operations.

Collateral and Covenants

Our obligations under the debt instruments with our senior lender are secured by substantially all our assets. In addition, our obligations under the Bank Term Loan assumed on April 16, 2010 are secured by the assets of SPI. We were in compliance with existing covenants and other requirements of the debt instruments with our senior lender and our bank lender as of April 30, 2010.

Debt Maturities

The table below shows scheduled maturities of our long-term debt for each of the next five year periods ending April 30. Although the senior lender has the option to extend the scheduled maturity dates by three years on the amended Convertible Notes (I, II, and III), for purposes of this disclosure, we have used the scheduled maturity dates of July 31, 2011 (as last amended on July 8, 2010) for these three notes:

	Scheduled Payments	Net Amortization of Premiums & Discount	Total Maturities of Long-Term Debt
April 30:			
2011	$ 130,491	$388,752	$ 519,243
2012	20,997,374	97,195	21,094,569
2013	29,099	—	29,099
2014	10,260	—	10,260
2015	—	—	—
Thereafter	—	—	—
	$21,167,224	$485,947	$21,653,171

Long-Term Debt Activity in Prior Fiscal Periods

The following summarizes the impact of significant modifications and other activities related to the debt instruments covering fiscal 2009 and fiscal 2008.

Fiscal 2009

On May 30, 2008, we amended Convertible Note I and Term Note B in connection with securing additional financing from our senior lender associated with Term Note C and the Lender Commitment.

The significant amendments to Convertible Note I included: (i) the "Make-Whole Amount" provision was added which provided the senior lender with an incentive to convert all or part of the balance due under the note prior to its maturity, (ii) an anti-dilution conversion price reset provision that was originally added on January 31, 2007 was eliminated, and (iii) the scheduled maturity date was extended from July 1, 2009 to August 1, 2009.

The significant amendments to Term Note B were: (i) the limit for the maximum amount of principal payable under the multiplier provision that was present upon issuance of the note was increased from $37.5 million to $52.5 million, (ii) a provision that allowed us to make prepayments under the note at any time was revised to restrict us from making prepayments under the note prior to January 17, 2010 (the "First Call Date"), and (iii) a provision that only required the multiplier formula to be factored into determining the amount of principal outstanding on the note upon a demand of payment by the senior lender was revised to require the multiplier formula to be factored into both prepayments by us and demands by the senior lender. Prior to the May 30, 2008 amendment, the derivative instrument representing the principal multiplier feature was not ascribed any fair value as a market place participant would have assumed that we would have avoided payment of the value attributable to the multiplier feature by exercising our option to prepay the note at its face value prior to January 16, 2010. However, after giving effect to the amendments that occurred on May 30, 2008, which eliminated our ability to avoid paying the value of the multiplier feature by prepaying the note, we could no longer avoid paying the value attributable to the multiplier feature by prepaying the note. Thus, the embedded derivative associated with the multiplier feature had a measurable fair value for all periods subsequent to the May 30, 2008 modifications.

The amendments to Convertible Note I and Term Note B resulted in an immediate increase in the value of the embedded conversion feature derivatives of $23.8 million (substantially all related to Term Note B) that was recognized as a loss on modification of debt and derivative instruments in fiscal 2009.

We determined that the amendments to Convertible Note I and Term Note B on May 30, 2008, in combination with the issuance of new debt and modifications to other debt instruments that were negotiated together, were not substantial and did not represent an implied exchange of debt instruments. For purposes of this analysis, we excluded the impact that the modifications had on the embedded features accounted for as derivative instruments under the guidance, as the change in fair value of the derivative instruments resulting from the modifications was immediately recognized as a loss on modification of debt.

During fiscal 2009, the holder requested conversions of $10.2 million of debt principal under the provisions of Convertible Note I. In connection with the issuance of our common shares (which had a fair value of $18.7 million on the settlement dates) in satisfaction of the principal converted and shares required pursuant to the Make-Whole Amount provision contained in the note, a portion of the derivative instrument liability associated with the conversion feature was also extinguished in the total amount of $4.2 million. The Make-Whole Amount provision was available to the holder from May 30, 2008 through July 9, 2009 at which time it was eliminated in connection with further modifications to the note. The difference between the fair value of the shares issued ($18.7 million) and the extinguishment of the liabilities ($10.2 million of debt principal and $4.2 million of derivative instruments) was recognized as a loss on settlement of $4.3 million during fiscal 2009.

Fiscal 2008

January 2008 Debt Restructuring

On January 11, 2008, our now discontinued business segment represented by the Tecstar Automotive Group subsidiary was in default of a January 1, 2008 semi-annual interest payment on an existing convertible note issued by the Tecstar Automotive Group and owed to affiliates of our senior lender (the "Tecstar Convertible Note"). As a result of the default, the amount due under the Tecstar Convertible Note became immediately due and payable. On January 16, 2008 and in connection with a strict foreclosure under Article 9 of the Uniform Commercial Code, we transferred our ownership in the common stock of the subsidiaries that comprised the Tecstar Automotive Group business segment to an affiliate of our senior lender to satisfy the amount due under certain borrowing arrangements with the senior lender and restructured other debt obligations that we owed to our senior lender, including replacing the Tecstar Convertible Note that was in default with a new note issued by Quantum that had substantially the same terms as the Tecstar Convertible Note.

Immediately prior to the strict foreclosure and debt restructure that occurred on January 16, 2008, the carrying value of our debt obligations to our senior lender totaled $54.8 million and consisted of: (i) $23.6 million outstanding on a revolving line of credit, (ii) $10.0 million outstanding on a term loan ("Term Note A"), (iii) $16.2 million outstanding on the Tecstar Convertible Note (including accrued interest), and (iv) $5.0 million outstanding on a term note issued by Tecstar Automotive Group ("Tecstar Term Note"). As a result of the transfer of the Tecstar Automotive Group business segment to the senior lender, which had a fair value of approximately $20.5 million, and the simultaneous restructure of our debt obligations, a total of $20.5 million of debt ($15.5 million due under the line of credit plus the $5.0 million Tecstar Term Note) was deemed paid in full, the line of credit (with a remaining balance of $8.1 million) was terminated and replaced with a new term loan, referred to as Term Note B, in the principal amount of $10.0 million (the $8.1 million due under the revolving line of credit plus $1.9 million of additional debt financing received by Quantum), and our issuance of a new convertible note in the principal amount of $16.2 million (Convertible Note I) in exchange for the existing $16.2 million Tecstar Convertible Note.

We evaluated the substance of the transactions as a whole and determined that we transferred net assets to the senior lender that had a fair value that slightly exceeded the fair value of the debt relieved by the senior lender in connection with the debt modifications and we determined that the transactions did not meet the definition of a troubled debt restructuring as prescribed by the applicable accounting guidance. GAAP defines a troubled debt restructuring as a restructuring of debt in which the creditor grants a concession to the debtor for economic or legal reasons related to the debtor's financial difficulties that it would not otherwise consider; however, a debt restructuring is not necessarily a troubled debt restructuring for purposes of GAAP even if a debtor is experiencing some financial difficulties. We applied the guidance in our evaluation of the substance of the transactions and determined that our senior lender did not provide a concession to us in connection with the debt modifications because the effective interest rate of the overall restructured debt was slightly higher just after the modifications as compared to just prior to the modifications.

After the evaluation and conclusion that the transactions did not represent a troubled debt restructuring under the accounting guidance, the debt instruments were individually considered as to whether extinguishment accounting was appropriate. We determined that the debt modifications did not represent a substantial change as defined by GAAP and therefore, extinguishment accounting was not appropriate. We then determined that the transfer of the ownership of the Tecstar Automotive Group subsidiaries to effectuate the strict foreclosure and debt modification transactions should be accounted for in accordance with the guidance related to the disposal of long-lived assets. As a result, the disposal of the business segment resulted in a net gain on disposal of $8.6 million that is reported as part of loss from discontinued operations, net of tax effects, in fiscal 2008 (see Note 20). The gain on disposal primarily resulted from the difference between the $20.5 million approximate fair value

of the net assets transferred to our senior lender in satisfaction of debt and the $9.0 million carrying value of those net assets, less a release fee paid to our senior lender and other transaction fees and costs of $2.9 million. The types of assets transferred to our senior lender that had fair values above their carrying values at the time of the transfer primarily related to property, plant and equipment and intangible assets associated with customer relationships/contracts.

11. 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.

We measure financial instruments that we consider to be derivatives at fair value on a recurring basis, which at April 30, 2010 consist of the Lender Commitment (see Note 10) and certain warrant contracts (see Note 14).

Prior to certain debt modifications executed on April 30, 2010, our three convertible notes and our Term Note B contained embedded conversion features that were also considered to be derivatives during the three years ended April 30, 2010. In addition, the Consent Fee Term Note also contained an embedded conversion feature that was classified as a derivative liability until the fee contingency was resolved on April 16, 2010. As of the close of business on April 30, 2010, the fair value of the embedded conversion features under the three convertible notes, Term Note B and the Consent Fee Term Note were each reclassified to equity. See further discussion of these financial instruments and the change in classification of the embedded features during fiscal 2010 in Note 10.

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. 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 for all periods reported.

The derivatives and their respective fair values measured using Level 3 inputs as of April 30, 2009 and April 30, 2010 are as follows:

	April 30, 2009	April 30, 2010
Derivative instruments classified as current liabilities:		
Embedded conversion features under convertible notes	$ 305,000	$ —
Embedded principal multiplier feature under Term Note B	3,493,000	—
Warrant contracts issued in October 2006	4,395,000	4,160,000
Warrant contracts issued in June 2007	3,630,000	4,100,000
Warrant contracts issued in August 2008	3,375,000	4,287,000
	15,198,000	12,547,000
Derivative instruments classified as non-current liabilities:		
Written Put Option under $10.0 million Lender Commitment	—	5,518,000
Warrant contracts issued in August & September 2009	—	1,151,000
	—	6,669,000
Total balance of derivative instruments	$15,198,000	$19,216,000

We determined the fair values of the derivative instrument liabilities associated with the written put option contained within the Lender Commitment and the 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 warrants 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 used the Black-Scholes model to calculate the value of the written put option under the Lender Commitment, the June 2007 Warrants, the August 2009 Warrants and the September 2009 Warrants. For other warrant contracts that incorporate more complex terms, including exercise price reset provisions (the October 2006 Warrants and the August 2008 Warrants), we utilize the Monte Carlo model 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 warrants. These random price paths are then averaged to determine the value of the warrants as of the reporting period date.

We determined the fair values of the embedded features under the three convertible notes, Term Note B and the Consent Fee Term Note during the period of time that they were classified as derivatives primarily based on binomial probability distribution models that integrate multiple layers of logic at each node representing probability weighted stock price points and possible outcomes over time based on volatility and appropriate risk free rates. The end node values are then individually present valued back to the valuation date. Under a binomial probability distribution model, the closing market price of our common stock on the dates of measurement and the estimated discount rates and annual volatility rates used are the primary drivers of fair value in addition to the contractual terms of the financial instruments.

The derivative liabilities associated with the convertible notes represented the fair value of the notional amount of the embedded conversion features as of the assessment date, which is less than the overall fair values of the embedded conversion features. The notional amount equaled the outstanding principal, including accrued interest that had been added to the principal balances as of the assessment date under the terms of the instruments' PIK provisions. Although the stated terms of the instruments required that a minimum portion of all future interest cost must be added to the principal under the PIK provisions (thereby increasing the overall value of the conversion features), under GAAP, a derivative instrument must have an existing notional amount to be

considered a derivative. As such, the additional fair value of the minimum future interest PIK provisions were not considered in valuing the derivatives until the PIK was actually added to the outstanding principal balances.

The following table summarizes the changes in the fair value during the three years ended April 30, 2010 for the derivative instrument liabilities using Level 3 inputs:

	Convertible Notes	Written Put Option	Term Note B	Consent Fee Term Note	Warrants	Total
Balance at April 30, 2007	$ —	$ —	$ —	$ —	$ 3,340,000	3,340,000
Origination of derivative instrument	666,000	—	—	—	11,792,000	12,458,000
Fair value adjustments resulting from change in value of underlying asset and passage of time recognized in earnings	5,726,000	—	—	—	(5,115,000)	611,000
Transfers in/(out) of Level 3	—	—	—	—	—	—
Balance at April 30, 2008	$ 6,392,000	$ —	$ —	$ —	$10,017,000	$ 16,409,000
Origination of derivative instruments	—	—	—	—	7,290,000	7,290,000
Contract modifications recognized in earnings	—	—	23,834,000	—	—	23,834,000
Adjustments resulting from change in value of underlying asset and passage of time recognized in earnings	(1,925,000)	—	(20,341,000)	—	(5,427,000)	(27,693,000)
Settlements associated with debt conversions and warrant exercises	(4,162,000)	—	—	—	(480,000)	(4,642,000)
Balance at April 30, 2009	$ 305,000	$ —	$ 3,493,000	$ —	$11,400,000	$ 15,198,000
Origination of derivative instruments	280,000	—	—	960,000	1,395,000	2,635,000
Origination of derivative instruments in connection with contract modifications recognized in earnings	3,877,000	—	—	—	—	3,877,000
Change to existing derivative instrument in connection with contract modifications recognized in earnings	3,342,000	3,009,000	—	—	—	6,351,000
Fair value adjustments resulting from change in value of underlying asset and passage of time recognized in earnings	3,710,000	2,509,000	2,522,000	(667,000)	2,500,000	10,574,000
Settlements associated with debt conversions and warrant exercises	(6,928,000)	—	(3,595,000)	—	(1,597,000)	(12,120,000)
Reclassification of instrument from debt to equity pursuant to contract modification	(4,586,000)	—	(2,420,000)	(293,000)	—	(7,299,000)
Balance at April 30, 2010	$ —	$5,518,000	$ —	$ —	$13,698,000	$ 19,216,000

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 as of April 30, 2009 and April 30, 2010 were as follows:

	Convertible Notes	Written Put Option	Term Note B	Consent Fee Term Note	October '06 Warrants	June '07 Warrants	August '08 Warrants	Aug/Sept '09 Warrants
April 30, 2009:								
Annual volatility*(1)*	81.2%	N/A	65.3%	N/A	70.1%	63.7%	66.8%	N/A
Risk-free rate	1.4%	N/A	2.4%	N/A	2.0%	2.0%	2.4%	N/A
Discount rate for cash payments	20.0%	N/A	20.0%	N/A	N/A	N/A	N/A	N/A
Dividend rate	0.0%	N/A	0.0%	N/A	0.0%	0.0%	0.0%	N/A
VWAP or closing price of Quantum stock used	$0.72	N/A	$0.72	N/A	$0.76	$0.72	$0.72	N/A
Conversion/exercise price	$1.35	N/A	*(2)*	N/A	$1.50	$2.09	$4.00	N/A
April 30, 2010*(4)*:								
Annual volatility*(1)*	84.4%	89.3%	75.3%	75.3%	79.7%	77.4%	72.8%	77.4%-94.5%
Risk-free rate	1.5%	1.5%	2.4%	2.5%	2.0%	2.4%	2.4%	1.2%-2.0%
Discount rate for cash payments	14.3%	14.3%	14.3%	14.3%	N/A	N/A	N/A	N/A
Dividend rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Closing price of Quantum stock	$0.70	$0.70	$0.70	$0.70	$0.70	$0.70	$0.70	$0.70
Conversion/exercise price	$0.71	$0.71	*(2)*	*(3)*	$0.55	$2.09	$3.13	$0.85

(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) Under the terms of the embedded principal multiplier feature, the minimum conversion price is $0.67, the maximum conversion price is $3.50, and we cannot use shares to settle the principal payments if our share price is less than $0.50 for payments after January 16, 2012.

(3) Under the terms of the amended embedded principal multiplier feature, the minimum conversion price is $1.25, the maximum conversion price is $2.50, and we cannot use shares to settle the principal payments if our share price is less than $0.50 for payments after July 31, 2011.

(4) Data as of April 30, 2010, except for the Consent Fee Term Note in which the data is as of April 16, 2010.

Fair Value Option

We have adopted 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.

We apply fair value techniques on a non-recurring basis associated with valuing potential impairment losses related to goodwill and other long-lived assets (see Note 8).

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:

	Year Ended April 30,		
	2008	2009	2010
Income tax benefit at U.S. statutory rates	(34.0)%	(34.0)%	(34.0)%
State and local income taxes, net of federal benefit	(5.1)%	(8.1)%	(5.8)%
Amortization of intangible asset	3.5%	10.1%	—
Derivative instruments and fair value measurements	—	(4.4)%	19.0%
Other	0.6%	1.9%	1.3%
Valuation allowance	35.0%	34.5%	19.5%
Effective tax rate	0.0%	0.0%	0.0%

The following table presents the provision for income taxes for continuing operations on a separate tax return basis:

	Year Ended April 30,		
	2008	2009	2010
Current:			
State and local	$ 1,600	$ 1,600	$ 4,268
Deferred:			
Federal	(16,751,000)	(4,248,000)	(4,611,933)
State and local	(2,383,000)	(810,000)	(663,751)
Foreign	—	—	(481,330)
	(19,134,000)	(5,058,000)	(5,757,014)
Less: Change in valuation allowance	19,134,000	5,058,000	5,758,970
Subtotal	—	—	1,956
Income tax expense	$ 1,600	$ 1,600	$ 6,224

The components of deferred tax assets and liabilities are as follows:

	Year Ended April 30,	
	2009	2010
Deferred income tax assets:		
Accrued compensation	$ 373,000	$ 372,170
Accrued warranty	89,000	35,681
Inventory	902,000	1,147,729
Debt amortization	1,467,000	—
Share-based compensation	2,171,000	2,226,817
Other	761,000	499,980
Tax credits	765,000	764,575
Derivative instruments	1,391,000	913,801
Net operating loss carryforwards	61,817,000	71,748,152
	69,736,000	77,708,905
Less: Valuation allowance	(69,613,000)	(75,371,969)
Total deferred income tax assets	123,000	2,336,936
Deferred income tax liabilities:		
Equipment and leasehold improvements	(123,000)	(417,121)
Intangible asset	—	(2,401,145)
Net deferred tax liability	$ —	$ (481,330)

For our U.S. based businesses, we have a net deferred tax asset position primarily consisting of net operating loss carry forwards that 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.

Our wholly-owned subsidiary, SPI, based in Canada, has a net deferred tax liability, primarily associated with the unamortized balance of an intangible asset, which cannot be offset by net operating loss carry forwards from the U.S. businesses and represents the balance of the net deferred tax liability reported as of April 30, 2010 on the accompanying consolidated balance sheet.

At April 30, 2010, we had federal net operating loss carryforwards of approximately $188 million available to offset future federal taxable income that expire between the years 2023 and 2030. We had state net operating loss carryforwards of approximately $90 million available to offset future state taxable income that expire between the years 2016 and 2020. We had federal credit carryforwards of $0.4 million that do not expire and state credit carryforwards of $0.3 million that will expire within the next five years. The net operating loss carryforwards include approximately $0.8 million of deductions related to stock option exercises. If and when we reduce any portion of our valuation allowance related to the stock option compensation deduction, the benefit will be added to stockholders equity, rather than being shown as a reduction of future income tax expense.

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 April 30, 2010, our U.S. federal tax returns related to fiscal years ended April 30, 2006 through April 30, 2010 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.

The U.S. tax laws contain provisions (Section 382 limitations) that limit the annual utilization of net operating loss and credit carryforwards upon the occurrence of certain events including a significant change in ownership interest. Generally, such limitations arise when the ownership of certain shareholders or public groups in the stock of a corporation change by more than 50 percentage points over a three-year period. We had incurred such an event in the past which limits the future use of our losses and may result in expiration of a portion of the losses before utilization. We may also have incurred such an event or events over recent years; however, we have not completed a current study to determine the extent of the limitations. Until a study is completed and the extent of the limitations is able to be determined, no amounts are being presented as an uncertain tax position.

13. Commitments and Contingencies

Leases

We have certain non-cancelable operating leases for facilities and equipment. Future minimum lease commitments under non-cancelable operating leases at April 30, 2010 are as follows:

	Lease Obligation
Fiscal year 2011	$ 2,837,702
Fiscal year 2012	2,952,815
Fiscal year 2013	2,999,185
Fiscal year 2014	2,978,936
Fiscal year 2015	2,414,943
Thereafter	1,398,109
Total minimum lease payments	$15,581,690

Total rental expense under the operating leases of continuing operations for fiscal years ended April 30, 2008, 2009 and 2010 was approximately $1.5 million, $1.7 million and $2.8 million, respectively. These leases are non-cancelable and certain leases have renewal options and escalation clauses.

On November 11, 2008, we entered into a new facility lease arrangement with Cartwright Real Estate Holdings, LLC (Cartwright LLC) and Klein Investments Family Limited Partnership for a facility that currently houses our corporate offices in Irvine, California which we plan to utilize as the manufacturing facility for Quantum Solar's business activities. The lease has an effective date of November 1, 2008 and expires on October 31, 2015. Our Chief Executive Officer owns a 50% interest in Cartwright LLC and an irrevocable trust established by our Chairman of the Board owns a 36.67% interest in Cartwright LLC. We made cash payments to Cartwright LLC during fiscal years ended April 30, 2008, 2009 and 2010 in amounts totaling $0.7 million, $0.9 million and $0.7 million, respectively.

Obligations under Solar Cell Supply Arrangement

We have obligations pursuant to an arrangement with Asola under which we agreed to purchase one-half of Asola's rights and obligations under a certain long-term solar cell supply agreement that Asola executed with one of its solar cell suppliers. Our arrangement with Asola and our obligations under the arrangement are more fully described in Note 4.

Contingencies

We and our affiliates are subject to various legal proceedings and claims which arise out of the normal course of our business. 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. In the opinion of management, any ultimate cost to us in excess of amounts accrued will not materially affect our consolidated financial position, results of operations or cash flows.

Compensation Plan

We sponsor a defined contribution plan (the "401K Plan") 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. 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.

Contributions attributable to us for continuing operations approximated $0.2 million, $0.3 million and $0.2 million for fiscal years ended April 30, 2008, 2009 and 2010, respectively.

Employment Agreements

We have entered into employment agreements with our Chief Executive Officer and other executive officers and senior managers which provide for annual base salary, other benefits and severance obligations. Our total obligation under the terms of these agreements is approximately $5.8 million for those agreements that are in place as of May 1, 2010. The total obligation consists of the estimated minimum contractual obligations under the arrangements assuming a termination of employment without cause initiated by us and benefit continuation to the employees assuming a cost to us of 15% of base salaries.

Strategic Alliance with General Motors

Pursuant to the strategic alliance with General Motors (see Note 8), we have committed to spend $4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of our fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002 through 2009, we anticipate that this commitment will be waived or partially waived in the future. During fiscal 2010 there were no directed research and development activities pursuant to the strategic alliance.

The strategic alliance also requires us to pay royalties for products sold using certain technologies covered by the alliance as follows: Beginning July 24, 2005 for non-automotive applications and July 24, 2008 for automotive applications, we are obligated to provide revenue sharing payments to General Motors based on a percentage of gross revenue derived from sales of applications developed under the strategic alliance. The revenue sharing payments will equal 5% of applicable gross revenue through July 23, 2015, 4% for the ten-year period ending July 23, 2025, 3% for the ten-year period ending July 23, 2035, and 2% for the ten-year period ending July 23, 2045. On July 23, 2045, we will also be obligated to provide a final revenue sharing payment to General Motors equal to the present value of future revenue sharing payments that would otherwise be payable to General Motors on an annual basis assuming an income stream to General Motors of 2% of our gross revenues in perpetuity. No royalty expense was incurred under the arrangement for any of the periods presented in the financial statements.

14. Stockholders' Equity

Authorized Capital Stock

Our authorized stock consists of 20.0 million shares of preferred stock and 400.0 million shares of common stock. Of the 400.0 million shares of common stock, 2.0 million are designated as Series B common stock.

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.

Series B Common Stock

Shares of our Series B common stock, held entirely by General Motors, are not entitled to vote on any matters voted on by stockholders except as otherwise specifically required by law. In the event we issue additional shares of our common stock as a dividend or other distribution on our outstanding common stock, or a subdivision or combination of common stock into a smaller or greater number of shares, the number of shares of Series B common stock will be adjusted to that number of shares of Series B common stock that is equal to the percentage of all outstanding shares of all series of our common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan) that the holders of Series B common stock held prior to such event. Upon the transfer of any of the outstanding shares of Series B common stock to any person or entity that is not controlled by or under common control with General Motors, the transferred shares of Series B common stock will convert into an equal number of shares of our common stock. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of our Series B common stock will be entitled to participate ratably in dividends on our common stock as declared by our board of directors. Holders of our Series B 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 our preferred stock.

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 20.0 million 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 Global 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.

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 compensation expense ratably over the vesting period, typically three years. Approximately $0.1 million was recognized in compensation expense related to restricted stock issuances in each of the three fiscal years ended April 30, 2010.

Warrants

In connection with a $12.5 million private placement offering completed on June 29, 2006, investors received warrants to purchase 0.9 million shares of our common stock at an exercise price of $3.94 per share to the investors (the "June 2006 Warrants"). The warrants can be exercised at any time and expire in June 2011.

In connection with a $10.0 million private placement offering completed on October 27, 2006, investors received warrants to purchase 2.1 million shares of our common stock at an initial exercise price of $2.36 per share (the "October 2006 Warrants"). The warrants can be exercised at any time and expire in April 2014.

In connection with a $18.75 million private placement offering that was completed on June 22, 2007, investors received warrants to purchase 15.0 million shares of our common stock at $2.09 per share, which included 2.5 million shares provided to the October 2006 investors in exchange for those investors waiving certain rights obtained in the October 2006 private placement (the "June 2007 Warrants"). The warrants can be exercised anytime and expire in December 2014.

In connection with a $19.1 million registered direct offering completed on August 25, 2008, the investor received warrants to purchase 13.5 million shares of our common stock at an initial exercise price of $4.00 per share (the "August 2008 Warrants"). The warrants can be exercised at any time and expire in August 2015.

In connection with a $12.3 million private placement offering completed in two rounds that closed on August 3, 2009 (the "August 2009 Warrants") and September 4, 2009 (the "September 2009 Warrants"), investors received warrants to purchase 2.0 million shares of our common stock at an exercise price of $0.85 per share to the investors. The warrants became exercisable beginning in February 2010, of which 0.6 million relate to the August 2009 Warrants and expire in August 2014 and 1.4 million relate to the September 2009 Warrants and expire in September 2014. In connection with the transaction, the placement agent also received 1.0 million in warrants to purchase shares of our common stock at an exercise price of $0.85 per share that became exercisable beginning in March 2010, of which 0.7 million expire in September 2012 and 0.3 million expire in September 2014.

On April 16, 2010, in connection with the acquisition of SPI, we provided the former SPI warrant holders with Quantum replacement warrants that allows these former SPI warrant holders to purchase up to 2.1 million shares of our common stock at exercise prices ranging from $0.48 to $2.41 per share that expire on dates through May 13, 2011 (the "April 2010 Replacement Warrants"). The fair value of these warrants on the closing date was included as part of the consideration paid in connection with the acquisition (see Note 3).

In connection with a $10.6 million private placement offering completed on various dates from April 30, 2010 through June 14, 2010 (the "Spring 2010 Warrants"), investors received warrants to purchase 3.9 million shares of our common stock at an exercise price of $0.91 per share to the investors. The warrants became exercisable beginning in October 2010. In connection with the transaction, the placement agent also received 0.5 million in warrants to purchase shares of our common stock at an exercise price of $0.91 per share that become exercisable beginning in October 2010. The warrants expire five years from the date they were issued (April 2015 thru June 2015). The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $9.1 million (of which $6.0 million was received subsequent to the latest reported balance sheet date of April 30, 2010). The private placement offering remained opened as of June 14, 2010.

We evaluate the warrants provided in connection with each of our private placement or public offerings and we have concluded that liability classification is appropriate for warrants issued in October 2006, June 2007, August 2008, August 2009 and September 2009. We have further concluded that equity classification is

appropriate for the warrants that we refer to as the June 2006 Warrants and the Spring 2010 Warrants due to the fact that these warrants 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 from the transactions in June 2006 and in the spring of 2010 that gave rise to these warrants have been allocated to the stock and the warrants based on their relative fair values. However, we aggregate the values for financial reporting purposes as both types of instruments issued in June 2006 and in the spring of 2010 have been classified as permanent equity. The classification as equity for the June 2006 Warrants and the Spring 2010 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 these warrants is required in the future, the warrants would be treated as derivatives, brought onto 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.

The October 2006 Warrants, the June 2007 Warrants and the August 2008 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 in Quantum in the future. Since the contractual provisions that could require us to net-cash settle the warrants are not within our control, equity classification is precluded. As such, we consider these warrants to be derivative instruments that are classified as current liabilities, recorded at fair value and marked to market each period, with the changes in fair values being recognized in the respective period's statement of operations.

Further, the August 2009 Warrants and the September 2009 Warrants contain cashless warrant exercise provisions whereby the settlement calculation may incorporate the book value per share of common stock if there is not a public market for the common stock. Under GAAP, if an instrument's settlement calculation incorporates variables other than those used to determine the fair value of a fixed-for-fixed forward or option on equity shares, the instrument would not be considered indexed to the entity's own stock and therefore would not be precluded from derivative instrument consideration. As such, we consider these warrants to be derivatives that are classified as non-current liabilities, recorded at fair value and marked to market each period, with the changes in fair values being recognized in the respective period's statement of operations.

The fair values of the derivative liabilities associated with warrant contracts as of April 30, 2009 and April 20, 2010, and a summary of the changes in the fair values of those derivative instruments during the three years ended April 30, 2010 are disclosed in Note 11.

The October 2006 Warrants and the August 2008 Warrants also contain contractual provisions which, subject to certain exceptions, reset the initial exercise price of such warrants if at any time while such warrants are outstanding, we sell or issue shares of our common stock or rights, warrants, options or other securities or debt convertible, exercisable or exchangeable for shares of our common stock at a price below $2.36 for the October 2006 Warrants or $4.00 for the August 2008 Warrants, provided that the exercise price for the August 2008 Warrants cannot be reset below $1.93. Since the initial issuance of these warrants, we have completed certain subsequent capital transactions that have contractually reset the exercise price of the October 2006 Warrants and August 2008 Warrants to $0.55 and $3.13 as of April 30, 2010, respectively, and has further reset the exercise price of the August 2008 Warrants to $2.92 as of June 14, 2010. As a result of exercise price resets to date and in the event of further price resets to the October 2006 Warrants and/or the August 2008 Warrants, the number of shares of our common stock that is subject to such warrants contractually increases so that the aggregate purchase price payable applicable to the exercise of the warrants after the reset of the exercise price is the same as the aggregate purchase price payable immediately prior to the reset. As a result of the exercise price resets, the number of shares subject to the October 2006 Warrants increased to 7.1 million as of April 30, 2010

and the number of shares subject to the August 2008 Warrants increased to 17.3 million and 18.5 million as of April 30, 2010 and June 14, 2010, respectively. Any resets to the exercise price of the October 2006 Warrants and/or August 2008 Warrants in the future will have an additional dilutive effect on our existing shareholders.

During the second quarter of fiscal 2010, we issued 1.1 million shares upon the exercise of 1.9 million warrants on a cashless basis by certain holders of the October 2006 Warrants.

Warrant activity and warrants outstanding for the three year period ending April 30, 2010, and through the closing of the round of financing on June 14, 2010, reportable in the equivalent number of shares of our common stock that can be purchased upon exercise of the warrants, is as follows:

	Total Warrants
Warrants outstanding at April 30, 2007	3,283,377
Issued—additional number	16,377,648
Warrants outstanding at April 30, 2008	19,661,025
Exercised	(400,000)
Issued—original number	13,500,000
Warrants outstanding at April 30, 2009	32,761,025
Issued—original number	6,409,124
Issued—additional number	9,412,408
Exercised	(1,916,102)
Warrants outstanding at April 30, 2010	46,666,455
Issued—original number	3,039,536
Issued—additional number	1,211,400
Warrants outstanding at June 14, 2010	50,917,391

Stock Options

We have one stock option plan, the 2002 Stock Incentive Plan (the "Options Plan"), which provides that options to purchase shares of our unissued common stock may be granted to directors, employees, associates and consultants. Options expire ten years after the date of grant or 30 days after termination of employment and generally vest ratably at the rate of 25% on each of the first four anniversaries of the grant date. New shares are issued to satisfy stock option exercises under the Options Plan. Options awarded are generally granted with an exercise price equal to the market price of our stock at the date of grant.

On November 17, 2008, we completed a value-for-value stock option exchange program which was approved by our stockholders on September 18, 2008. Pursuant to the option exchange, 3.9 million eligible options were canceled and replaced with 2.6 million replacement stock options. The exchange ratio was calculated such that the value of the replacement options would approximate the value of the canceled options, determined in accordance with the Black-Scholes option valuation model. We recognized the excess value of vested replacement options as compensation expense in fiscal 2009 and plan to recognize the excess value of non-vested replacement options as compensation expense ratably over their respective vesting periods. The excess value was nominal.

Below is a summary of the options activity for the three-year period ending April 30, 2010:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (In Years)	Aggregate Intrinsic Value
Options outstanding at April 30, 2007	5,771,194	$4.30		
Granted	1,770,000	$0.80		
Exercised	—	$ —		
Forfeited(1)	(884,875)	$4.18		
Expired(2)	(687,625)	$4.78		
Options outstanding at April 30, 2008	5,968,694	$3.33		
Granted(3)	3,013,673	$1.21		
Exercised	—	$ —		
Forfeited(4)	(1,272,087)	$3.19		
Expired(5)	(2,971,719)	$4.50		
Options outstanding at April 30, 2009	4,738,561	$1.29		
Granted	50,000	$0.75		
Exercised	(5,000)	$0.80		
Forfeited	(145,415)	$0.87		
Expired	(377,693)	$3.80		
Options outstanding at April 30, 2010	4,260,453	$1.08	5.8	$—
Vested and expected to vest at April 30, 2010	4,159,578	$1.09	5.8	$—
Options exercisable at April 30, 2008	2,960,194	$4.65		
Options exercisable at April 30, 2009	2,780,117	$1.56		
Options exercisable at April 30, 2010	3,097,949	$1.15	5.1	$—

(1) Includes 616,000 non-vested options terminated in connection with the disposal of the Tecstar Automotive Group segment.
(2) Includes 337,000 vested options terminated in connection with the disposal of the Tecstar Automotive Group segment.
(3) Includes 2,574,673 options granted pursuant to the stock option exchange program.
(4) Includes 931,750 non-vested options canceled pursuant to the stock option exchange program.
(5) Includes 2,965,076 vested options canceled pursuant to the stock option exchange program.

The aggregate intrinsic value in the table above is based on our closing stock price of $0.70 per share as of the last business day of the fiscal year ended April 30, 2010, which amount would have been received by the optionees had all options been exercised on that date.

The following table sets forth summarized information with respect to stock options outstanding and exercisable at April 30, 2010:

	Outstanding			Exercisable	
Exercise Price Range	Number of Shares	Average Life Remaining	Average Price	Number of Shares	Average Price
$0.70 – $0.98	1,540,000	7.72	$0.80	745,000	$0.80
$0.98 – $1.96	2,638,296	4.83	1.12	2,283,542	1.13
$1.96 – $2.95	17,000	8.25	2.23	4,250	2.23
$2.95 – $4.91	17,440	1.49	4.81	17,440	4.81
$4.91 – $5.89	32,317	0.64	5.63	32,317	5.63
$5.89 – $6.87	12,000	0.90	6.30	12,000	6.30
$6.87 – $9.82	3,400	0.30	9.82	3,400	9.82
	4,260,453	5.83	1.08	3,097,949	1.15

A summary of the options activity of our non-vested options and changes during fiscal 2010 is as follows:

		Weighted-Average		Remaining Unrecognized Compensation Cost
	Number of Shares	Grant-Date Fair Value	Remaining Years To Vest	
Nonvested outstanding at April 30, 2009	1,958,444	$1.22		
Granted	50,000	0.56		
Vested	(700,525)	1.74		
Forfeited	(145,415)	0.82		
Nonvested outstanding at April 30, 2010	1,162,504	$0.93	1.4	$685,292

On May 1, 2009, an additional 2,928,839 shares of common stock became available for future grant under the Options Plan pursuant to an "evergreen" provision contained in the Options Plan. At April 30, 2010, there were 8,709,957 shares of common stock available for grant under the Options Plan.

Shares Available

The number of undesignated shares available as of June 14, 2010, after factoring in the private placement offering transactions that occurred through June 14, 2010, is as follows:

	Common Stock	Series B Common Stock	Preferred Stock
Shares authorized	398,000,000	2,000,000	20,000,000
Less shares issued and outstanding at April 30, 2010	(169,155,324)	(999,969)	—
Less shares issued post April 30, 2010	(12,698,145)		
Less shares designated for issuance under:			
Stock options	(4,260,453)	—	—
Warrants	(50,917,391)	—	—
Conversion of principal under convertible notes(1)	(15,938,832)	—	—
Lender Commitment(2)	(14,084,507)	—	—
Total shares designated for future issuance	(85,201,183)	—	—
Undesignated shares available	130,945,348	1,000,031	20,000,000
Other instruments in which share settlement is at Company option:			
Principal repayment in shares under Term Note B(3)	8,965,619	—	—
Principal repayment in shares under Consent Fee Term Note(3)	4,838,710	—	—

(1) Represents number of shares upon conversion of $11.3 million of principal and interest outstanding under three convertible notes at a fixed conversion price of $0.71 per share.

(2) Represents the maximum possible shares issuable under the $10 million Lender Commitment if it becomes outstanding and is structured as a convertible note at a fixed conversion price of $0.71 per share.

(3) Repayment of principal in shares is at our option, subject to certain conditions; represents the number of shares that would be required to satisfy the outstanding principal under the terms of the note assuming the share price was $0.62 per share (which represents our closing share price as of June 14, 2010).

Share-based Compensation

The share-based compensation expense related to stock options and restricted stock included in the accompanying consolidated statements of operations and in the financial information by reportable business segment in Note 16 for the three years ended April 30, 2010 is:

	Fuel Systems	Corporate	Discontinued Operations	Total
Year Ended April 30, 2008:				
Continuing operations:				
Cost of product sales	$ 96,216	$ —	$ —	$ 96,216
Research and development	169,490	—	—	169,490
Selling, general and administrative	22,117	2,570,797	—	2,592,914
Discontinued operations	—	—	98,181	98,181
Total share-based compensation	$287,823	$2,570,797	$98,181	$2,956,801
Year Ended April 30, 2009:				
Continuing operations:				
Cost of product sales	$103,597	$ —	$ —	$ 103,597
Research and development	213,005	—	—	213,005
Selling, general and administrative	17,907	1,609,715	—	1,627,622
Total share-based compensation	$334,509	$1,609,715	$ —	$1,944,224
Year Ended April 30, 2010:				
Continuing operations:				
Cost of product sales	$ 17,950	$ —	$ —	$ 17,950
Research and development	153,911	—	—	153,911
Selling, general and administrative	14,735	738,465	—	753,200
Total share-based compensation	$186,596	$ 738,465	$ —	$ 925,061

The fair value of each share-based 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. A summary of the grant date fair value and intrinsic value information is as follows:

	Year Ended April 30,		
	2008	2009	2010
Weighted average grant date fair value per share	$ 0.57	$ 0.53	$ 0.56
Intrinsic value of options exercised	n/a	n/a	$ 2,250
Total fair value of options vested during the period	$3,467,308	$1,271,078	$1,220,980

The fair value of options granted was estimated using the following weighted–average assumptions:

	Year Ended April 30,		
	2008	2009	2010
Dividend yield	0.0%	0.0%	0.0%
Expected life—years	5.8	5.8	6.2
Risk-free interest rate	2.4%	2.3%	2.8%
Expected volatility of common stock	85.1%	91.0%	90.0%

15. 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 income by application of the treasury stock method. 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:

	Year Ended April 30,		
	2008	2009	2010
Numerators for basic and diluted loss per share data—attributable to common stockholders:			
Loss from continuing operations, net of tax	$(19,914,039)	$(27,992,652)	$ (46,294,327)
Loss from discontinued operations, net of tax	$(66,886,009)	$ —	$ —
Net loss	$(86,800,048)	$(27,992,652)	$ (46,294,327)
Denominator for basic and diluted loss per share data—weighted-average shares	76,791,382	92,013,338	129,197,981
Basic and diluted per share data:			
Loss from continuing operations attributable to stockholders	$ (0.26)	$ (0.30)	$ (0.36)
Loss from discontinued operations attributable to stockholders	$ (0.87)	$ —	$ —
Net loss	$ (1.13)	$ (0.30)	$ (0.36)

For the three fiscal years ending April 30, 2010 presented above, shares of common stock potentially issuable upon the exercise of options, warrants and convertible notes, in addition to shares potentially issuable in satisfaction of term note obligations 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, in thousands, from the computation of diluted earnings per share, as to do so would have been anti-dilutive:

	As of April 30,		
	2008	2009	2010
Stock Options	5,969	4,739	4,260
Warrants	19,661	32,761	46,666
Convertible Notes	11,997	6,556	15,151
Term Notes	22,974	37,538	12,624
Lender Commitment	—	—	14,085
	60,601	81,594	92,786

16. Business Segments and Geographic Information

Business Segments

We classify our business operations into three reporting segments: Fuel Systems (formerly referred to as the Quantum Fuel Systems segment), Renewable Energy (beginning April 16, 2010 with the acquisition of SPI) and Corporate. Prior to January 16, 2008, we also had a Tecstar Automotive Group business segment. The Tecstar Automotive Group segment ceased operations on January 16, 2008 when we transferred substantially all of that segment's business operations to an affiliate of our senior lender. As a result of such transfer, the historical activities of the Tecstar Automotive Group business segment are now classified as discontinued operations.

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 and income taxes.

Fuel Systems Segment

Our Fuel Systems segment supplies advanced propulsion and fuel systems for alternative fuel vehicles to OEM customers for use by consumers and for commercial and government fleets. We also provide our propulsion systems and hydrogen storage products for hybrid and fuel cell applications to major OEMs and certain governmental agencies through funded research and development contracts and on a prototype and production intent basis. This segment's business operations primarily consist of design, integration and supply of electric drive and control system technologies and manufacture and supply of packaged fuel systems for use in hybrid, plug-in electric hybrid, hydrogen, fuel cell, and other alternative fuel vehicles.

Our Fuel Systems segment generates product revenues through the sale of hydrogen fuel storage, fuel delivery, and electronic control systems to OEMs, the installation of our systems into OEM vehicles, and the sale of transportable hydrogen refueling stations. Product revenues are also generated through the sale of compressed natural gas (CNG), propane (LPG), and hydrogen fuel storage, fuel delivery, and electronic control systems for internal combustion engine applications.

Our Fuel Systems segment also generates contract revenue by providing engineering design and support to OEMs so that our advanced propulsion systems integrate and operate with the OEM's hybrid or fuel cell applications. Contract revenue is also generated from customers in the aerospace industry, military and other governmental entities and agencies, and other strategic alliance partners.

Renewable Energy Segment

Our Renewable Energy segment consists solely of the business operations of SPI. SPI, headquartered in Toronto, Ontario, Canada, is an independent power producer and developer of renewable wind and solar energy projects and provider of related services. This segment currently generates revenues through energy sales under a PPA contract. In addition to energy sales on its existing wind farm and future wind and solar energy farms that it is currently developing, this segment anticipates generating revenues and cash flows through the sale of ownership interests in its renewable energy projects and through development and construction services for renewable energy projects owned by third parties.

Our development of renewable energy projects involves several sequential stages of completion and advancement before a project becomes operational. We conduct feasibility studies to obtain sufficient data to validate the wind and/or solar energy capacity from a prospective project. We must negotiate with local landowners to obtain easements to allow for the development of an energy farm on their properties. Applications

are submitted to local utility providers to obtain approval for a grid interconnection and environmental assessments and feasibility studies must be completed and submitted to Federal, Provincial and Municipal governments to obtain permits for construction and commissioning. Finally, we secure PPAs with a utility provider or power broker as a project approaches the operational stage.

An energy project may be financed with equity, debt or a combination thereof. Due to SPI's limited cash availability and the high cost of development and construction of a project, SPI has historically entered into strategic relationships to provide for project financing. SPI will evaluate its project portfolio and assess sell versus hold factors and the underlying opportunity to develop and retain ownership of its projects. If SPI decides to enter into strategic relationships to provide for project financing on certain of its projects, we anticipate that a typical strategic relationship would be structured such that SPI would transfer a majority interest (usually 80% to 90%) to a strategic partner in exchange for the strategic partner agreeing to fund the development and construction of the renewable energy project. We would anticipate that SPI and the strategic partner would also enter into a development agreement pursuant to which SPI would provide development services for the project and would receive a development fee in return.

Corporate Segment

The Corporate segment consists of general and administrative expenses incurred at the corporate level that are not directly attributable to the Fuel 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 the our board of directors.

All activities of Quantum Solar, which is still in the preliminary phase of its anticipated solar module manufacturing operation are included in our Corporate segment and to date principally consist of partial payments on long lead assembly equipment under construction for solar module production capability. Once Quantum Solar commences its manufacturing operations, we anticipate that we will report these activities under a new business segment separate from the Fuel Systems, Renewable Energy and Corporate reporting segments.

In connection with the transfer of the Tecstar Automotive Group's assets to our senior lender in January 2008, certain historical indirect expenses of the Corporate segment that were directly attributable to the Tecstar Automotive Group business activities and would not have been incurred had the Tecstar Automotive Group business segment not existed, have been reclassified and are reported as discontinued operations.

Discontinued Segment—Tecstar Automotive Group Segment

Prior to its disposal in January 2008, the Tecstar Automotive Group segment was comprised of virtually all of the business activities acquired via the merger with Tecstar Automotive Group in March 2005, and subsequent specialty vehicle business acquisitions. In January 2008, we transferred substantially all the assets of our Tecstar Automotive Group segment to an affiliate of our senior lender pursuant to a strict foreclosure under Article 9 of the Uniform Commercial Code. As a result of the transfer, the Tecstar Automotive Group business segment (formerly consisting of all of the Tecstar businesses and operating units) ceased operations for purposes of our financial reporting. The Tecstar Automotive Group segment, prior to its disposal, engineered and integrated specialty equipment products into motor vehicle applications, primarily General Motors' pick-up trucks and sport utility vehicles, provided vehicle build capabilities associated with military vehicle projects and provided design and powertrain services for high performance cars.

As a result of the disposal of the Tecstar businesses, all historical activities of the Tecstar Automotive Group business segment have been classified as discontinued operations in the accompanying consolidated statements of operations and consolidated statements of cash flows.

Intangible assets associated with the Tecstar Automotive Group and Regency acquisitions, prior to the write-off of the remaining unamortized balance in the first quarter of fiscal 2008, were reported in the Tecstar Automotive Group business segment. Goodwill associated with the Regency acquisition was reported in the Tecstar Automotive Group business segment prior to its write-off in the first quarter of fiscal 2008.

Geographic Information

Our long-lived assets as of April 30, 2010 are primarily based within facilities in Irvine and Lake Forest, California and on our wind farm located in Ontario, Canada. We also own land in Nova Scotia, Canada that we are developing as a renewable energy project. Our two significant affiliates, Asola and Fisker Automotive, are based in Erfurt, Germany and Irvine, California, respectively.

Our revenue by country associated with our continuing operations is as follows (in thousands):

	Year Ended April 30,		
	2008	2009	2010
		(in thousands)	
United States	$ 9,437	$20,589	$8,753
Germany	14,097	2,577	557
India	—	—	176
Canada	89	—	87
Iceland	949	71	28
Japan	1,547	21	3
Other	378	—	1
Total	$26,497	$23,258	$9,605

Financial Information by Business Segment

Selected financial information by business segment for continuing operations follows (in thousands):

	Year Ended April 30,		
	2008	2009	2010
		(in thousands)	
Total Revenue			
Fuel Systems	$ 26,497	$ 23,258	$ 9,590
Renewable Energy	—	—	15
Corporate	—	—	—
Total	$ 26,497	$ 23,258	$ 9,605
Operating Loss			
Fuel Systems	$ (7,340)	$(14,398)	$(10,911)
Renewable Energy	—	—	(77)
Corporate	(11,431)	(10,719)	(9,517)
Total	$(18,771)	$(25,117)	$(20,505)
Product Gross Profit (Loss)			
Fuel Systems & Renewable Energy:			
Net product sales	$ 11,856	$ 975	$ 1,450
Cost of product sales	(10,016)	(2,288)	(1,573)
Gross profit (loss)	$ 1,840	$ (1,313)	$ (123)
Capital Expenditures			
Fuel Systems	$ 1,629	$ 2,663	$ 338
Renewable Energy	—	—	—
Corporate	2	2,157	108
Total	$ 1,631	$ 4,820	$ 446
Depreciation			
Fuel Systems	$ 2,109	$ 1,808	$ 1,219
Renewable Energy	—	—	13
Corporate	13	11	36
Total	$ 2,122	$ 1,819	$ 1,268
Amortization and Impairment of Intangibles			
Fuel Systems	$ 1,676	$ 7,021	$ —
Renewable Energy	—	—	16
Total	$ 1,676	$ 7,021	$ 16

Selected financial information for discontinued operations is as follows (in thousands):

	Year Ended April 30,		
	2008	2009	2010
		(in thousands)	
Discontinued Operations:			
Capital Expenditures	$ 906	$—	$—
Depreciation	1,577	—	—
Amortization of Intangibles	698	—	—

Identifiable assets by reporting segment is as follows (in thousands):

	Year Ended April 30,	
	2009	2010
	(in thousands)	
Identifiable Assets		
Fuel Systems	$47,052	$38,777
Renewable Energy—assets held for sale	—	2,090
Renewable Energy—all other assets	—	14,718
Corporate	12,831	17,433
Total Continuing Operations	$59,883	$73,018

Research and development is expensed as incurred and is related to the operations of the Fuel Systems and Renewable Energy business segments for each of the periods presented. Research and development expense includes both customer-funded research and development and internally-sponsored research and development. Customer-funded research and development consists primarily of expenses associated with contract revenue. These expenses include applications development costs in our Fuel Systems business segment that are funded under customer contracts.

17. Insurance Settlements

Property Damage Recovery

On September 22, 2007, a flood caused damages to our inventory, manufacturing equipment and a warehouse facility that was covered under existing insurance coverage. We received the insurance benefits in installments on various dates through November 2008. We recognized a non-recurring gain of $0.5 million and $1.2 million in fiscal years 2008 and 2009, respectively, which is included as a reduction to selling, general and administrative expense on the consolidated statements of operations. The gain is primarily related to the difference between the insured values and carrying values of the damaged inventory and equipment. Insurance proceeds on the settlements of $2.3 million and $1.5 million in fiscal years 2008 and 2009, respectively, are included in cash flows from operating activities on the consolidated statements of cash flows.

Life Insurance Proceeds

We recorded other income of $2.0 million during fiscal 2009 in connection with a life insurance settlement payment that was received during November 2008. Insurance proceeds on the settlement are included in cash flows from operating activities on the consolidated statement of cash flows.

18. Revenue and Purchase Concentrations

Fisker Automotive comprised 8%, 59% and 46%, General Motors comprised 64%, 13% and 12%, and U.S. Army comprised 10%, 13% and 11%, of the total Fuel Systems segment revenue reported for the fiscal years ended April 30, 2008, 2009 and 2010, respectively.

As of April 30, 2009 and 2010, Fisker Automotive's accounts receivable comprised 46% and 45%, and General Motors and affiliated companies' accounts receivable comprised 11% and 7%, of our total outstanding accounts receivable, respectively.

During fiscal years 2008, 2009 and 2010, respectively, purchases from one supplier constituted approximately 18%, 26% and 20% of net raw materials purchases. In fiscal year 2008, 2009 and 2010, ten suppliers accounted for approximately 72%, 80% and 75% of net raw materials purchases, respectively.

19. Quarterly Results of Operations (unaudited)

A summary of the unaudited quarterly results of operations follows (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal Year 2009				
Net product sales	$ 214	$ 385	$ 216	$ 161
Contract revenue	3,517	7,019	5,665	6,081
Total revenue	3,731	7,404	5,881	6,242
Cost of product sales	654	423	449	763
Gross profit (loss) on product sales	(440)	(38)	(233)	(602)
Research and development expense	4,619	6,774	7,316	6,468
Net income (loss)	(39,008)	32,759	(18,550)	(3,193)
Net income (loss) per share—basic	(0.49)	0.36	(0.19)	(0.03)
Net income (loss) per share—diluted	(0.49)	0.10	(0.19)	(0.03)
Weighted average shares outstanding:				
Basic	79,742	92,070	97,629	98,628
Diluted	79,742	152,466	97,629	98,628

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal Year 2010				
Net product sales	$ 188	$ 425	$ 475	$ 363
Contract revenue	2,906	2,230	1,005	2,013
Total revenue	3,094	2,655	1,480	2,376
Cost of product sales	267	595	329	382
Gross profit (loss) on product sales	(79)	(170)	146	(19)
Research and development expense	3,795	3,509	2,946	3,284
Net income (loss)	(12,264)	(42,673)	14,143	(5,500)
Net income (loss) per share—basic	(0.12)	(0.35)	0.10	(0.04)
Net income (loss) per share—diluted	(0.12)	(0.35)	0.02	(0.04)
Weighted average shares outstanding:				
Basic	104,763	121,891	141,488	149,306
Diluted	104,763	121,891	172,556	149,306

20. Discontinued Operations

On January 11, 2008, Tecstar Automotive Group was in default of the January 1, 2008 semi-annual interest payment due to affiliates of our senior lender under terms of the Tecstar Convertible Note. As a result of the default, the amount due under the Tecstar Convertible Note was immediately due and payable. On January 16, 2008, we completed a series of transactions that restructured our outstanding debt obligations and resulted in the transfer of substantially all of the assets of the Tecstar Automotive Group business segment to an affiliate of the senior lender, WB Automotive, Inc. (WB Automotive), as payment in full of the obligations due under the Tecstar Convertible Note.

The transfer of the Tecstar business segment was structured as a strict foreclosure under Article 9 of the Uniform Commercial Code pursuant to which Tecstar Automotive Group assigned to WB Automotive all of its right, title and interest in and to (i) the equity interests in Tecstar's operating subsidiaries (the "Operating Subsidiaries"), (ii) Tecstar's interest in the Amstar joint venture, (iii) receivables owed to Tecstar by the Operating Subsidiaries and (iv) Tecstar's interest in a $1.0 million cash collateral account, in full payment and satisfaction of the amounts owed by Tecstar under the Tecstar Convertible Note. WB Automotive also released Quantum from our guaranty of the Tecstar Convertible Note and the Tecstar Term Note. In exchange for the foregoing release, Quantum (i) caused Tecstar Automotive Group to enter into and complete the transactions described above, (ii) paid $1.0 million to WB Automotive and (iii) agreed to assume $0.7 million in unpaid interest owed under the Tecstar Convertible Note.

As a result of the disposal of the Tecstar businesses, the historical activities of the Tecstar Automotive Group business segment are reported as discontinued operations in the accompanying consolidated statement of operations and consolidated statement of cash flows for the fiscal 2008 period through January 16, 2008. The disposal of the Tecstar businesses resulted in a gain of $8.6 million included in discontinued operations, net of taxes, for the year ended April 30, 2008.

The historical operating results of the Tecstar Automotive Group business segment through the date of disposition on January 16, 2008, classified as discontinued operations, were as follows:

	Year Ended April 30, 2008
Revenue:	
Net product sales	$ 53,738,861
Contract revenue	5,023,412
Total revenue	58,762,273
Costs and expenses:	
Cost of product sales	54,989,022
Research and development	5,450,843
Selling, general and administrative	15,204,456
Amortization of intangibles	698,570
Impairment of long-lived assets(1)	58,900,000
Total costs and expenses	135,242,891
Operating loss	(76,480,618)
Interest expense, net(4)	(3,995,137)
Gain on disposal of business segment(3)	8,641,447
Other income, net	5,827
Loss from discontinued operations before taxes	(71,828,481)
Income tax benefit(2)	4,942,472
Loss from discontinued operations	$ (66,886,009)

(1) Includes impairment charges of $45.8 million related to intangibles, $9.6 million to write down property and equipment to estimated fair value and $3.5 million to write off goodwill associated with Tecstar Automotive Group's acquisition of Regency.

(2) Tax benefit mainly related to the elimination of a deferred tax liability in the amount of $4.9 million recognized in connection with the impairment of the remaining unamortized balances of intangibles assets.

(3) The components of the gain on disposal of the Tecstar Automotive Group business segment effective upon the cease of operations on January 16, 2008 consisted of the following:

Long term liabilities released by lender	$ 20,501,145
Less carrying value of net assets transferred to lender:	
Assets transferred to lender	(36,385,894)
Current liabilities assumed by lender	24,529,439
Long term liabilities assumed by lender	2,867,785
	(8,988,670)
Less other fees and costs incurred on disposal:	
Fee paid to lender upon transfer of net assets	(1,000,000)
Transaction fees and other costs	(1,871,028)
	(2,871,028)
Net gain on disposal	$ 8,641,447

(4) Net interest expense associated with our revolving line of credit and amortization of deferred loan fees were allocated 65% to the discontinued operations of the Tecstar Automotive Group business segment and 35% to continuing operations based on the estimated percentage of assets supporting the borrowing base of the respective operations. Included in fiscal year 2008 is allocated net interest expense of $1.3 million.

21. Subsequent Events

Notes 1 through 20 of the Notes to Consolidated Financial Statements incorporate disclosures of significant subsequent events that have occurred after our most recent Consolidated Balance Sheet as of April 30, 2010. These subsequent events are as follows:

- On various dates from April 30, 2010 through June 14, 2010 we raised cumulative gross proceeds of $10.6 million in connection with a private placement from the sale of 19.3 million shares of our common stock at a price of $0.55 per share. The investors and placement agent also received warrants in connection with the transactions. The net amount received by us from the transactions, after deducting placement agent fees and offering expenses, was approximately $9.1 million (of which $6.0 million was received subsequent to the latest reported balance sheet date of April 30, 2010). The private placement offering remained opened as of June 14, 2010. See Notes 1 and 14.
- On July 8, 2010, we modified certain debt obligations with our senior lender in exchange for a debt modification fee payable to the senior lender. We satisfied the debt modification fee with the issuance of 1.7 million shares of our common stock to the senior lender that had a fair value of $0.9 million on the modification date. The significant amendments to the debt instruments (see also Note 10) were as follows:
  - The maturity dates on the three convertible notes were changed from March 31, 2011 to July 31, 2011.
  - The earliest date specified in the original Consent Fee Term Note that the senior lender could make a demand if our VWAP was below $0.50 was changed from March 31, 2011 to July 31, 2011.

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

Valuation and qualifying accounts of our continuing operations are as follows:

Account Description	Balance at Beginning of Year	Additions Charged (Credited) to Costs and Expenses	Deductions and Other Adjustments	Balance at End of Year
Allowance for doubtful accounts for the year ended:				
April 30, 2008	$ 184,726	$ 643,178	$(220,943)	$ 606,961
April 30, 2009	606,961	(80,922)	(81,436)	444,603
April 30, 2010	444,603	9,316	(381,810)	72,109
Provision for obsolescence reserve for the year ended:				
April 30, 2008	$1,705,360	$ 186,318	$(836,130)	$1,055,548
April 30, 2009	1,055,548	1,294,645	(84,925)	2,265,268
April 30, 2010	2,265,268	618,356	(2,373)	2,881,251
Warranty reserve for the year ended:				
April 30, 2008	$ 466,373	$ 603,216	$(403,983)	$ 665,606
April 30, 2009	665,606	(22,823)	(419,290)	223,493
April 30, 2010	223,493	340,444	(474,183)	89,754

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: July 12, 2010

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

By: /s/ WILLIAM B. OLSON
William B. Olson, Chief Financial Officer and Treasurer
[Authorized Signatory and Principal Financial Officer]

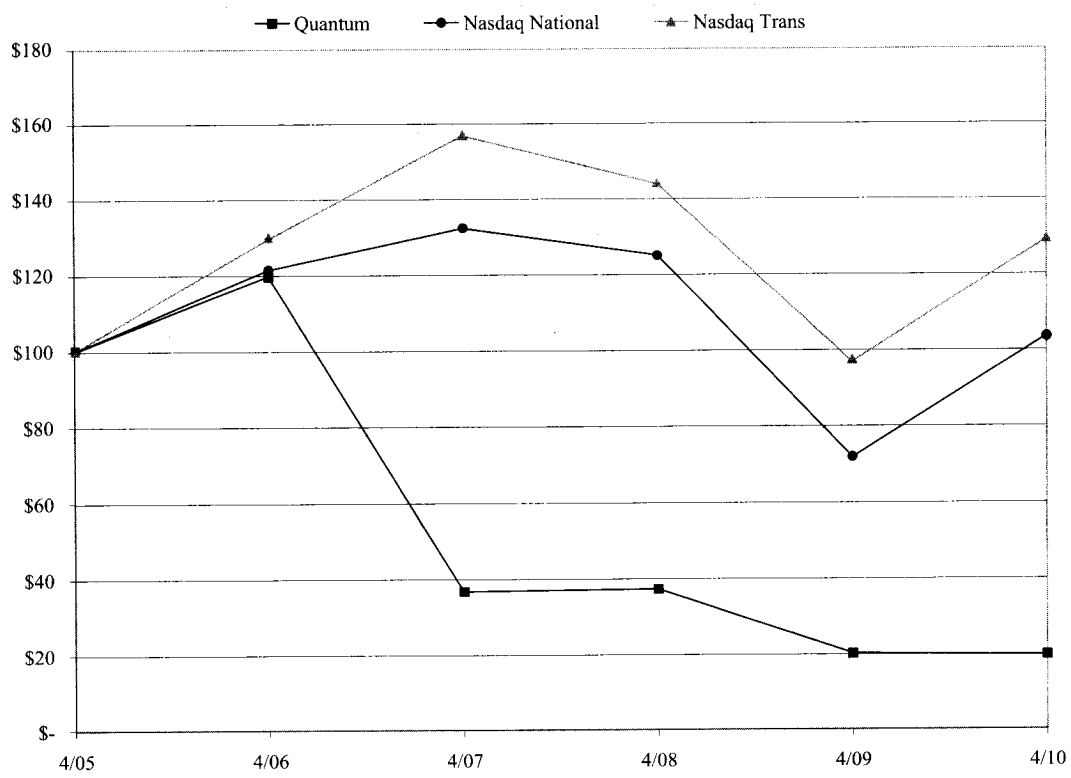
Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ ALAN P. NIEDZWIECKI **Alan P. Niedzwiecki**	President, Chief Executive Officer and Director (Principal Executive Officer)	July 12, 2010
/s/ W. BRIAN OLSON **W. Brian Olson**	Chief Financial Officer and Treasurer (Principal Financial Officer)	July 12, 2010
/s/ BRADLEY J. TIMON **Bradley J. Timon**	Controller (Principal Accounting Officer)	July 12, 2010
/s/ DALE L. RASMUSSEN **Dale L. Rasmussen**	Chairman of the Board of Directors	July 8, 2010
/s/ DAVID M. MAZAIKA **David M. Mazaika**	Chief Operating Officer	July 8, 2010
/s/ BRIAN A. RUNKEL **Brian A. Runkel**	Director	July 8, 2010
/s/ G. SCOTT SAMUELSEN **G. Scott Samuelsen**	Director	July 8, 2010
/s/ CARL E. SHEFFER **Carl E. Sheffer**	Director	July 8, 2010
/s/ PAUL GRUTZNER **Paul Grutzner**	Director	July 8, 2010
/s/ JONATHON LUNDY **Jonathon Lundy**	Director	July 8, 2010

Five-Year Stock Performance Graph

The following information does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other company filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the company specifically incorporates the report herein.

The following performance graph compares the cumulative stockholder return on our common stock on an annual basis, assuming an initial investment of $100, for the period beginning on April 30, 2005 and ending on April 30, 2010, with the cumulative total return of a broad market index (NASDAQ National Stock Market – CRSP Total Return Index) and an industry index (NASDAQ Transportation Stock Index) for the same period. We paid no dividends during the periods shown; the performance of the indexes is shown on a total return (dividend reinvestment) basis. The graph lines merely connect the prices on the dates indicated and do not reflect fluctuations between those dates. The comparisons in the graph below are based on historical data and are not intended to forecast the possible future performance of our common stock.



[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]

Corporate Information

Officers

Dale L. Rasmussen
Chairman of the Board

Alan P. Niedzwiecki
President & Chief Executive Officer

W. Brian Olson
Chief Financial Officer & Treasurer

David M. Mazaika
Chief Operating Officer

Kenneth R. Lombardo
Vice President-Legal, General Counsel & Corporate Secretary

Bradley J. Timon
Corporate Controller & Chief Accounting Officer

Directors

Dale L. Rasmussen
Chairman of the Board of Quantum Technologies

Alan P. Niedzwiecki
President & Chief Executive Officer of Quantum Technologies

Paul E. Grutzner
Founder & Managing Partner of ClearPoint Financial

Brian A. Runkel
President of Runkel Enterprises & Executive Director of the California Environmental Business Council

G. Scott Samuelsen
Director of the National Fuel Cell Research Center & Professor at the University of California, Irvine

Carl E. Sheffer
President of Sheffer Enterprises, LLC

Jonathan Lundy
Senior Vice President & General Counsel of Atomic Energy Canada Limited

---

Corporate Counsel
Kerr, Russell and Weber, PLC

Independent Auditors
Ernst & Young LLP

Transfer Agent and Registrar
BNY Mellon Shareowner Services
480 Washington Boulevard
Jersey City, NJ 07310-1900
1-800-832-8519

Quantum's Code of Business Conduct & Ethics is available on our website (www.qtww.com) under "About-Corporate Governance-Code of Conduct."

Annual Stockholders' Meeting
The annual meeting of stockholders will be held on
Thursday, September 30, 2010
at 1:30 p.m. PDT
at the Irvine Marriott Hotel
18000 Von Karman
Irvine, California 92612
949-553-0100

Some of the information in this Annual Report 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, and are subject to the "safe harbor" created by those sections. These statements include 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. Various risks and other factors, including, without limitation, those identified in the "Risk Factors" section of the Form 10-K included in this Annual Report, could cause actual results, and actual events that occur, to differ materially from those contemplated by the forward-looking statements. You should not place any reliance on forward-looking statements.

QUANTUM
TECHNOLOGIES

17872 Cartwright Road
Irvine, CA 92614
T: 949.399.4500 / / F: 949.399.4600
Email: Info@qtww.com

2010 Annual Report

QTWW.com
NASDAQ: QTWW