

CLEAN DIESEL TECHNOLOGIES INC
Form 10-K
April 07, 2017
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

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

For the fiscal year ended: December 31, 2016

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.: 001-33710

CLEAN DIESEL TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)
Delaware 06-1393453
State or other jurisdiction of (I.R.S. Employer
incorporation or organization Identification No.)

1621 Fiske Place
Oxnard, CA 93033

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (805) 639-9458

Securities registered pursuant to Section 12(b):

Title of each class	Name of each exchange on which registered
Common Stock, \$0.01 par value	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g): None

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

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

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

Indicate by check mark 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 Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

Large Accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☒
(Do not check if a

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 equity held by non-affiliates of the registrant, computed by reference to the closing price as of the last business day of the registrant's most recently completed second fiscal quarter, June 30, 2016, was \$6,460,563. This calculation does not reflect a determination that persons are affiliates for any other purposes. The registrant does not have non-voting common stock outstanding.

As of March 31, 2017, the registrant had 15,703,301 shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the registrant's 2017 Annual Meeting of Stockholders are incorporated by reference in Part III of this Annual Report on Form 10-K. Such Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of December 31, 2016, the last day of the fiscal year covered by this Annual Report on Form 10-K.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Annual Report on Form 10-K

For the Year Ended December 31, 2016

Table of Contents

PART I

<u>Item 1. Business</u>	<u>1</u>
<u>Item 1A. Risk Factors</u>	<u>8</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>18</u>
<u>Item 2. Properties</u>	<u>18</u>
<u>Item 3. Legal Proceedings</u>	<u>19</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>19</u>

PART II

<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>20</u>
<u>Item 6. Selected Financial Data</u>	<u>20</u>
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>21</u>
<u>Item 7A. Quantitative and Qualitative Disclosures about Market Risk</u>	<u>28</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>28</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>29</u>
<u>Item 9A. Controls and Procedures</u>	<u>29</u>
<u>Item 9B. Other Information</u>	<u>30</u>

PART III

<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>31</u>
<u>Item 11. Executive Compensation</u>	<u>31</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>31</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>32</u>
<u>Item 14. Principal Accounting Fees and Services</u>	<u>32</u>

PART IV

<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>33</u>
<u>Item 16. Form 10-K Summary</u>	<u>34</u>

<u>SIGNATURES</u>	<u>34</u>
-------------------	-----------

Table of Contents

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, adopted pursuant to the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve risks and uncertainties, as well as assumptions that could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements generally are identified by the words “may,” “will,” “project,” “might,” “expects,” “anticipates,” “believes,” “intends,” “estimates,” “should,” “could,” “would,” “strategy,” “plan,” or the negative of these words or other words or expressions of similar meaning. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements. These forward-looking statements are based on information available to us, are current only as of the date on which the statements are made, and are subject to numerous risks and uncertainties that could cause our actual results, performance, prospects or opportunities to differ materially from those expressed in, or implied by, the forward-looking statements. For a discussion of such risks and uncertainties, please see the discussion under the caption “Risk Factors” contained in this Annual Report on Form 10-K and in other information contained in this annual report and our publicly available filings with the Securities and Exchange Commission. You should not place undue reliance on any forward-looking statements. Except as otherwise required by federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or any other reason.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the Securities and Exchange Commission as exhibits thereto with the understanding that our actual future results and circumstances may be materially different from what we expect.

EXPLANATORY NOTE

The terms “CDTi” or the “Company” or “we,” “our” and “us” means Clean Diesel Technologies, Inc. and its consolidated subsidiaries as of the date of this Annual Report on Form 10-K. References to “Notes” are notes included in the consolidated financial statements included in this Annual Report on Form 10-K.

TRADEMARKS

The Clean Diesel Technologies name with logo, CDT logo, CDTi name with logo, CSI®, CATALYTIC SOLUTIONS®, CSI logo, ARIS®, BARETRAP®, BMARS™, CATTRAP®, COMBICLEAN®, COMBIFILTER®, DESIGNED TO FIT. BUILT TO LAST.™, DURAFIT™, DURAFIT OEM REPLACEMENT EMISSION TECHNOLOGIES™, MPC®, P2C™, PATFLUID®, PLATINUM PLUS®, PURIFIER and design, PURIFILTER®, PURIMUFFLER®, SPGM™, SPINEL™, THREE-WAY ZPGM™, TWO-WAY ZPGM™, ZPGM™, ZPGM TWC™, TERMINOX® and UNIKAT®, among others, are registered or unregistered trademarks of Clean Diesel Technologies, Inc. (including its subsidiaries).

Table of Contents

PART I

ITEM 1. BUSINESS

Company Overview

Clean Diesel Technologies, Inc. is a leading provider of technology and solutions to the automotive emissions control markets. We possess market leading expertise in emissions catalyst design and engineering for automotive and off-road applications. In particular, we have a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGM") and rare earth metals in coatings on vehicle catalytic converters. Our business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants.

We deliver our catalyst technology through the supply of materials and technology used in the catalyst coating process as well as finished products such as coated substrates and emission control systems. We supply our proprietary catalyst technologies to major automakers, heavy duty truck manufacturers, catalyst manufacturers, distributors, integrators and retrofitters.

We produce coated substrates at our ISO Technical Specifications certified manufacturing facility in Oxnard, California. In some instances, the coated substrates we produce are integrated into exhaust systems by third-party manufacturers before being shipped to our end customer. We also supply coated substrates directly to exhaust systems manufacturers for incorporation in their own products.

Over the past decade, we have developed several generations of high performance catalysts, including our low-PGM mixed phase catalysts, or MPC® that are used on certain new Honda vehicles. During the same period we have developed the ability to deliver our catalyst technology to other catalyst manufacturers in the form of functional powders or material systems. Recently, we have expanded our offering of material systems beyond MPC® to include new synergized-PGM diesel oxidation catalysts, or SPGM™ DOCs, base-metal activated rhodium support, or BMARS™, and Spinel™ technologies. Most catalytic systems require significant amounts of costly PGMs to operate effectively. Our family of unique high-performance material systems, featuring inexpensive base-metals with low PGM content will enable further advances in catalyst performance. We are marketing these new catalyst technologies to other catalyst manufacturers in a proprietary powder form, which will allow them to capture the benefits of our advanced catalyst technology in their own manufacturing operations and will provide a new source of revenue for the Company.

Strategy

Over more than twenty years, we have developed the emissions control technology and manufacturing know-how to allow us to progress to delivering enabling technology for manufacturers serving the emissions catalyst market. The ability to deliver our advanced materials to other catalyst producers as functional powders allows us to achieve greater scale and higher return on our technology investment than would be possible as a manufacturer of emission control systems. The strategy to provide our technology to other manufacturers has significantly increased the size of our addressable market and provides access to markets that would not be achievable as a catalyst producer. In the short term, we are focusing our efforts and resources by pursuing opportunities in fast growing markets in China and India, as well as North America, where we believe that we can serve profitably with our technology provider business model.

The Chinese market offers significant opportunity as the world's single largest automotive market with over 24 million vehicles produced in 2016. There is an extensive emission control systems supply chain serving domestic and international automobile manufacturers in China. Somewhat unique to China, there are many domestic catalyst manufacturers serving the automotive market in competition with the large global catalyst producers. This segment of the market requires technology and know-how to adhere to increasingly stringent emissions standards and to deliver competitively priced catalysts. In addition, there is significant pressure for the Chinese automotive market to address increasing air pollution, an issue that has escalated to become a matter of public policy. We believe these factors provide a highly favorable environment for our products and technology.

Air quality is also an important market driver in India where annual vehicle production was over 4 million in 2016. India has a number of domestic vehicle manufacturers that are served by both global and local catalyst manufacturers. There is significant opportunity to provide enabling technology to domestic catalyst producers with the appropriate manufacturing expertise.

North America continues to be a leading global automotive market with over 18 million vehicles produced in 2016. We have focused our resources in North America on developing the growing original equipment manufacturer ("OEM") diesel particulate filter ("DPF") and diesel oxidation catalysts ("DOC") replacement market. We currently serve that market directly with our DuraFit™ product line and through the supply of technology and products to other manufacturers and distributors for sale under their own brand. We believe that our technology has the potential to become the market standard in the OEM DPF and DOC replacement market.

Table of Contents

In support of this strategy, we have filed approximately 215 patents that underpin next-generation technology for our advanced zero-PGM or ZPGM and low-PGM catalysts, and during 2015 and 2016, we completed an initial series of vehicle tests to validate our next-generation technologies. Based on the success of these tests, we are beginning to make our new catalyst technologies available to OEMs, catalyst coaters and other participants in the emission reduction supply chain for use in proprietary powder form, and we foresee multiple paths to market our new technologies.

Emissions Control Industry Overview

Regulatory standards have been adopted worldwide to control the exhaust emissions from on- and off-road engines. These emissions typically include nitrogen oxides, hydrocarbons, particulate matter, carbon monoxide and more recently greenhouse gases such as carbon dioxide. Emission regulations for mobile sources have tightened and expanded over the years due to an increased understanding of the impacts of these emissions on human health and the environment, which is highlighted by the following:

According to a March 2014 EPA report, over 149 million Americans today still experience unhealthy levels of air pollution which are linked to adverse health impacts such as hospital admissions, emergency room visits and premature mortality.

In a 2014 State of the Air report prepared by the American Lung Association, it was documented that air pollution hovers at unhealthy levels in almost every major city, placing lives at risk. The same report indicated that cleaner diesel engines helped cut year-round particle pollution in many areas.

According to a 2013 report published by the World Health Organization, exposure to particulate matter less than 2.5 micrometers in diameter (PM_{2.5}) reduces the life expectancy of each person in Europe by an average of 8.6 months. A comprehensive 2016 study led by Tsinghua University and the Health Effects Institute found that, with continued actions to control air pollution, levels will decline substantially by the year 2030, and 275,000 premature deaths will be avoided in the People's Republic of China.

Because standards put in place by the United States Environmental Protection Agency, or EPA, the California Air Resources or CARB, the European Union, the Chinese Ministry of Environmental Protection and other international regulators continue to become more restrictive, we view the market opportunities for our products as continually expanding. Our light duty vehicle catalyst products and heavy duty diesel emission control systems are designed specifically to deal with emissions from gasoline, diesel and a variety of alternative fuel powered engines.

Light Duty Vehicles

Key milestones in the evolution of light duty vehicle emissions control in the U.S. are summarized in the table below:

- Congress passed the Clean Air Act, which required a 90% reduction in emissions from new automobiles by 1970 1975, and resulted in the introduction of the first generation two-way catalytic converter to remove carbon monoxide and hydrocarbon emissions.
- 1977 Congress amended the Clean Air Act in order to further reduce the limits for nitrogen oxide emissions which resulted in the introduction of the three-way catalytic converter in 1981.
- 1990 Amendments were made to the Clean Air Act to further reduce nitrogen oxide emission limits by another 40% beginning in 1994. These "Tier 1" standards also resulted in standards for certain trucks.
- The Clinton Administration, auto industry and Northeast States came to a voluntary agreement to implement the National Low Emissions Vehicles, or NLEV, which was fully implemented across the U.S. by 2001.
- 1998 Additionally, CARB adopted the Low Emission Vehicle II, or LEV II, program which was a predecessor to the EPA's "Tier 2" standards set in 1999, which took effect in 2004.
- The EPA announced their finalized "Tier 3" standards, which are to be phased in between 2017 and 2025. These standards further reduce emissions from light duty vehicles by approximately 70% to 80% and are closely coordinated with the CARB LEV III standards. Of particular note, particulate matter standards are being further tightened to ensure that new advanced combustion strategies such as gasoline direct injection and diesel fueled vehicles do not pose additional new sources of pollution.
- 2014

Light Duty Vehicles—International Markets

Europe implemented similar regulations as those noted above under Euro III (effective 2000), Euro IV (effective 2005), Euro V (effective 2009) and Euro VI (effective 2016).

Table of Contents

In India the current emission standard is at BSIII going to BSIV nationwide (similar to Euro-IV) with discussions still on-going concerning timing to implement BSV and BSVI.

China has the world's largest passenger car market and is transitioning to China V (equivalent to Euro-V) in 2016 and 2017, with a complex set of regional deadlines. China VI (with an accelerated timetable for Beijing called "Beijing 6") is set to be implemented in 2019. China VI is equivalent to Euro-VI.

Heavy Duty Diesel Engines

Key milestones in the evolution of heavy duty diesel engine emissions control in the U.S. are summarized in the table below.

1985	The EPA first mandated emission standards for diesel-fueled trucks and buses. Emissions standards were largely met with advanced engine technologies. In approximately 375 engine
1991 - 2006	certifications between 1994 and 2006, diesel oxidation catalysts were also used to help engines comply with particulate matter standards.
2007	The EPA and CARB standards further reduced particulate matter emissions limits for heavy duty engines by an additional 90% which led to the introduction of catalyzed diesel particulate filters, or CDPF. EPA 2010 significantly lowers the tailpipe emissions of nitrogen oxides, or NOx compared to the 2007
2010	standard. 2010 tailpipe standards in US have led to the use of selective catalytic reduction, or SCR in addition to DOC and filters commonplace in EPA 2007 systems.

Off-road compression ignition emissions standards (non-road Tier 1) were first set in 1996 and consistently phased in and further tightened by off-road Tier 2 and Tier 3 emissions limits. Tier 4 emissions limits which have been phased in between 2011 and 2014 saw the first introduction of various exhaust emissions controls including diesel oxidation catalysts, diesel particulate filters and selective catalytic reduction catalysts. Given the global nature of the off-road diesel powered equipment market, common EPA and European Union standards have typically been enacted at comparable times.

Emerging Replacement Market in North America

According to market analysis firm Power System Research, manufacturers in North America have produced on average of 250,000 heavy duty on-road diesel vehicles equipped with a diesel particulate filter each year since 2007 to comply with EPA requirements. The typical OEM warranty on diesel particulate filters is five years and has expired for many of these vehicles with more continuing to expire in the coming years. As 2007 and newer diesel particulate filters from OEMs fail and require replacement, non-OEM diesel particulate filters will be needed as replacements. According to a 2012 industry report, the market for medium and heavy duty vehicle after-treatment maintenance and repair is projected to grow from \$0.5 billion in 2010 to \$3.0 billion by 2017. In the third quarter of 2014, we introduced the CDTi manufactured DuraFit™ OEM replacement diesel particulate filters through our channel of distributors to provide an alternative to OEM manufactured parts. We expect to leverage our existing technology and know-how to serve this emerging market.

Heavy Duty Diesel Engines—International Markets

Europe has adopted the stringent Euro-VI standard for heavy-duty vehicles which has led to systems using DOC, particulate filters and SCR. China is following the European standards and is currently implementing Euro-V with Euro-VI set to begin in 2010 with an accelerated version in Beijing. India is currently at BSIV (similar to Euro-IV) and is discussing the timetable for BSV and BSVI implementation.

Technology

In addition to our traditional catalyst products (TWC, DOC, CDPF and SCR), we have succeeded in developing a broad technology portfolio of new materials and catalysts to meet and exceed regulatory emission standards around the globe. We have focused on the two products, Three-Way Catalysts (TWC) and Diesel Oxidation Catalysts (DOC), that currently utilize a significant amount of PGMs. In particular, our BMARS™, Spinel™ and MPC® powder materials and catalyst products

developed from these technologies: SPGM™ DOC, SPGM™ TWC and TWC using BMARS™ and MPC®, are at the core of our business.

Spinel™. Our Spinel™ technology is a unique clean emissions exhaust technology which we believe will dramatically reduce the cost of attaining more stringent clean air standards. Spinel was the name initially given to

naturally-occurring magnesium aluminate (MgAl_2O_4) and is now used to describe any composition with the same structure. Our Spinel™ technology can employ numerous low-cost metals in the spinel structure enabling use in a wide range of engine and vehicle applications, both gasoline and diesel, as well as other potential vertical markets. Our unique Spinel™ technology utilizes various base metals, which when combined together in a common structure, achieve

Table of Contents

unusual and very effective catalytic conversion activity. Spinel™ technology is ideal for the coating of catalytic converters, an alternative to those utilizing costly PGMs and rare earth materials. The base metals we use are common and inexpensive compared to PGMs, such as platinum, palladium and rhodium, and rare earth metals, such as cerium, lanthanum and neodymium. We believe Spinel™ technology will provide significant cost savings over conventional coating formulations. In addition, the Spinel™ technology structure is extremely versatile and stable. The versatility is critical for optimizing future generations of products to meet changing catalytic conversion needs for rapidly evolving engine technologies and increasingly stringent clean air standards. The stability of Spinel™ is critical to provide superior catalytic performance over time and at extreme temperatures for lifetime durability. In addition to SPGM™ and ZPGM™ catalysts, we currently have oxygen storage material, or OSM, under development, which synergizes PGM function and drives the critical vehicle on-board diagnostic system. Our newest family of advanced low-PGM and ZPGM™ oxide compounds based upon our Spinel™ technology is summarized below:

To date, we have filed numerous patents on our Spinel™ technology and two were issued in late 2014.

BMARS™. We have developed and patented intellectual property rights to a novel technology for enhancing the catalytic activity of rhodium known as base-metal activated rhodium on Support (BMARS™). This technology is in the form of a nano-scale powder that can be used by catalyst manufacturing partners in the production of TWC. The products made from these novel materials exhibit superior NOx performance at reduced rhodium loading.

MPC®. We have developed and patented intellectual property rights to a novel technology for creating and manufacturing catalysts known as mixed phase catalysts (MPC®). This technology involves the self-assembly of a ceramic oxide matrix with catalytic metals precisely positioned within three-dimensional structures. The MPC® design gives our catalyst products two critical attributes that we believe differentiate them from competing offerings: superior stability that allows heat resistance and high performance with very low levels of precious metals; and base metal activation that allows base metals to be used instead of costly PGMs without compromising catalytic performance.

SPGM™ DOC. We have developed powder materials that can be used to produce SPGM™DOC, synergized PGM diesel oxidation catalyst. The unique materials developed enable a low PGM and high performance DOC for use in a range of applications, including systems utilizing particulate filters and SCR for advanced emission standards.

Platinum Plus®. We have developed and patented our Platinum Plus® fuel-borne catalyst as a diesel fuel soluble additive, which contains minute amounts of organo-metallic platinum and cerium catalysts. Platinum Plus® enables rapid conversion of particulate matter from diesel engines when coupled with a diesel particulate filter. It also improves combustion, which acts to reduce engine-out emissions. Platinum Plus® fuel-borne catalyst lends itself to a wide range of enabling solutions including diesel particulate filtration, low emission biodiesel, carbon reduction and exhaust emission reduction.

Table of Contents

ARIS®. We have developed technology for selective catalytic reduction using urea, which is a highly effective method of reducing oxides of nitrogen. ARIS® technology forms a key part of the selective catalytic reduction system and is an advanced, computer-controlled, reagent injection system.

We protect our proprietary technologies, along with our other intellectual property, through the use of patents, trade secrets and registered and common law trademarks. For additional information, refer to the "Intellectual Property" discussion below.

Competitive Advantages

Through a focused technology development campaign, we have developed a full suite of materials for gasoline and diesel engines with an associated broad portfolio of emission control catalysts. We believe that our technologies and products represent a fundamentally different solution, and the following competitive strengths position us as a leading provider of emission control products and systems.

Superior Catalyst Performance. Our proprietary technology enables us to produce catalytic coatings capable of significantly better catalytic performance than those previously available. We have achieved this demonstrated performance advantage by creating catalysts using unique nanostructures with superior stability under prolonged exposure to high temperatures. As a result, in heavy duty diesel and automotive applications, our catalyst formulations are able to maintain high levels of performance over time using substantially lower, or zero, PGMs than products previously available.

Catalyst Cost Advantage—Addressing Global PGM Supply and Demand. Expensive PGMs, which include palladium, platinum and rhodium, and rare earth metals such as cerium, neodymium and lanthanum, are used in the manufacture of emission control catalysts, with palladium being the primary component used in catalysts serving the global light duty vehicle market. According to Johnson Matthey PLC's "Platinum 2013 Interim Review", in 2013, over 70% of all primary platinum and 80% of all primary rhodium produced originated in South Africa. Russia and South Africa combined supplied over 75% of palladium. We believe that the continued growth in supply of these metals from the mines in South Africa and Russia will be critical in order to meet the increasingly stringent global emission control standards. According to the same report, it is estimated that more than \$6 billion is spent annually by OEMs on PGM purchases for catalysts. The global auto industry is expected to produce over 100 million vehicles by 2018, according to IHS Automotive. These production levels are expected to result in a continued increase in PGM demand for the foreseeable future. In addition, continued tightening of emission standards by regulators globally will require increased loading of PGM in emission catalysts. The new materials developed at CDTI enable OEMs and their suppliers to drastically reduce the PGM loadings in the DOC and TWC products that currently require the high cost of elevated PGM usage.

Highly Customizable Catalyst Formulations. Our proprietary MPC® technology is a design approach, as opposed to a single chemical formulation. We have developed this technology since inception as a platform that can be tailored for a range of different catalyst applications. Specifically, our formulations can be tailored in two distinct ways. First, the oxide compounds used in our formulations can be adapted for specific applications by adding to them, or doping them with, a wide range of chemical elements. Second, we are able to vary the mixtures of our compounds to create customized solutions for specific applications for different vehicle platforms within the auto industry, complex heavy duty diesel equipment for OEMs, aftermarket and retrofit markets, and for different applications in the energy sector, such as selective catalytic reduction nitrogen oxide control for industrial and utility boilers, process heaters, gas turbines and generator sets. These could also include applications in the fuel cell, petrochemical and refinery, and thermoelectric industries.

Proven Durability. Our products and systems have undergone substantial laboratory and field testing by our existing and prospective customers and have demonstrated their durability and reliability in a wide range of applications in actual use for many years. In addition, our products and systems have achieved numerous certifications and meet or exceed industry standards.

Broad Portfolio of Verified Heavy Duty Diesel Systems. We believe we offer one of the industry's most comprehensive portfolios of system products that have been evaluated and verified (approved) by the EPA and CARB, as well as regulators in several European countries, for use in engine retrofit programs and in the aftermarket segment. Additionally, we have a thorough understanding of the verification process and the demonstrated ability to

obtain broad verifications of products for use in the retrofit market.

Compatibility with Existing Manufacturing Infrastructure and Operating Specifications. Catalytic converters using our catalyst products are compatible with existing automotive manufacturing processes as well as specific vehicle operating specifications. Our customers generally do not need to change their manufacturing operations, processes, or how their products operate in order to utilize our proprietary technology. Our heavy duty diesel emission control

Table of Contents

products and solutions are engineered to each customer's specific application and designed to deliver custom and industry-leading solutions that meet or exceed environmental mandates.

Products

We categorize our products as follows:

Gasoline Engines	<p>We offer a range of advanced powder materials for use in catalyst products for emission control from gasoline engines: MPC®, BMARS™ and Spinel™. In addition we provide the catalyst products themselves in high-value applications where necessary. We believe catalytic converters using our technology have superior catalytic performance, can cost substantially less as a result of significantly reduced PGM loadings, have comparable or better durability and are physically and operationally compatible with all existing manufacturing processes and operating requirements. Our solution is based on industry-leading, patent-protected technology and a scalable manufacturing business model.</p> <p>We offer proven and robust catalyst products for emissions control from diesel engine applications: catalyzed particulate filters and diesel oxidation catalysts. Current techniques for diesel engines to meet emissions standards require the use of several methods, including diesel oxidation catalysts, catalyzed diesel particulate filters and selective catalytic reduction systems. We offer a full range of catalyst products for the control of carbon monoxide, hydrocarbons, particulate matter and nitrogen oxide in light and heavy duty applications. A new generation of materials is now available that enable catalyst manufacturing partners to commercialize SPGM™ DOC products for improved performance and low PGM usage.</p>
Diesel Engines	
Energy Applications	<p>We have developed and can manufacture catalysts for use in selective catalytic reduction and carbon monoxide reduction systems, which are used to reduce nitrogen oxide and carbon monoxide emissions from natural gas and petroleum gas burning utility plants, industrial process plants, OEMs, refineries, food processors, product manufacturers and universities.</p>
Advanced Catalytic Materials	<p>We have developed a complete suite of high performance and cost efficient technologies that can be offered in powder form to catalyst suppliers for inclusion in their manufacturing processes to address global demand by OEMs.</p>

Sales and Marketing

We deliver our catalyst technology to customers as finished products such as coated substrates and emissions control systems as well as through the supply of materials and technology used in the catalyst coating process.

We supply our proprietary catalyst technologies to the OEM segment including automakers, heavy duty truck manufacturers, catalyst manufacturers, and aftermarket participants including distributors, integrators and retrofitters.

In the OEM segment, we utilize a business development team, with technical backgrounds, to pursue customers that can benefit from the use of our technology in the manufacture of their own catalysts. The catalyst industry is mainly comprised of a few suppliers serving large, sophisticated customers such as automobile manufacturers. Extensive interaction is required between catalyst manufacturers and the auto maker in the course of developing an effective, reliable catalyst for a particular application. We produce coated catalysts and continue to be an approved supplier of catalysts for major automotive manufacturers. Our ability to deliver our technology in powder form to catalyst manufacturers has enhanced our ability to market our products globally and to other catalyst manufacturers.

In the aftermarket segment, we sell emissions control products to automotive aftermarket suppliers and distributors for the OEM DPF and DOC replacement market. OEM replacement products are sold through the OEMs proprietary service network or through independent distributors and retailers. We are present in the OEM replacement market with Durafit™ brand of OEM replacement diesel particulate filters and diesel oxidation catalysts as well as through the sale of products to other manufacturers. Retrofit applications generally involve funded projects that use "approved systems" that are one-off in nature. Typical retrofit end-user customers include school districts, municipalities and other fleet operators, and the market for our heavy duty diesel systems products is heavily influenced by government funding of emissions control projects.

Competition

The automotive emissions control industry is highly concentrated with a few major competitors as a result of continuing consolidation through acquisitions. The major competitors are diversified enterprises with catalysts

representing one of several lines of business. Globally, we and our catalyst manufacturer customers compete directly against BASF GmbH, Johnson Matthey PLC and Umicore Limited Liability Company. In the North America heavy-duty diesel market, competitors also include, Donaldson Company, Inc., ESW, Inc., Hug Filtersystems, and DCL International, Inc.

In the worldwide market the key competitive factors are:

Table of Contents

- Ability to provide a solution that satisfies emission reduction regulations;
- Total cost of product (inclusive of PGM);
- Ability to transition new products from development to production;
- Quality control that guarantees 100% compliance with specifications;
- On-time delivery to support customer production requirements; and
- Financial stability and global reach.

Our strategy of transitioning to an advanced materials company is intended to enable broad commercialization of our technology without the need for a global manufacturing footprint. In particular, our ability to provide enabling technology to domestic catalyst manufacturers in key growth markets will allow our customers to defend and grow their market share.

Research and Development

Our research and development in catalyst technology is our core strength and has resulted in a broad array of products for the light duty vehicle and heavy duty diesel markets. We believe that the technical sophistication and cost-to-performance ratio of our products truly distinguishes our company. Product development for TWC and DOC has resulted in a broad family of verified products and systems. We credit our accomplishments to date to innovation, technology differentiation, application engineering expertise, highly targeted product development efforts and solid experience in the verification and approval process.

Intellectual Property

Our intellectual property includes patent rights, trade secrets and registered and common law trademarks. Historically, we have primarily protected our intellectual property, particularly in the area of three-way catalysts (and particularly in the automotive area) by maintaining our innovative technology as trade secrets. We believe that the protection provided by trade secrets for our intellectual property was the most suitable protection available for the automotive industry where our business initially started and in which we currently sell our commercial products. Our automotive competitors largely rely on trade secret protection for their innovative technology.

In order to more broadly commercialize our technology in new business models, we have sought patent protection in relation to any new industries and new countries in which we expect to do business. We currently have approximately 111 issued patents and approximately 177 pending applications covering the following main technologies: fundamental catalyst formulations based on perovskite mixed metal oxides applicable to all catalyst markets, Spinel™ technology, Mixed Phase Catalyst (MPC®) technology, PGM-free catalyzed diesel particulate filter, selective catalytic reduction, diesel oxidation catalyst, ZPGM™ three-way catalyst formulations, ZPGM™ diesel oxidation catalyst, palladium three-way catalyst formulations, fuel-borne catalysts, optimization and stabilization of oxygen storage materials without rare earth materials, exhaust gas recirculation with selective catalytic reduction and exhaust systems for diesel engines incorporating particulate filters. Currently, our patents have expiration dates ranging from 2017 through 2033.

We have conducted an analysis of our technologies and intellectual property and have decided to aggressively patent our important technologies going forward. While we continue to rely on a combination of trade secrets, know-how, trademark registrations, confidentiality and other agreements with employees, customers, partners and others, we intend to strengthen our position through the prosecution of patents to protect our intellectual property rights pertaining to our products and technology.

We currently have registered and unregistered trademarks for the Clean Diesel Technologies name with logo, CDT logo, CDTi name with logo, CSI®, CATALYTIC SOLUTIONS®, CSI logo, ARIS®, BARETRAP®, BMARSTM, CATRAP®, COMBICLEAN®, COMBIFILTER®, DESIGNED TO FIT. BUILT TO LAST.™, DURAFIT™, DURAFIT OEM REPLACEMENT EMISSION TECHNOLOGIES™, MPC®, P2C™, PATFLUID®, PLATINUM PLUS®, PURIFIER and design, PURIFILTER®, PURIMUFFLER®, SPGM™, SPINEL™, THREE-WAY ZPGM™, TWO-WAY ZPGM™, ZPGM™, ZPGM TWC™, TERMINOX® and UNIKAT®.

Manufacturing Operations

We have developed innovative and sophisticated manufacturing processes for coating substrates using our proprietary catalytic coatings. The manufacturing process consists of preparing coatings direct or in powder form via controlled mixing and calcination, then coating and further calcining (one or multiple times) the coated substrates. The process of

mixing and applying the various types of coatings onto high cell density substrates is complex and requires sophisticated manufacturing technology. We have been manufacturing automotive catalysts in house since 1999 perfecting those technologies. Our manufacturing processes are designed to provide a high level of quality control at every step of our unique manufacturing

Table of Contents

process. We coat our proprietary catalyst products at our Oxnard, California manufacturing facility as well as support our downstream partners in deploying coating processes in their global facilities to enable them to correctly apply our unique products.

For our complete turnkey DuraFit™, Purifilter™, and private label family emissions products we outsource the manufacture of the metal enclosures, accessories and hardware which complete the unit sold to the end customer. We maintain ISO 9001:2008, ISO/TS 16949:2009 and ISO 14001:2004 certifications for our facilities.

Our raw material requirements include significant purchases of ceramic substrates filters that we coat with specialty formulated catalytic materials comprised of platinum group metals (PGMs) and various chemicals. PGMs and substrates are either provided on a consignment basis by the customers or are purchased by us on behalf of the customer. The availability of raw materials is generally dictated by global market supply of key materials. Delivery of key materials such as rare earth metals and PGMs have been at times constricted due to global supply constraints. The ceramic substrates and filters that we buy can generally be purchased from more than one source, limiting our risk of supply. Changing suppliers for some raw materials may require regulatory or customer approval. For further discussion of risk of supply, refer to "Item 1.A. Risk Factors".

Regulations

We are committed to complying with all federal, state and international environmental laws governing production, use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our emissions control products, including, but not limited to, required compliance with emissions standards applicable to new product diesel, gasoline and alternative fuel engines. These regulations include those developed in Japan, in the United States by the EPA and CARB and in the E.U. by the European Environment Agency, including standards from the Verification of Emission Reduction Technologies, or VERT, Association.

Many of our products must receive regulatory approval prior to sale. In the United States, regulatory approval is obtained from the EPA or CARB through a verification process. The verification process includes a thorough review of the technology as well as tightly controlled testing to quantify statistically significant levels of emission reductions. For example, the EPA verification process begins with a verification application and a test plan. Once this is completed, the testing phase begins and is then followed by a data analysis to determine if the technology qualifies for verification. Once a technology is placed on the verified technologies list and 500 units are sold, the manufacturer is responsible for conducting in-use testing and reporting of results to the EPA. Where we own the verification, primarily in retrofit, we are responsible for this testing. Similar product approval schemes exist in other countries around the world.

Company History

We are a Delaware corporation formed in 1994 as a wholly-owned subsidiary of Fuel Tech, Inc., a Delaware corporation (formerly known as Fuel-Tech N.V., a Netherlands Antilles limited liability company) ("Fuel Tech"), and were spun off by Fuel Tech in a rights offering in December 1995 on the NASDAQ Stock Market (Symbol CDTI). On October 15, 2010, we completed a business combination with Catalytic Solutions, Inc. ("CSI"), a California corporation formed in 1996, when our wholly-owned subsidiary, CDTI Merger Sub, Inc., merged with and into CSI. We refer to this transaction as the "Merger." The Merger was accounted for as a reverse acquisition and, as a result, our Company's (the legal acquirer) consolidated financial statements are now those of CSI (the accounting acquirer), with the assets, liabilities, revenues and expenses of CDTI being included effective from October 15, 2010, the closing date of the Merger. From November 22, 2006 through the closing date of the Merger, CSI's common stock was listed on the AIM of the London Stock Exchange (AIM: CTS and CTSU).

Employees

As of December 31, 2016, we had 97 full time employees and 2 part time employees. None of our employees is a party to a collective bargaining agreement. We also retain outside consultants and sales and marketing consultants and agents.

ITEM 1A. RISK FACTORS

We are subject to risks and uncertainties that may affect our future financial performance and our stock price. Some of the risks and uncertainties that may cause our financial performance to vary or that may materially or adversely affect our financial performance or stock price are discussed below. Any of these risks, as well as other risks and uncertainties not known to us or that we believe to be immaterial, could harm our financial condition, results of operations or cash flows. You should carefully consider the risks described below in addition to the cautionary statements and risk factors described elsewhere and the other information contained in this Annual report on Form 10-K and in our other filings with the SEC, including subsequent reports on Forms 10-K, 10-Q and 8-K, before deciding to purchase, hold, or sell our stock.

Table of Contents

Risks Related to Our Financial Condition

We have limited cash and experience negative cash flows from operations, and may need to raise additional capital to sustain our operations. If we are unable to raise additional capital when needed, we may be forced to seek to reorganize under bankruptcy laws or liquidate. As a result, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

As of December 31, 2016, we had cash of \$7.8 million, and indebtedness of \$3.3 million. Additionally, we have historically operated with negative cash flows from operations and had operating cash flow deficits of \$7.0 million and \$11.6 million for the years ended December 31, 2016 and 2015, respectively. Due to these conditions, substantial doubt exists as to our ability to continue as a going concern. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Our inability to raise capital when needed may cause us to reorganize our balance sheet and operations, or liquidate, under the protection of the U.S. Bankruptcy Code, which could result in a loss of your entire investment. Consistent with the foregoing, our auditors have rendered a going concern opinion in respect of our financial statements.

We may require additional working capital to maintain our operations in the form of funding from outside sources which may be limited, difficult to obtain, or unavailable on acceptable terms or not available at all, or in the case of an offering of common stock or securities convertible into or exercisable for common stock, may result in dilution to our existing stockholders.

We have historically relied on outside sources of funding in the form of debt or equity. Although we have a demand credit facility backed by our receivables and inventory, there is no guarantee that we will be able to borrow to the full limit of \$7.5 million if the lender chooses not to finance a portion of our receivables or inventory. Additionally, the lender may terminate the facility at any time. We were successful in raising net proceeds of approximately \$10.2 million and \$7.1 million through private and public offerings of shares during the years ended December 31, 2016 and 2015, respectively, but there is no guarantee that should the need arise, we will be able to do so again.

Any required additional funding may be in the form of debt financing or a private or public offering of equity securities. We believe that debt financing would be difficult to obtain because of our limited assets and cash flows as well as current general economic conditions. Any additional offering of shares of our common stock or of securities exercisable for or convertible into shares of our common stock may result in further dilution to our existing stockholders. Our ability to consummate a financing will depend not only on our ability to achieve positive operating results, but also on conditions then prevailing in the relevant capital markets. There can be no assurance that such funding will be available if needed, or on acceptable terms. In the event that we are unable to raise such funds, we may be required to delay, reduce or severely curtail or cease our operations or the implementation of our business strategies or otherwise impede our on-going business efforts and/or seek reorganization under the U.S. Bankruptcy Code, any of which could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

Future growth of our business depends, in part, on the general availability of funding for emissions control programs, enforcement of existing emissions-related environmental regulations, further tightening of emission standards worldwide, market acceptance of our catalyst products, and successful product verifications.

Although retrofit is a declining part of our business, future growth of our business depends in part on the general availability of funding for emissions control programs, which can be affected by economic as well as political reasons. Additionally, funding for the EPA's Diesel Emissions Reductions Act, or DERA, for 2016 was substantially reduced from historic levels, and future funding remains uncertain as budget discussions continue to be debated in the U.S. Congress. Funding under the U.S. Congestion Mitigation and Air Quality program, or CMAQ, can be used by states for a variety of emission reduction programs including purchase of new vehicles, building high occupancy travel lanes (car-pool lanes) and retrofit programs. To the extent that these funds are not used for retrofit programs, it limits our sales opportunities. Funding for these types of emissions control projects drives demand for our products. If such funding is not available, it can negatively affect our future growth prospects. In addition to funding, we also expect that our future business growth will be driven, in part, by the enforcement of existing emissions-related environmental

regulations, further tightening of emissions standards worldwide, market acceptance of our catalyst products and successful product verifications. If such standards do not continue to become stricter or are loosened or are not enforced by governmental authorities due to commercial and business pressure or otherwise, it could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

Table of Contents

The pursuit of opportunities relating to special government mandated retrofit programs requires cash investment in operating expenses and working capital such as inventory and receivables prior to the realization of profits and cash from sales and, if we are not successful in accessing cash resources to make these investments, we may miss out on these opportunities; further, if we are not successful in generating sufficient sales from these opportunities, we will not realize the benefits of the investments in inventory, which could have an adverse effect on our business, financial condition and results of operations.

Although retrofit is a declining part of our business, we are pursuing revenue generating opportunities relating to special government mandated retrofit programs such as those in California and potentially others in various jurisdictions in North America, Europe and Asia. Opportunities such as these require cash investment in operating expenses and working capital such as inventory and receivables prior to realizing profits and cash from sales. If we are not successful in accessing cash resources to make these investments, we may miss out on these opportunities.

Further, if we are not successful in generating sufficient sales from these opportunities, we will not realize the benefits of the investments in inventory, which would have an adverse effect on our business, financial condition and results of operations.

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, which will likely result in significant legal and accounting expense and diversion of management resources, and current and potential stockholders may lose confidence in our financial reporting and the market price of our stock will likely decline.

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 disclosure controls and to disclose any changes and material weaknesses in those internal controls.

Any failure to maintain internal controls could adversely affect 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. If we do not file our financial statements on a timely basis as required by the SEC and The NASDAQ Capital Market, we could face negative consequences from those authorities. In either case, there could be a material adverse effect 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 common stock. We can give no assurance that material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, in the future our controls and procedures may no longer be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements. Responding to inquiries from the SEC or The NASDAQ Capital Market, regardless of the outcome, is likely to consume a significant amount of our management resources and cause us to incur significant legal and accounting expense. Further, many companies that have restated their historical financial statements have experienced a decline in stock price and related stockholder lawsuits.

The debt conversion completed in the third quarter of 2016 adversely affects our ability to take advantage of significant U.S. federal tax loss carryforwards and accumulated tax credits.

In connection with the debt conversion, we performed a study to evaluate the status of net operating loss carryforwards. Because the debt conversion caused an "ownership change" (as defined for U.S. federal income tax purposes), our ability to use our net operating losses and credits in future tax years has been significantly limited. In addition, due to the "ownership change," our federal research and development credits have also been limited and, consequently, we do not anticipate being able to use any of these credits that existed as of the date of the debt conversion in future tax years. Our limited ability to use these net operating losses and tax credits, including as a result of equity offerings subsequent to the debt conversion, could have an adverse effect on our results of operations once we become profitable.

Foreign currency fluctuations could impact financial performance.

Because of our activities in the United Kingdom, Europe, Canada and Asia, we are exposed to fluctuations in foreign currency rates. We do not manage the risk to such exposure by entering into foreign currency futures and option contracts. Foreign currency fluctuations may have a significant effect on our operations in the future.

Risks Related to Our Business

We cannot assure you that we will be successful in completing our transition into an advanced materials supplier or that those efforts will have the intended effect of increasing profitability.

Table of Contents

We are in the process of transitioning from being a niche manufacturer of emissions control solutions for the automotive and heavy duty diesel markets to becoming an advanced materials technology provider of proprietary powders for these markets. During the second quarter of 2016, we completed our operating strategy transition however we are still in process with our business strategy transition. We believe that the transition to a powder-to-coat business model will allow us to achieve greater scale and higher return on our technology investment than in the past. In the short term, we expect to focus our efforts and resources in pursuing opportunities in fast growing markets in China and India, as well as North America, which we believe that we can serve profitably with our powder-to-coat business model. However, we cannot assure you that these efforts will be successful and, if they are, that they will have the intended effect of increasing profitability.

We may not be able to successfully implement this strategy for a number of reasons, including, but not limited to:

- Unforeseen costs and delays;

- Unexpected legal, regulatory, or administrative hurdles;

- Our customers' unfamiliarity with this business model;

- Restrictions on our technology; and

- Our inability to:

 - Obtain additional capital to pursue such strategies on favorable terms or at all;

 - Protect our intellectual property;

 - Develop products that meet or exceed the qualification standards of OEMs and partners and provide greater value than alternatives;

 - Persuade other catalyst manufacturers to incorporate our technology in their products;

 - Find suitable third parties with whom to enter into partnering arrangements or invest in our business;
 - and

 - Compete successfully or enter new markets.

We hired a new Chief Executive Officer in November 2015, and our Executive Team, with input from our Board of Directors, is in the process of accelerating the execution of our business strategy. However, we cannot assure you that we will successfully complete our transformation from serving as a manufacturer of emissions solutions to a developer and supplier of proprietary powders used by other catalyst manufacturers for supply to the global automotive industry or that those efforts will have the intended effect of increasing profitability.

Furthermore, in attempting to execute this strategy, we may harm our relationships with customers, suppliers, employees or other third parties, any of which could be significant. The process of exploring, financing, and realigning our strategic path may also be disruptive to our business. While we believe the pursuit of this strategy will have a positive effect on our profitability in the long-term, there is no assurance that this will be the case. If we are not successful in our efforts to carry out this strategy, our business, financial condition, and results of operation may be adversely affected.

Our sales of coated catalysts to Honda, which historically has represented a substantial portion of our revenues, will begin to significantly decline in the fourth quarter of 2017 and end in the first quarter of 2018, which will adversely affect our operations and financial results if we are unable to secure new sources of revenue.

Historically, we have derived a significant portion of our revenue from sales to Honda, which represented 96% and 99% of Catalyst division revenues for the years ended December 31, 2016 and 2015, respectively, and 59% and 57% of consolidated revenues for the years ended December 31, 2016 and 2015, respectively. While we continually seek to broaden our customer base, through 2017 we will remain dependent on Honda to represent a substantial portion of our revenue. Our supply of coated catalysts to Honda will begin to significantly decline in the fourth quarter of 2017 and end in the first quarter of 2018, as certain current vehicle models are phased out. Accordingly, it will be critical that our powder-to-coat business strategy produces revenues with new customers, which may include Honda, directly or indirectly, to replace revenues from our current core catalyst business with Honda.

Historically, we have been dependent on a few major customers for a significant portion of our revenue and our revenue would decline if we are unable to maintain those relationships, if customers reduce their orders for our products, or if we are unable to secure new customers.

Table of Contents

We expect to continue to derive a significant portion of our revenue from a limited number of customers. If we are unable to maintain our relationships with customers, or if customers reduce their orders for our products, our revenues will decline.

In addition, manufacturers typically seek to have two or more sources of critical components; however, there can be no assurance that manufacturers for which we are a shared supplier will not sole source the products we supply. Once our product is designed into a vehicle model, we generally supply our component for the life of that model. There can be no assurance, however, that our customers will retain us for a full model term. In this regard, relationships with our customers are based on purchase orders rather than long-term formal supply agreements and customers can discontinue or materially reduce orders without warning or penalty. In addition, while new models tend to remain relatively stable for a few years, there can be no assurance that manufacturers will not change models more rapidly, or change the performance requirements of components used in those models, and use other suppliers for these new or revised models. Demand for our products is tied directly to demand for vehicles. Accordingly, factors that affect the truck and automobile markets have a direct effect on our business, including factors outside of our control, such as vehicle sales slowdowns due to economic concerns, or as a result of natural disasters, including earthquakes and/or tsunamis. The loss of one or more of our significant customers, or reduced demand from one or more of our significant customers, would have an adverse effect on our revenue, and could affect our ability to become profitable or continue our business operations.

We have an expired agreement with Honda that may limit our rights to commercialize certain technology within the scope of that agreement and adversely affect our technology licensing strategy.

In conjunction with our longstanding relationship with Honda, we entered into a joint research agreement with the motorcycle division of Honda regarding the development of ZPGM™ catalysts for motorcycles. The agreement was signed in 2010, extended in 2012 and expired in March 2014, although confidentiality provisions continue to survive. The agreement provides that technology within the scope of the agreement developed solely by one party is owned by that party, and that technology within the scope of the agreement that is jointly developed by both parties is jointly owned. While we believe that core technology within the scope of the agreement was developed solely by us, there can be no assurance that our belief will not be challenged or invalidated. To the extent that Honda is a joint owner of critical technology developed under the agreement, Honda (including its automotive division) might not be required to pay us a license or royalty fee for use of the jointly owned technology; Honda may be able to manufacture its own catalysts based on the jointly owned technology; and Honda may be able to license the jointly owned technology to others without our consent. In addition, under the terms of the agreement, we may not be able to license jointly owned technology to others without Honda's consent. Our inability to license jointly owned technology to others could adversely affect the ability to license certain technology.

We may not be able to successfully market new products that are developed or obtain verification or approval of our new products.

Some of our catalyst products and heavy duty diesel systems are still in the development or testing stage with targeted customers. We are developing technologies in areas that are intended to have a commercial application; however, there is no guarantee that such technologies will actually result in any commercial applications. In addition, we plan to market other emissions reduction devices used in combination with our current products. There are numerous development and verification issues that may preclude the introduction of these products for commercial sale. These proposed operations are subject to all of the risks inherent in a developing business enterprise, including the likelihood of continued operating losses. If we are unable to demonstrate the feasibility of these proposed commercial applications and products or obtain verification or approval for the products from regulatory agencies, we may have to abandon the products or alter our business plan. Such modifications to our business plan will likely delay achievement of revenue milestones and profitability.

PGMs and rare earth metals price fluctuations could impact financial performance.

Because our catalysts contain platinum, palladium and rhodium, or platinum group metals (PGMs), and rare earth metals, fluctuations in prices could have an adverse impact on our profits as it may not be possible to recover price increases from customers. Additionally, increased prices could result in increased working capital requirements which we may not be able to finance. Conversely, reductions in PGM prices could reduce the competitive advantage our

catalyst technologies have over conventional catalysts which rely on significantly higher PGM loadings to achieve emissions targets.

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

We rely on patent, trademark and copyright law, trade secret protection, and confidentiality and other agreements with employees, customers, partners and others to protect our intellectual property. In addition, some of our intellectual property is not protected by any patent or patent application. The lack of patent and trademark protection may be intentional as we may

Table of Contents

lack sufficient resources to protect our intellectual property in every applicable jurisdiction. As a result, it may be possible for third parties to obtain and use our intellectual property without the need to obtain our authorization. We do not know whether any patents will be issued from our pending or future patent applications or whether the scope of any issued patents is or will be sufficiently broad to protect our technologies. Moreover, patent applications and issued patents may be challenged or invalidated. We could incur substantial costs in prosecuting or defending patent infringement suits. In addition, the laws of some foreign countries may not protect or enforce intellectual property rights to the same extent as do the laws of the United States.

The patents protecting our proprietary technologies expire after a period of time. Currently, our patents have expiration dates ranging from 2017 through 2033. Although we have attempted to incorporate technology from our core patents into specific patented product applications, product designs and packaging, there can be no assurance that this building block approach will be successful in protecting our proprietary technology and products. If we are not successful in protecting our proprietary technology, it could have a material adverse effect on our business, financial condition and results of operations. Questions have arisen regarding our exclusive ownership and control of certain technologies, including by our principal customer, Honda, and a former employee, who claims ownership in a patent relating to ZPGM™. In addition, we have sold technology for exclusive use in Asia to another party. For additional information, refer to “--We have an expired agreement with Honda that may limit our rights to commercialize certain technology...” above and “--We are subject to restrictions and must pay a royalty on certain sales of our products and technology in specified countries in Asia” below. Past or future weaknesses in control of our intellectual property could render our current strategies unachievable, require that we change our strategies which could prove unsuccessful, result in litigation over ownership issues including the costs thereof and potential adverse findings, require that we pay to license back technology that we developed or co-developed, or otherwise material adversely affect us, our business and our financial performance.

As part of our confidentiality procedures, we generally have entered into nondisclosure agreements with employees, consultants and corporate partners. We also have attempted to control access to and distribution of our technologies, documentation and other proprietary information. We plan to continue these procedures. Despite these procedures, third parties could copy or otherwise obtain and make unauthorized use of our technologies or independently develop similar technologies. The steps that we have taken and that may occur in the future might not prevent misappropriation of our solutions or technologies, particularly in foreign countries where laws or law enforcement practices may not protect the proprietary rights as fully as in the United States.

There can be no assurance that we will be successful in enforcing our proprietary rights. For example, from time to time we have become aware of competing technologies employed by third parties who might be covered by one or more of our patents. In such situations, we may seek to grant licenses to such third parties or seek to stop the infringement, including through the threat of legal action. There is no assurance that we would be successful in negotiating a license agreement on favorable terms, if at all, or able to stop the infringement. Any infringement upon our intellectual property rights could have an adverse effect on our ability to develop and sell commercially competitive systems and components.

If we fail to obtain the right to use the intellectual property rights of others which are necessary to operate our business, our ability to succeed will be adversely affected.

From time to time, we may choose to or be required to license technology or intellectual property from third parties in connection with the development of our products. We cannot assure you that third-party licenses will be available to us on commercially reasonable terms, if at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms could have an adverse impact on our results of operations. The inability to obtain a necessary third-party license required for our product offerings or to develop new products and product enhancements could require us to substitute technology of lower quality or performance standards, or of greater cost, either of which could adversely affect our business. If we are not able to obtain licenses from third parties, if necessary, then we may also be subject to litigation to defend against infringement claims from these third parties. Our competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage. If we are unable to obtain or maintain any third-party license required to develop new products and product enhancements, on favorable terms, our results of operations may

be harmed.

If third parties claim that our products infringe upon their intellectual property rights, we may be forced to expend significant financial resources and management time litigating such claims and our operating results could suffer. Third parties may claim that our products and systems infringe upon their patents and other intellectual property rights. Identifying third-party patent rights can be particularly difficult, notably because patent applications are generally not published until up to 18 months after their filing dates. If a competitor were to challenge our patents, or assert that our products or

Table of Contents

processes infringe their patent or other intellectual property rights, we could incur substantial litigation costs, be forced to make expensive product modifications, pay substantial damages or even be forced to cease some operations. Third-party infringement claims, regardless of their outcome, would not only drain financial resources but also divert the time and effort of management and could result in customers or potential customers limiting or deferring their purchase or use of the affected products or services until resolution of the litigation.

We are subject to restrictions and must pay a royalty on certain sales of our products and technology in specified countries in Asia.

In February 2008, we established a joint venture in Japan called TC Catalyst, Inc., or TCC, with Tanaka Holdings Co., Ltd. (formerly Tanaka Holdings K.K.), a Japanese company, which, together with its subsidiary Tanaka Kikinzoku Kogyo K.K., is referred to herein as TKK. Initially, we and TKK each owned 50% of TCC, but since formation we have sold most of our stake in the venture to TKK and now own 5%. In connection with these transactions, we also sold to TKK certain proprietary technology for sale, licensing or use in various countries in Asia, which we refer to as the Territory. In general, the technology covers our catalyst formulations (including platinum and zero platinum) developed for heavy duty commercial vehicles and other applications through 2013, and for non-commercial light vehicles through 2012. In addition, TKK has a right to cause us to license heavy duty commercial technology to TKK or TCC in exchange for a royalty if TKK or TCC desire to sell related products or services outside the Territory to subsidiaries of OEM customers located within the Territory. We have also agreed not to compete in the Territory with TKK or TCC in connection with heavy duty commercial vehicles and applications and light duty vehicles.

Subsequent to these arrangements, we discovered that an exception allowing us to continue to supply catalysts in Japan to our largest customer, Honda, had been omitted in an amendment to the original transaction documents with TKK. We have shipped approximately \$5.6 million of catalysts covered by the agreements since such amendment through December 31, 2014. In this regard, in December 2014 we made a good faith payment of \$0.3 million to TKK with respect to such prior shipments.

In addition, on March 13, 2015, we further amended our agreements with TKK and TCC to, among other things, enable us to sell in the Territory (i) coated substrates or certain catalytic materials utilizing the technology we sold to TKK for a 4% royalty to TKK; (ii) coated substrates and certain catalytic materials utilizing solely new technology developed by us after we sold TKK the prior technology, as well as licenses of such technology related to catalysts for heavy-duty commercial vehicles and applications and light duty vehicles, for a 3% royalty to TKK; (iii) products used in vehicles without a royalty, provided that the ultimate user of the vehicle which contains the product purchases the vehicle outside the Territory; (iv) limited quantities of coated substrates or certain catalytic materials sold for the purpose of customer testing, evaluation and approval without a royalty; and (v) limited quantities of coated substrates sold during an extended period of time after mass production ends for a specified vehicle model year program without a royalty.

Pursuant to the terms of the amendment, once an aggregate amount of approximately \$16.6 million in royalties has been paid by us to TKK, we may commercialize any technology without a royalty, including inside the Territory. Consequently, if we or third parties desire to sell our products or otherwise commercialize certain of our technology in the Territory, we currently would have to pay a royalty to TKK in order to do so, which could adversely affect our ability to expand. In addition, although we believe that the amendment to the parties' agreements will generally enable us to pursue our business strategies in the Territory and that, based on discussions with TKK, our non-binding, good faith payment relieves us from further obligations to TKK with respect to past shipments of catalysts covered by the agreements, there can be no assurance that TKK will not assert claims and pursue available remedies, any of which could have an adverse effect on our business.

Failure of one or more key suppliers to timely deliver could prevent, delay or limit us from supplying products. Delays in delivery times for PGM purchases could also result in losses due to fluctuations in prices. Delays in the delivery times and the cost impact of the world-wide shortage of rare earth metals could delay us from supplying products and could result in lower profits.

Due to customer demands and specifications, we are required to source critical materials and components such as ceramic substrates from a sole supplier. Our three largest suppliers accounted for over 45% and 60% of our raw material purchases during the years ended December 31, 2016 and 2015, respectively. Failure of one or more of the key suppliers to deliver timely could prevent, delay or limit us from supplying products because we would be required to qualify an alternative supplier. For certain products and customers, we are required to purchase PGM materials. As commodities, PGM materials are subject to daily price fluctuations and significant volatility, based on global market conditions. Historically, the cost of PGMs used in the manufacturing process has been passed through to the customer. This limits the economic risk of changes in market prices to PGM metal usage in excess of nominal amounts allowed by the customer. However, going forward there can be no assurance

Table of Contents

that we will continue to be successful in passing PGM price risk onto our current and future customers to minimize the risk of financial loss. Additionally, PGM material is accounted for as inventory and therefore subject to lower of cost or market adjustments on a regular basis. A drop in market prices relative to the purchase price of PGMs could result in a write-down of inventory. Due to the high value of PGM materials, special measures have been taken to secure and insure the inventory. There is a risk that these measures may be inadequate and expose us to financial loss. We utilize rare earth metals in the production of some of our catalysts. Due to a reduction in export from China of these materials, there has been a world-wide shortage, leading to a lack of supply and higher prices. We risk delays in shipment due to this constrained supply and potentially lower margins if we are unable to pass the increased costs on to our customers.

Qualified management, marketing, and sales personnel are difficult to locate, hire and train, and if we cannot attract and retain qualified personnel, it will harm the ability of the business to grow.

Our success depends, in part, on our ability to retain current key personnel, attract and retain future key personnel, additional qualified management, marketing, scientific, and engineering personnel, and develop and maintain relationships with research institutions and other outside consultants. Competition for qualified management, technical, sales and marketing employees is intense. In addition, some employees might leave our Company and go to work for competitors. The loss of key personnel or the inability to hire or retain qualified personnel, or the failure to assimilate effectively such personnel could have a material adverse effect on our business, operating results and financial condition.

We are transitioning from being a niche manufacturer of emissions control solutions to becoming an advanced materials technology provider of proprietary powders, which will increase our reliance on third-party manufacturers and could harm our business.

In connection with our efforts to realign our manufacturing footprint, we closed our Canadian manufacturing facility in 2016. As a result of this action, we now rely on third-party service providers to manufacture certain of our products. This reliance generates a number of risks, including decreased control over the production process, which could lead to production delays or interruptions, and inferior product quality control. In addition, performance problems at these third-party providers could lead to cost overruns, shortages or other problems, which could increase our costs of production or result in delivery delays to our customers.

If one or more of our third-party manufacturers becomes insolvent or unwilling to continue to manufacture products of acceptable quality, at acceptable costs, in a timely manner, our ability to deliver products to our retail customers could be significantly impaired. Substitute manufacturers might not be available or, if available, might be unwilling or unable to manufacture the products we need on acceptable terms. Moreover, if customer demand for our products increases, we may be unable to secure sufficient additional capacity from our current third-party manufacturers, or others, on commercially reasonable terms, or at all.

Any liability for environmental harm or damages resulting from technical faults or failures of our products could be substantial and could adversely affect our business and results of operations.

Customers rely upon our products to meet governmental emissions control standards. Failure of our products to meet such standards could expose us to claims from customers. Our products are also integrated into goods manufactured by our customers, and therefore, a malfunction or the inadequate design of our products could subject us and our customers to product liability claims. We have agreed to indemnify and hold harmless certain of our customers against losses arising from environmental harm and product liability claims. Any liability for environmental harm or damages resulting from technical faults or failures could be substantial and could adversely affect our business and results of operations. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products, which would materially impact our financial condition and operating results.

By email dated June 26, 2015, the California Air Resources Board (CARB) asserted that we had deficiencies in compliance with the Verification Procedure, Aftermarket Parts Regulations and the Vehicle Code. The penalty calculated by CARB for these alleged violations was \$1.8 million, with the largest component relating to the use of empty center bodies to allow trucks to be placed back in service while warranty claims are being evaluated. This process is now explicitly permitted by regulation, but was not permitted at the time of the alleged violation. Although we disagreed, and continue to disagree, with CARB's findings, we cooperated with CARB's investigation and

discussed with CARB whether and to what extent the payment of monetary penalties would be appropriate. After review and evaluation of CARB's findings and publicly available CARB settlements for similar matters, we accrued an expense of less than \$0.1 million as of December 31, 2015 to resolve this matter. During 2016, CARB responded to our proposed settlement with a counter-proposal of \$0.8 million by cutting certain components of their initial penalty in half and reducing certain penalties. We ultimately reached a settlement for approximately \$0.1 million which will be paid in 2017.

Table of Contents

We have entered into contractual agreements in connection with past sales of certain of our assets, which may expose us to liability for claims for indemnification under such agreements.

We have entered into various agreements by which we may be obligated to indemnify the other party with respect to certain matters. Generally, these indemnification provisions provide that we agree to hold the indemnified party harmless against losses arising from a breach of the contract terms. Payments by us under such indemnification clauses are generally conditioned on the other party making a claim. Such claims are generally subject to challenge by us and to dispute resolution procedures specified in the particular contract. Further, our obligations under these arrangements may be limited in terms of time and/or amount and, in some instances, we may have recourse against third parties for certain payments made by us. It is not possible to predict the maximum potential amount of future payments under these indemnification agreements due to the conditional nature of our obligations and the unique facts of each particular agreement.

Risks Related to Our Industry

Future growth of our business depends, in part, on market acceptance of our catalyst products, successful verification of our products and retention of our verifications.

While we believe that there exists a viable market for our developing catalyst products, there can be no assurance that such technology will succeed as an alternative to competitors' existing and new products. The development of a market for the products is affected by many factors, some of which are beyond our control. The adoption cycles of our key customers are lengthy and require extensive interaction with the customer to develop an effective and reliable catalyst for a particular application. While we continue to develop and test products with key customers, there can be no guarantee that all such products will be accepted and commercialized. Our relationships with our customers are based on purchase orders rather than long-term formal supply agreements. Generally, once a catalyst has successfully completed the testing and certification stage for a particular application, it is generally the only catalyst used on that application and therefore unlikely that, unless there are any defects, the customer will try to replace that catalyst with a competing product. However, our customers usually have alternate suppliers for their products and there is no assurance that we will continue to win the business. Also, although we work with our customers to obtain product verifications in accordance with their projected production requirements, there is no guarantee that we will be able to receive all necessary approvals for our catalysts by the time a customer needs such products, or that a customer will not accelerate its requirements. If we are not successful in having verified catalyst products to meet customer requirements, it will have a negative effect on our revenues, which could have a material adverse effect on our results of operations.

If a market fails to develop or develops more slowly than anticipated, we may be unable to recover the costs we will have incurred in the development of our products and may never achieve profitability. In addition, we cannot guarantee that we will continue to develop, manufacture or market our products or components if market conditions do not support the continuation of the product or component.

We believe that it is an essential requirement of the U.S. retrofit market that emissions control products and systems are verified under the EPA and/or CARB protocols to qualify for funding from the EPA and/or CARB programs.

Funding for these emissions control products and systems is generally limited to those products and technologies that have already been verified. Verification is also useful for commercial acceptability. Notably, EPA verifications were withdrawn on two of our products in January 2009 because available test results were not accepted by the EPA as meeting new emissions testing requirements for nitrogen dioxide (NO₂) measurement. As a general matter, we have no assurance that our products will be verified by the CARB or that such a verification will be acceptable to the EPA. If we are not able to obtain or maintain necessary product verifications, it will limit our ability to commercialize such products, which could have a negative effect on our revenues and on our results of operations.

Our results may fluctuate due to certain regulatory, marketing and competitive factors over which we have little or no control.

The factors listed below, some of which we cannot control, may cause our revenue and results of operations to fluctuate significantly:

- Actions taken by regulatory bodies relating to the verification, registration or health effects of our products;
- The extent to which our products obtain market acceptance;

- The timing and size of customer purchases;
- Customer concerns about the stability of our business, which could cause them to seek alternatives to our solutions and products; and

Table of Contents

Increases in raw material costs, particularly platinum group metals and rare earth metals.

We face constant changes in governmental standards by which our products are evaluated.

We believe that, due to the constant focus on the environment and clean air standards throughout the world, requirements in the future to adhere to new and more stringent regulations are possible as governmental agencies seek to improve standards required for certification of products intended to promote clean air. In the event our products fail to meet these ever-changing standards, some or all of our products may become obsolete.

We face competition and technological advances by competitors.

There is significant competition among companies that provide solutions for pollutant emissions from internal combustion engines. Several companies market products that compete directly with our products. Other companies offer products that potential customers may consider to be acceptable alternatives to our products and services, including products that are verified by the EPA, the CARB or other environmental authorities. We face direct competition from companies with greater financial, technological, manufacturing and personnel resources. Newly developed products could be more effective and cost-efficient than our current or future products. We also face indirect competition from vehicles using alternative fuels, such as methanol, hydrogen, ethanol and electricity. New standards, lower environmental limits or stricter regulation for health reasons of platinum or cerium metals could be adopted and affect use of our products.

New standards or environmental limits on the use of platinum or cerium metals by a governmental agency could adversely affect our ability to use our Platinum Plus® fuel-borne catalyst in some applications. Government or regulatory bodies in countries where we sell our Platinum Plus® fuel-borne catalyst could adopt limits or regulations with regards to platinum and cerium metals that could impact our ability to sell Platinum Plus® and related fuel borne catalysts.

Risks Related to Our Common Stock

We could be delisted from NASDAQ, which could seriously harm the liquidity of our stock and our ability to raise capital.

During 2016, we received two separate notifications from the Listing Qualifications staff of The NASDAQ Stock Market LLC indicating that we no longer met the requirements to maintain a minimum bid price of \$1 per share and a minimum stockholders' equity of \$2.5 million. We remedied both deficiencies by August 30, 2016 and regained compliance with NASDAQ's requirements for continued listing on the exchange.

While currently we are in compliance with NASDAQ's rules for continued listing, in the future we may again fail to comply with the minimum bid price, minimum stockholders' equity or other NASDAQ listing requirement, in which case our common stock will be subject to delisting. If that were to occur, there can be no assurance that we will be able to again regain compliance, or that we would be eligible for listing on any comparable trading market. The effects of losing the NASDAQ listing could materially harm our ability to raise capital, by, among other things, negatively affecting the market liquidity of our common stock. Investors would likely find it more difficult to purchase, dispose of or obtain accurate quotations as to the market value of our common stock, and the price of our common stock may be adversely affected. Delisting from NASDAQ could also result in negative publicity and a loss of confidence by investors, customers, suppliers or employees.

The risk of dilution, perceived or actual, may contribute to downward pressure on the trading price of our stock.

We have outstanding warrants and stock options to purchase shares of our common stock, and additional shares or warrants or options to acquire shares of our common stock may be issued in the future. At December 31, 2016, we had outstanding options and warrants to purchase an aggregate of approximately 2.1 million shares of our common stock.

The exercise of these securities will result in the issuance of additional shares of our common stock. We may also issue additional shares of our common stock or securities exercisable for or convertible into shares of our common stock, whether in the public market or in a private placement to fund our operations, or as compensation. These issuances, particularly where the exercise price or purchase price is less than the current trading price for our common stock, could be viewed as dilutive to the holders of our common stock.

To provide us with additional flexibility to access capital markets for general corporate purposes, we filed a shelf registration statement which was declared effective by the SEC on November 17, 2015. The shelf registration statement permits us to sell, from time to time, up to an aggregate \$50.0 million of various securities, including

common stock, preferred stock, warrants to purchase common stock or preferred stock and units consisting of one or more of the foregoing or any combination of such securities, not to exceed one-third of our public float in any 12-month period. As of December 31, 2016, we had sold an

Table of Contents

aggregate of \$3.1 million using the shelf registration statement. To the extent that we raise additional capital by issuing equity securities under our shelf registration statement, our stockholders may experience dilution. The risk of dilution, perceived or actual, may cause existing stockholders to sell their shares of stock, which could contribute to a decrease in the price of shares of our common stock. In that regard, downward pressure on the trading price of our common stock may also cause investors to engage in short sales, which could further contribute to downward pressure on the trading price of our stock.

There has been and may continue to be significant volatility in the volume and price of our common stock on the NASDAQ Capital Market and an investment in our stock could suffer a decline in value. Our stock historically has experienced high levels of volatility. The trading price of our common stock may continue to fluctuate substantially, depending on many factors, some of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our common stock. Factors that could cause fluctuations in the trading price of our common stock include, but are not limited to, the following:

- fluctuations in demand for our products;
- product development efforts;
- the loss of any customer relationship;
- the addition of a new customer relationship;
- mergers and acquisitions involving us, our customers or our competitors;
- price and volume fluctuations in the overall stock market from time to time;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes or fluctuations in our results of operations;
- whether our results of operations meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of investors or securities analysts;
- litigation involving us, our industry, or both;
- regulatory developments in the United States, foreign countries, or both;
- general economic conditions and trends;
- major catastrophic events;
- sales of large blocks of our common stock;
- departures of key employees; or
- an adverse impact on the company from any of the other risks cited herein.

In addition, if the stock market, in general, experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. We may be the target of securities-related litigation, which could divert our management's attention and resources, result in substantial costs, and have an adverse effect on our business, results of operations and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We use approximately 52,000 square feet of space in Oxnard, California under three separate lease agreements, one that is month-to-month, one that expires on April 30, 2018 and one that expires on December 31, 2018. Our Oxnard facilities include

Table of Contents

our corporate headquarters, contain a warehouse that is used for shipping and receiving, and are also used for manufacturing and research and development. We also lease approximately 800 square feet of space in Tokyo, Japan under a lease agreement that is month-to-month, which is used for sales and marketing purposes.; approximately 4,300 square feet of space in Malmö, Sweden for administrative, research and development and European sales and marketing; and an office in a shared office suite complex in Whyteleafe, Surrey, United Kingdom (outside London) for administrative and sales and marketing which we lease on a month-to-month basis.

Although we have exited our facility in Ontario, Canada, we are under a lease agreement that expires on December 31, 2018 for approximately 51,000 square feet. We are actively seeking a tenant to sublease the property, but we may be unable to find a tenant. As such, we have recorded a liability for the remaining lease obligation as of December 31, 2016. See Note 7 "Accrued Expenses and Other Current Liabilities."

We do not anticipate the need to acquire additional space in the near future and consider our current capacity to be sufficient for current operations and projected growth. As such, we do not expect that our rental costs will increase substantially from the amounts historically paid in 2016.

ITEM 3. LEGAL PROCEEDINGS

Refer to Note 17, "Commitments and Contingencies".

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Table of Contents

PART II

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

Market Information

Our common stock is traded on The NASDAQ Capital Market under the symbol "CDTI". The following table sets forth for the periods indicated the high and low sale prices of our common stock as reported on the NASDAQ Capital Market.

On July 22, 2016, we effected a one-for-five reverse stock split of our common stock. All share and per share information has been retroactively adjusted to reflect the reverse stock split.

NASDAQ

Capital

Market

High Low

2016

1st Quarter	\$5.00	\$2.55
-------------	--------	--------

2nd Quarter	\$3.80	\$1.50
-------------	--------	--------

3rd Quarter	\$5.21	\$1.60
-------------	--------	--------

4th Quarter	\$3.72	\$1.98
-------------	--------	--------

2015

1st Quarter	\$11.95	\$8.00
-------------	---------	--------

2nd Quarter	\$16.90	\$8.75
-------------	---------	--------

3rd Quarter	\$11.15	\$7.25
-------------	---------	--------

4th Quarter	\$9.50	\$4.15
-------------	--------	--------

Holders

At March 6, 2017, there were 153 holders of record of our common stock, which excludes stockholders whose shares were held by brokerage firms, depositories and other institutional firms in "street name" for their customers.

Dividends

No dividends have been paid on our common stock and we do not anticipate paying dividends in the foreseeable future.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Recent Sale of Unregistered Securities

None.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements, the accuracy of which involves risks and uncertainties. See "Cautionary Statement Concerning Forward-Looking Statements" included elsewhere in this Annual Report on Form 10-K. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, as a result of many important factors, including those set forth in Part I-Item 1A "Risk Factors".

References to "Notes" are notes included in the consolidated financial statements included in this Annual Report on Form 10-K.

Overview

The Company is a leading provider of technology and solutions to the automotive emissions control markets. We possess market leading expertise in emissions catalyst design and engineering for automotive and off-road applications. In particular, we have a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGM") and rare earth metals in coatings on vehicle catalytic converters. Our business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants.

We deliver our catalyst technology through the supply of materials and technology used in the catalyst coating process, as well as finished products such as coated substrates and emission control systems. We supply our proprietary catalyst technologies to major automakers, heavy duty truck manufacturers, catalyst manufacturers, distributors, integrators and retrofitters.

We produce coated substrates at our ISO TS certified manufacturing facility in Oxnard, California. In some instances, the coated substrates we produce are integrated into exhaust systems by third-party manufacturers, before being shipped to our end customer. We also supply coated substrates directly to exhaust systems manufacturers for incorporation in their own products.

Over the past decade, we have developed several generations of high performance catalysts, including our low-PGM MPC® catalysts that are used on certain new Honda vehicles. During the same period, we have developed the ability to deliver our catalyst technology to other catalyst manufacturers in the form of functional powders or material systems. Recently, we have expanded our offering of material systems beyond MPC® to include new synergized-PGM diesel oxidation catalysts, or SPGM™ DOCs, base-metal activated rhodium support, or BMARST™, and Spinel™ technologies. Most catalytic systems require significant amounts of costly PGMs to operate effectively. Our family of unique high-performance material systems, featuring inexpensive base-metals with low PGM content will enable further advances in catalyst performance. We are marketing these new catalyst technologies to other catalyst manufacturers in a proprietary powder form, which will allow them to capture the benefits of our advanced catalyst technology in their own manufacturing operations and will provide a new source of revenue for the Company.

Strategy

Over more than twenty years, we have developed the emissions control technology and manufacturing know-how to allow us to progress to delivering enabling technology for manufacturers serving the emissions catalyst market. The ability to deliver our advanced materials to other catalyst producers as functional powders allows us to achieve greater scale and higher return on our technology investment than would be possible as a manufacturer of emission control systems. The strategy to provide our technology to other manufacturers has significantly increased the size of our addressable market and provides access to markets that would not be achievable as a catalyst producer. In the short term, we are focusing our efforts and resources by pursuing opportunities in fast growing markets in China and India, as well as North America, where we believe that we can rapidly leverage our technology provider business model. The Chinese market offers significant opportunity as the world's single largest automotive market with over 24 million vehicles in 2016. There is an extensive emission control systems supply chain serving domestic and international automobile manufacturers in China. Somewhat unique to China, there are many domestic catalyst manufacturers serving the automotive market in competition with the large global catalyst producers. This segment of the market

requires technology and know-how to adhere to increasingly stringent emissions standards and to deliver competitively priced catalysts. In addition, there is significant pressure for the Chinese automotive market to address increasing air pollution, an issue that has escalated to become a matter of public policy. We believe these factors provide a highly favorable environment for our products and technology.

Air quality is also an important market driver in India where annual vehicle production was over four million in 2016. India has a number of domestic vehicle manufacturers that are served by both global and local catalyst manufacturers. There is

Table of Contents

significant opportunity to provide enabling technology to domestic catalyst producers with the appropriate manufacturing expertise.

North America continues to be a leading global automotive market with over 18 million vehicles produced in 2016. We have focused our resources in North America on developing the growing OEM DPF and DOC replacement market. We currently serve that market directly with our DuraFit™ product line and through the supply of technology and products to other manufacturers and distributors for sale under their own brand. We believe that our technology has the potential to become the market standard in the OEM DPF and DOC replacement market.

In support of this strategy, we have filed approximately 215 patents that underpin next-generation technology for our advanced zero-PGM and low-PGM catalysts, and during 2015 and 2016, we completed an initial series of vehicle tests to validate our next-generation technologies. Based on the success of these tests, we are beginning to make our new catalyst technologies available to OEMs, catalyst coaters and other participants in the emission reduction supply chain for use in proprietary powder form, and we foresee multiple paths to market our new technologies

2016 Financial Overview

For the year ended December 31, 2016 revenues were \$36.8 million, a decrease of approximately \$2.9 million, or 7.3% from the prior year, loss from continuing operations was \$15.7 million, an increase of approximately \$5.3 million from the prior year, primarily due to a goodwill impairment charge of \$4.7 million in the fourth quarter of 2016 and costs associated with the closure of our Canadian facility recorded during 2016, and basic and diluted net loss from continuing operations per share was \$(3.84) compared to \$(2.67) in the prior year. The decrease in revenues is primarily driven by the continued contraction of the retrofit market ahead of the catalyst industries shift to an after-market model, as well as a decrease in orders for our coated catalyst products by our Japanese OEM. As we continue to reposition the Company from being a niche manufacturer of emission control solutions for the automotive and off-road markets to becoming an advanced provider of proprietary powder for manufacturers serving these markets, we recognized approximately \$2.6 million of severance and other charges primarily in connection with the closure of our Canadian facility.

During 2016, we successfully recapitalized our balance sheet. We converted approximately \$9.7 million of principal debt and accrued interest for approximately 6.0 million shares of our common stock, and raised \$10.3 million in gross proceeds from the sale of our common stock. These transactions helped to reduce our total liabilities from \$24.7 million at December 31, 2015 to \$16.2 million at December 31, 2016, and increase our stockholders' equity from \$437,000 at December 31, 2015 to \$8.6 million at December 31, 2016.

During the second and third quarter of 2016, in connection with our issuance of shares of common stock in exchange for promissory notes and other indebtedness, we recorded a loss of approximately \$12.4 million on the extinguishment and conversion of this debt.

Net cash used in operations was \$7.0 million for the year ended December 31, 2016.

Customer Dependency and Relationship with Honda

Historically, we have derived a significant portion of our revenues from a limited number of customers. Sales to Honda represented 59% and 57% of our revenues for the year ended December 31, 2016 and 2015, respectively. However, based on discussions with Honda, and acceleration of our powder-to-coat strategy, we anticipate that our supply of coated catalysts to Honda will end in the first quarter of 2018, as certain current vehicle models are phased out and we fulfill a last-time buy agreement with Honda. Accordingly, it will be critical that our advanced materials business strategy produces revenue from new customers, which may include Honda, directly or indirectly, to replace revenues from our current core catalyst business with Honda

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and

related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions.

Table of Contents

We believe that the assumptions, judgments and estimates involved in the accounting for revenue recognition, allowance for doubtful accounts, inventory valuation, product warranty reserves, accounting for income taxes, goodwill, impairment of long-lived assets other than goodwill, stock-based compensation and liability-classified warrants have the greatest potential impact on our unaudited condensed consolidated financial statements. Please refer to Note 3, "Significant Accounting Policies" in the accompanying notes to the consolidated financial statements for a more complete discussion of our critical accounting policies and estimates.

Impact of Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements see Note 3, "Significant Accounting Policies" in the accompanying notes to the consolidated financial statements.

Results of Operations

In the past, the Company operated with two reportable business division segments based on the products it delivered. Beginning in the last quarter of 2015, the Company had been transitioning from a niche manufacturer of emissions control solutions for the automotive and heavy duty diesel markets to becoming an advanced materials technology provider of proprietary powders for these markets. During the second quarter, the transition of the operational strategy was completed and the Company now views its operations and measures business as one reportable segment.

Comparison of Operations for the years ended December 31, 2016 and 2015

Revenues

	Year Ended December 31,						Change	
	2016	% of Total Revenues		2015	% of Total Revenues		\$	%
	(\$ in thousands)							
Coated catalysts	\$22,520	61 %		\$23,075	58 %		\$(555)	(2)%
Emission control systems	12,970	35 %		15,415	39 %		(2,445)	(16)%
Technology and advanced materials	1,349	4 %		1,248	3 %		101	8 %
Total revenues	\$36,839	100 %		\$39,738	100 %		\$(2,899)	(7)%

Coated catalyst revenues are generated from the sale of our high performance catalysts which reduce emissions from gasoline, diesel and natural gas combustion engines. Emission control systems revenues are generated from the sale of products in our extensive line of heavy duty applications including DuraFit TM, OEM replacement diesel particulate filters, or DPFs, and diesel oxidation catalysts, or DOCs, sold through our distribution/dealer network and direct sales. Technology and advanced materials revenues included licenses and royalties, as well as sales of our advanced materials platform. The timing and amounts of revenue generated from licensing agreements will fluctuate.

For the year ended December 31, 2016 our lower coated catalysts revenues are largely attributable to decreased sales to our Japanese OEM customer. The decline in revenues from our emission control systems is due to the anticipated continuing contraction of the retrofit market. New licensing agreements drove the increase in revenue from technology and advanced materials.

Cost of revenues

	Year Ended December 31,						Change	
	2016	% of Total Revenues		2015	% of Total Revenues		\$	%
	(1)							

(\$ in thousands)

Cost of revenues \$28,773.78 % \$28,846.73 % \$(73) ~~%~~

Table of Contents

Cost of revenues includes the costs of materials and assembly labor, as well as assembly services, and labor and overhead costs associated with manufacturing and product procurement, planning and quality assurance. Our cost of revenues is affected by various factors, including product mix, volume, and provisions for excess and obsolete inventories, materials, labor and overhead costs, as well as manufacturing efficiencies. Our cost of revenues as a percentage of revenues is affected by these factors, as well as customer mix, volume, pricing and competitive pricing programs.

The increase in cost of revenues as a percentage of revenues resulted from costs associated with the shut-down of our Canadian facility and the transition of manufacturing from that facility to outside parties.

Operating expenses

	Year Ended December 31,						Change	
	2016	% of Total Revenues	2015	% of Total Revenues			\$	%
	(\$ in thousands)							
Research and development	\$4,657	13 %	\$7,826	20 %			\$(3,169)	(40)%
Selling, general and administrative	11,837	32 %	11,903	30 %			(66)	(1)%
Goodwill impairment	4,675	13 %	—	—			4,675	*
Severance and other charges	2,555	7 %	1,482	4 %			1,073	72 %
Total operating expenses	\$23,724	64 %	\$21,211	53 %			\$2,513	12 %

*Percentage not meaningful

Research and development expenses consist primarily of compensation expense for employees and contractors engaged in research, design and development activities, as well costs paid to outside parties for testing, validation and certification of our products. Selling, general and administrative expenses consist primarily of compensation expense, legal and professional fees, facilities expenses, and communication expenses. Goodwill impairment charges relates to the impact of our annual impairment analysis. Severance and other charges related primarily to the closure of our Canadian facility and the transfer of operations to our California facility and include severance costs, equipment disposal, moving costs, and building exit costs.

Research and development expenses

The decrease is primarily a result of reduced outside testing of our advanced materials and, headcount reduction, as well as, as the fundamental research of our new key materials, such as SPGM-DOC™, BMARS™ and Spinel™, have largely transitioned out of fundamental research into applications development for specific market opportunities. Research and development expenses can be significantly impacted by the timing of outside testing requirements.

Selling, general and administrative expenses

We decreased general and administrative costs including consulting, payroll and benefits expenses, as a result of the closure of our Canadian facility and changes made at our California location. The decrease was partially offset by payroll increases for the sales organization as well as an increase in stock compensation expense as a result of awards made in 2015 and 2016.

Goodwill impairment

In connection with our annual impairment analysis performed during the fourth quarter of 2016, we determined that our goodwill was impaired. As a result, we recognized an impairment charge of \$4.7 million. See Note 15 for further details.

Severance and other charges

The increase was due primarily to the closure of our Canadian facility in the second quarter of 2016.

Other income (expense)

24

Table of Contents

	Year Ended December 31,					
	2016	% of Total Revenues	2015	% of Total Revenues	Change \$	%
	(\$ in thousands)					
Interest expense	\$ (1,535)	(4)%	\$ (1,166)	(3)%	\$ (369)	32 %
Gain on change in fair value of bifurcated derivative liability	2,754	7 %	—	— %	2,754	*
Loss on extinguishment of convertible debt	(12,410)	(34)%	—	— %	(12,410)	*
Gain on change in fair value of liability- classified warrants	1,554	4 %	2,617	7 %	(1,063)	(41)%
Other income, net	863	2 %	47	— %	816	*
Total other income (expense)	\$ (8,774)	(24)%	\$ 1,498	4 %	\$ (10,272)	*

*Percentage not meaningful

For the year ended December 31, 2016, the decrease in other income (expense) was primarily due to the loss on extinguishment of convertible debt partially offset by a gains on the change in fair value of both the bifurcated derivative liability and the liability-classified warrants, and foreign currency exchange gains.

Income Taxes

We incurred income tax benefit of \$1.0 million and \$0.4 million during the years ended December 31, 2016 and 2015, respectively. Our effective income tax rate was 4% for the year ended December 31, 2016, compared to 5% for the year ended December 31, 2015. The differences between our effective tax rate and the U.S. statutory tax rate were primarily related to the valuation allowance offsetting the deferred tax assets in both the U.S. and U.K. jurisdictions, as well as Swedish and Canadian foreign tax rate differentials.

Liquidity and Capital Resources

Historically, the revenue that we have generated has not been sufficient to fund our operating requirements and debt servicing needs. Notably, we have suffered recurring losses since inception. As of December 31, 2016, we had an accumulated deficit of \$223.1 million compared to \$199.6 million at December 31, 2015. We have also had negative cash flows from operations from inception through the year ended December 31, 2016. Our primary sources of liquidity in recent years have been asset sales, credit facilities and other borrowings and equity sales.

We had \$7.8 million in cash at December 31, 2016 compared to \$3.0 million at December 31, 2015. At December 31, 2016 and 2015, \$1.1 million and \$1.1 million, respectively, of our cash was held by foreign subsidiaries in Canada, Sweden and the U.K. We anticipate most of the cash held by foreign subsidiaries will be used to fund our subsidiaries' continued operations. If we decide to repatriate unremitted foreign earnings in the future, it could have negative tax implications.

We have a \$7.5 million secured demand financing facility with FGI backed by our receivables and inventory that terminates on August 15, 2017 and may be extended at our option for additional one-year terms. However, FGI can cancel the facility at any time. For additional information regarding the FGI facility, refer to the "Description of Indebtedness" discussion below. At December 31, 2016, we had \$1.5 million in borrowings outstanding with \$6.0 million available under our FGI credit facility, subject to the availability of eligible accounts receivable and inventory balances for collateral. However, there is no guarantee that we will be able to borrow to the full limit of \$7.5 million if FGI chooses not to finance a portion of our receivables or inventory.

2016 Debt Transactions

On April 1, 2016, we executed a Promissory Note (the "Kanis Note") and entered into an amendment of existing loan agreements (the "Kanis Agreement") with Kanis S.A. Pursuant to the terms of the Kanis Note, Kanis S.A. agreed to lend the Company \$2.0 million at 8% per annum with a maturity date of September 30, 2017. Pursuant to the terms of the Kanis Agreement, we and Kanis S.A. agreed to amend prior loans with an aggregate outstanding principal balance of \$7.5 million (collectively, the "Loan Agreements"), such that: (i) Kanis S.A. shall have the right to convert the principal

balance of the Loan Agreements and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTI's common stock on the date before the date of the Kanis Agreement or as of the date when Kanis S.A. exercises its conversion right; and (ii) we shall have the right to mandatorily convert the \$7.5 million principal balance and any accrued interest thereon into its common stock upon maturity of the Loan Agreements or

Table of Contents

earlier upon the occurrence of a Liquidity Event at a conversion price equal to the lower of the closing price of CDTI as of the date immediately before the date of the Kanis Agreement or at a 25% discount to the Liquidity Event price. A Liquidity Event is defined as a strategic investment in CDTI or a public stock offering by CDTI. The Company could prepay the principal and any interest due on the Loan Agreements at any time before their maturity date without penalty.

On April 11, 2016, we executed a Convertible Promissory Note (the “Director Note”) with Lon E. Bell, Ph.D., one of the Company’s Directors. Pursuant to the terms of the Director Note, Dr. Bell agreed to lend \$0.5 million at 8% per annum and a maturity date of September 30, 2017. Dr. Bell had the right to convert the principal balance of the Director Note and any accrued interest thereon into common stock of the Company at any time prior to maturity.

On June 30, 2016, we also entered into a Note Purchase Agreement with Haldor Topsøe A/S, a company organized under the laws of Denmark (“Haldor Topsøe”). We agreed to sell and issue (i) a Senior Convertible Promissory Note (the “Senior Note”) in the principal amount of \$0.75 million and (ii) a Convertible Promissory Note (the “Note”, and with the Senior Note, the “Convertible Notes”) in the principal amount of \$0.5 million, each of which was convertible into our equity securities.

Change in Control/Debt Conversion

On August 25, 2016, we held a special meeting of our stockholders to consider and vote to approve (i) in exchange for outstanding promissory notes and other evidences of debt in the aggregate principal amount of \$7.5 million plus accrued but unpaid interest thereon owed by us to Kanis S.A., the issuance of a number of shares of our common stock determined by dividing the Kanis S.A. indebtedness as of the date of the exchange by \$1.6215, and (ii) in exchange for an outstanding promissory note in the aggregate principal amount of \$0.5 million plus accrued but unpaid interest thereon owed by us to Dr. Lon Bell, one of our directors, the issuance of a number of shares of our common stock determined by dividing the Bell indebtedness as of the date of the exchange by \$1.6215. Our stockholders approved the issuance of shares in exchange for the Kanis S.A. and Bell indebtedness, and we also exercised our right to mandatorily convert an additional \$0.5 million in principal of indebtedness owed by us to Haldor Topsøe A/S at the conversion price of \$1.6215 per share. We issued an aggregate of 5,498,339 shares of our common stock in exchange for the extinguishment of \$8.9 million of indebtedness.

Settlement of the Kanis S.A. and Bell debt exchange transactions and the conversion of the Haldor Topsøe A/S promissory note increased the number of shares of common stock issued and outstanding by approximately 5.5 million shares, resulting in substantial dilution of the percentage ownership of CDTi held by stockholders prior to the settlement. Settlement of the Kanis S.A. exchange also resulted in a change in control of the Company with Kanis S.A. being the largest owner of our common stock, our only outstanding voting securities, in an amount greater than 50% of the issued and outstanding shares of common stock. Kanis S.A.’s percentage ownership of our common stock was subsequently reduced below 50% following our issuance of 6.2 million shares of our common stock in the fourth quarter of 2016. Kanis S.A. continues to hold a significant percentage of our common stock and is our single largest stockholder. Consequently, Kanis S.A. will be able to influence, among other matters presented to our stockholders for a vote, the individuals elected to our Board, and our current stockholders will have a limited ability to influence significant corporate decisions requiring stockholder approval. In addition, Kanis S.A.’s ownership of a significant percentage of our voting securities could, under certain circumstances, discourage or make more difficult and expensive a third party’s pursuit of a change of control of the Company.

On December 16, 2016, Haldor Topsøe elected to convert the Senior Note for which we issued an aggregate of 462,535 shares of common stock in conversion of \$0.75 million in principal amount of indebtedness.

2016 Equity Transactions

On May 19, 2015, we filed a shelf registration statement on Form S-3 with the SEC which was declared effective on November 17, 2015. Shelf registration statements are intended to provide us with additional flexibility to access capital markets for general corporate purposes, subject to market conditions and our capital needs. The form S-3 permits us to sell in one or more registered transactions up to an aggregate of \$50.0 million of various securities not to exceed one-third of our public float in any 12-month period. As of December 31, 2016, we had sold an aggregate of \$3.1 million using the Form S-3. For additional information, refer to Note 11, "Stockholders' Equity".

On November 3, 2016, we entered into a securities purchase agreement with institutional and individual accredited investors and certain of our officers and directors to raise gross proceeds of approximately \$10.3 million in a private placement of common stock at a per-share price of \$2.00. The offering was consummated in two closings. The initial closing for 949,960 shares of common stock, for gross proceeds of approximately \$1.9 million, was completed on November 4, 2016. The second closing for approximately 4.2 million shares, for gross proceeds of approximately \$8.4 million, was completed on December 16, 2016.

Table of Contents

We believe the equity raise along with the debt conversions improved our overall net cash positions, however there is no assurance that we will be able to achieve projected levels of revenue and maintain access to sufficient working capital. As a result there is substantial doubt as to whether our existing cash resources and working capital are sufficient to enable it to continue its operations within one year from the financial statement issuance date. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to potential customers or other investors, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty. The following table and discussion summarizes our cash flows from continuing operations for the years ended December 31, 2016 and 2015.

	Year Ended December 31,		Change	
	2016	2015	\$	%
	(\$ in thousands)			
Cash provided by (used in):				
Operating activities	\$(7,004)	\$(10,869)	\$3,865	(36)%
Investing activities	\$(67)	\$(453)	\$386	(85)%
Financing activities	\$12,135	\$7,786	\$4,349	56 %

Cash used in operating activities

Our largest source of operating cash flows is cash collections from our customers following the sale of our products and services. Our primary uses of cash for operating activities are for purchasing inventory in support of the products that we sell, personnel related expenditures, facilities costs and payments for general operating matters. During the year ended December 31, 2016, cash used in operations was \$7.0 million. Cash flows were largely impacted by the loss from operations, adjusted for non-cash items, including depreciation and amortization, stock-based compensation, goodwill impairment change in fair value of the liability-classified warrants and embedded bifurcated derivative, loss on extinguishment of convertible debt and foreign currency gains as well as the net effect of changes in net working capital and other balance sheet accounts. These changes include decreases in operating cash flows associated with accounts receivable (primarily due to the timing of collections from our customers). This decrease was partially offset by increases in operating cash flows associated with higher accrued expenses (primarily due to increases severance and other charges as well as consigned metals) and lower inventory (due to efforts to improve the purchasing cycle).

Cash used in investing activities

Cash used in investing activities in the year ended December 31, 2016 related to the sale of property and equipment resulting from the closure of our Canadian facility and the completion of certain product testing projects partially offset by capital expenditures.

Cash provided by financing activities

Cash provided by financing activities was due to \$2.0 million generated from the promissory note entered into with Kanis S.A. on April 1, 2016, \$0.5 million generated from the promissory note entered into with Lon E. Bell, Ph.D.,

one of CDTi's directors, on April 11, 2016 and \$1.3 million generated from the convertible notes entered into with Haldor Topsøe on June 30, 2016. The Company also received \$0.2 million from the exercise of outstanding warrants during the year ended December 31, 2016. Cash provided by financing was partially offset by a \$2.1 million decrease in net borrowings under our demand line of credit during the year ended December 31, 2016.

On November 3, 2016, we entered into a securities purchase agreement with institutional and individual accredited investors and certain of our officers and directors to raise gross proceeds of approximately \$10.3 million in a private placement of

Table of Contents

common stock at a per-share price of \$2.00. The offering was consummated in two closings. The initial closing for 949,960 shares of common stock, for gross proceeds of approximately \$1.9 million, was completed on November 4, 2016. The second closing for approximately 4.2 million shares, for gross proceeds of approximately \$8.4 million, was completed on December 16, 2016. We paid approximately \$0.1 million of transaction costs related to the equity offerings.

Description of Indebtedness

	December 31,	
	2016	2015
	(\$ in thousands)	
Line of credit with FGI	\$1,458	\$3,513
\$2.0 million, 8% shareholder note due 2017	1,803	—
\$1.5 million, 8% shareholder note due 2018	—	1,623
\$3.0 million, 8% subordinated convertible shareholder notes due 2018	—	2,972
\$3.0 million, 8% shareholder note due 2018	—	2,964
Total borrowings	\$3,261	\$11,072

We have a \$7.5 million secured demand facility with FGI backed by our receivables and inventory. FGI can cancel the facility at any time.

Under the FGI facility, FGI can elect to purchase eligible accounts receivables from us and certain of our subsidiaries at up to 80% of the value of such receivables (retaining a 20% reserve). At FGI's election, FGI may advance us up to 80% of the value of any purchased accounts receivable, subject to the \$7.5 million limit. Reserves retained by FGI on any purchased receivable are expected to be refunded to us net of interest and fees on advances once the receivables are collected from customers. We may also borrow against eligible inventory up to the inventory sublimit as determined by FGI subject to the aggregate \$7.5 million limit under the FGI facility and certain other conditions. At December 31, 2016, the inventory sublimit was the lesser of \$1.5 million or 50% of the aggregate purchase price paid for accounts receivable purchased under the FGI facility. While the overall credit limit and inventory sublimit were not changed, in the first quarter of 2015, borrowing against Honda inventory has been limited to \$0.2 million by FGI due to their concerns about customer concentration.

The interest rate on advances or borrowings under the FGI facility is the greater of (i) 6.50% per annum and (ii) 2.50% per annum above the prime rate, as defined in the FGI facility, and was 6.50% at December 31, 2016 and 2015.

We were in compliance with the terms of the FGI facility at December 31, 2016. However, there is no guarantee that we will be able to borrow the full limit of \$7.5 million if FGI chooses not to finance a portion of our receivables or inventory.

For additional information regarding our indebtedness, refer to Note 10, "Debt".

Capital Expenditures

As of December 31, 2016, we had no material commitments for capital expenditures and no material commitments are anticipated in the near future.

Off-Balance Sheet Arrangements

As of December 31, 2016 and 2015, we had no off-balance sheet arrangements.

Commitments and Contingencies

As of December 31, 2016 and 2015, other than office leases, we had no material commitments other than the liabilities reflected in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. For additional information, refer to Note 17, "Commitments and Contingencies".

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See "Index to Financial Statements", located on page F-1 of this Annual Report on Form 10-K.

Table of Contents

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The phrase “disclosure controls and procedures” refers to controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended, or the Exchange Act, such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the U.S. Securities and Exchange Commission, or SEC. Disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our chief executive officer, or CEO, and chief financial officer, or CFO, as appropriate to allow timely decision regarding required disclosure.

Our management, with the participation of our CEO and CFO, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a- 15(e) and 15d- 15(e) under the Exchange Act), as of December 31, 2016, the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our CEO and CFO have concluded that as of December 31, 2016, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Our management, with the participation of our CEO and CFO, has assessed the effectiveness of the internal control over financial reporting as of December 31, 2016. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in Internal Control - Integrated Framework (2013 Framework). Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2016.

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

Changes in Internal Controls over Financial Reporting

Other than with respect to the material weaknesses discussed below that were identified during the quarter ended December 31, 2015 (related to inventory costing and capitalization of manufacturing variances) and the quarter ended June 30, 2016 (related to embedded derivatives), and subsequently remediated as of December 31, 2016, there was no change in our internal control over financial reporting identified in management’s evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the quarter ended December 31, 2016 that materially affected, or is reasonable likely to materially affect, our internal control over financial reporting.

Remediation of a Material Weakness in Internal Control over Financial Reporting

Material Weakness Related to Inventory Costing and Capitalization of Manufacturing Variances

During the fourth fiscal quarter of 2015, our Chief Executive Officer and Chief Financial Officer identified a material weakness related to our inventory costing and the capitalization of certain manufacturing variances at our former Canadian manufacturing facility that we closed in early 2016. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. This

control deficiency resulted in the reasonable

29

Table of Contents

possibility that a material misstatement in the valuation of inventory would not be prevented or detected on a timely basis. This material weakness was identified and any resulting errors corrected prior to the completion of our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015.

Remediation of Material Weakness

We initiated a plan to enhance our control procedures over the accounting for inventory costing and capitalization of manufacturing variances. During the first quarter of 2016, we ceased to manufacture at the Canadian manufacturing facility and outsourced the manufacturing previously done at this location. As the material weakness related to the valuation of inventory at our Canadian manufacturing facility, management has concluded that the closure of the facility and outsourcing of the manufacturing activities eliminated the manufacturing labor and overhead variance component of the capitalization, which contributed to the remediation of the material weakness in internal controls related to the inventory costing and the capitalization of certain manufacturing variances at the facility. Additionally, management remediated this material weakness by:

- adding additional resources with technical expertise in inventory cost accounting; and
- re-designing controls to ensure proper inventory costing and the capitalization of certain manufacturing variances.

Material Weakness Related to Embedded Derivatives

During the second fiscal quarter of 2016, our Chief Executive Officer and Chief Financial Officer identified a material weakness in our controls over accounting for embedded derivatives requiring bifurcation and valuation modeling. We did not design effective controls to adequately assess the related accounting. This control deficiency resulted in the reasonable possibility that a material misstatement in the valuation of certain modified convertible debt would not be prevented or detected on a timely basis. This material weakness was identified prior to the completion of Form 10-Q for the quarter ended June 30, 2016.

Remediation of Material Weakness

During the fourth quarter of 2016, our management remediated this material weakness by supplementing its accounting professionals with additional resources that have technical expertise in accounting for complex, significant and unusual transactions including but not limited to embedded derivatives requiring bifurcation and valuation modeling.

Management believes that the actions described above to address the material weaknesses related to inventory costing and capitalization of manufacturing variances and embedded derivatives requiring bifurcation and valuation modeling, which actions were completed during the fourth quarter of 2016, have remediated such material weaknesses in internal control over financial reporting as of December 31, 2016.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

ITEM 9B. OTHER INFORMATION

None

Table of Contents

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to the disclosure appearing under the headings “Election of Directors,” “Executive Officers,” “Board of Directors and Corporate Governance” and “Other Matters” in our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2016.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to the disclosure appearing under the heading “Executive Compensation” in our Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2016.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated by reference to the disclosure appearing under the heading “Executive Compensation” in our Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2016.

Table of Contents

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to the disclosure appearing under the heading “Certain Relationships and Related Party Transactions” and “Board of Directors and Corporate Governance -- Director Independence” in our Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2016.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated by reference to the disclosure appearing under the heading “Ratification of Appointment of Independent Registered Public Accounting Firm” in our Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2016.

Table of Contents

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

We have filed the following documents as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements

Our consolidated financial statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

All schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is otherwise included in our consolidated financial statements and related notes.

3. Exhibits

See the Exhibit Index immediately following the signature pages of this Annual Report on Form 10-K.

Table of Contents

ITEM 16. FORM 10-K SUMMARY

None

SIGNATURES

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

CLEAN DIESEL
TECHNOLOGIES, INC.

April 7, 2017 By: /s/ Matthew Beale
Matthew Beale
Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Matthew Beale and Tracy Kern, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution for him, and in his name in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, and any of them or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

/s/ Matthew Beale Chief Executive Officer and Director (Principal Executive Officer) Date: April 7, 2017
Matthew Beale

/s/ Tracy Kern Chief Financial Officer (Principal Financial and Accounting Officer) Date: April 7, 2017
Tracy Kern

/s/ Lon E. Bell, Ph.D. Chairman of the Board Date: April 7, 2017
Lon E. Bell, Ph.D.

/s/ Till Becker, Ph.D. Director Date: April 7, 2017
Till Becker, Ph.D.

/s/ Mungo Park Director Date: April 7, 2017
Mungo Park

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Index to Financial Statements

Audited Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm F-2

Consolidated Balance Sheets as of December 31, 2016 and 2015 F-3

Consolidated Statements of Comprehensive Loss for the years ended December 31, 2016 and 2015 F-4

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016 and 2015 F-5

Consolidated Statements of Cash Flows for the years ended December 31, 2016 and 2015 F-6

Notes to Consolidated Financial Statements F-7

F-1

Table of Contents

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders

Clean Diesel Technologies, Inc.

Oxnard, California

We have audited the accompanying consolidated balance sheets of Clean Diesel Technologies, Inc. (the "Company") as of December 31, 2016 and 2015 and the related consolidated statements of comprehensive loss, stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Clean Diesel Technologies, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations and negative cash flows from operations since inception, resulting in an accumulated deficit of \$(223) million as of December 31, 2016, that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note 3 to the consolidated financial statements, the Company changed its method of presentation of debt issuance costs in 2016 due to the adoption of Financial Accounting Standards Board Accounting Standards Update ("ASU") 2015-03, Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs. This change was applied retrospectively to all periods presented.

/s/ BDO USA, LLP

BDO USA, LLP

Los Angeles, California

April 7, 2017

F-2

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	December 31,	
	2016	2015
ASSETS		
Current assets:		
Cash	\$7,839	\$2,958
Accounts receivable, net	5,398	4,255
Inventories	7,125	7,918
Prepaid expenses and other current assets	968	1,568
Total current assets	21,330	16,699
Property and equipment, net	1,158	1,538
Intangible assets, net	1,483	1,901
Goodwill	—	4,659
Deferred tax asset	554	—
Other assets	305	305
Total assets	\$24,830	\$25,102
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Line of credit	\$1,458	\$3,513
Shareholder notes payable	1,803	—
Accounts payable	5,979	5,012
Accrued expenses and other current liabilities	6,345	7,854
Income taxes payable	642	534
Total current liabilities	16,227	16,913
Shareholder notes payable, noncurrent	—	7,559
Deferred tax liability	—	193
Total liabilities	16,227	24,665
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Preferred stock, par value \$0.01 per share: authorized 100,000; no shares issued and outstanding	—	—
Common stock, par value \$0.01 per share: authorized 50,000,000 and 4,800,000 at December 31, 2016 and 2015, respectively; issued and outstanding 15,703,301 and 3,559,530 shares at December 31, 2016 and 2015, respectively	157	36
Additional paid-in capital	237,838	205,377
Accumulated other comprehensive loss	(6,329)	(5,387)
Accumulated deficit	(223,063)	(199,589)
Total stockholders' equity	8,603	437
Total liabilities and stockholders' equity	\$24,830	\$25,102
See accompanying notes to the consolidated financial statements.		

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Consolidated Statements of Comprehensive Loss

(in thousands, except per share amounts)

	Years Ended December 31,	
	2016	2015
Revenues	\$36,839	\$39,738
Cost of revenues	28,773	28,846
Gross profit	8,066	10,892
Operating expenses:		
Research and development	4,657	7,826
Selling, general and administrative	11,837	11,903
Goodwill Impairment	4,675	—
Severance and other charges	2,555	1,482
Total operating expenses	23,724	21,211
Loss from continuing operations	(15,658)	(10,319)
Other (expense) income:		
Interest expense, net	(1,535)	(1,166)
Gain on change in fair value of bifurcated derivative liability	2,754	—
Loss on extinguishment of convertible debt	(12,410)	—
Gain on change in fair value of liability-classified warrants	1,554	2,617
Other income, net	863	47
Total other (expense) income	(8,774)	1,498
Loss from continuing operations before income tax benefit	(24,432)	(8,821)
Income tax benefit from continuing operations	(958)	(399)
Net loss from continuing operations	(23,474)	(8,422)
Net loss from discontinued operations	—	(112)
Net loss	(23,474)	(8,534)
Foreign currency translation adjustments	(942)	(2,522)
Comprehensive loss	\$(24,416)	\$(11,056)
Basic and diluted net loss per share:		
Net loss from continuing operations	\$(3.84)	\$(2.67)
Net loss from discontinued operations	—	(0.04)
Net loss	\$(3.84)	\$(2.71)
Weighted-average number of common shares outstanding—basic and diluted	6,107	3,151

See accompanying notes to the consolidated financial statements.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Consolidated Statements of Stockholders' Equity

(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss		Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2014	2,831	\$ 28	\$ 200,885	\$ (2,865)	\$ (191,055)	\$ 6,993
Net loss	—	—	—	—		(8,534)	(8,534)
Foreign currency translation adjustment	—	—	—	(2,522)	—	(2,522)
Proceeds from equity offerings, net of costs	677	7	3,724	—		—	3,731
Restricted stock unit vesting	52	1	1	—		—	2
Stock-based compensation	—	—	767	—		—	767
Balance at December 31, 2015	3,560	36	205,377	(5,387)	(199,589)	437
Net loss	—	—	—	—		(23,474)	(23,474)
Foreign currency translation adjustment	—	—	—	(942)	—	(942)
Issuance of stock for settlement of accounts payable	81	1	183	—		—	184
Proceeds from equity offerings, net of costs	5,662	56	9,287	—		—	9,343
Issuance of common stock on conversion of debt	5,961	60	19,978	—		—	20,038
Exercise of warrants	411	4	1,382	—		—	1,386
Restricted stock unit vesting	28	—	—	—		—	—
Stock-based compensation	—	—	1,631	—		—	1,631
Balance at December 31, 2016	15,703	\$ 157	\$ 237,838	\$ (6,329)	\$ (223,063)	\$ 8,603
See accompanying notes to the consolidated financial statements.							

See accompanying notes to the consolidated financial statements.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,	
	2016	2015
Cash flows from operating activities:		
Net loss	\$(23,474)	\$(8,534)
Net loss from discontinued operations	—	112
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	780	924
Stock-based compensation expense	1,631	767
Gain on change in fair value of liability-classified warrants	(1,554)	(2,617)
Gain on change in fair value of bifurcated derivative liability	(2,754)	—
Loss on extinguishment of convertible debt	12,410	—
Gain on foreign currency transactions	(965)	(718)
Amortization of debt discount	460	—
Impairment of goodwill	4,675	—
Offering costs	—	833
Other	150	(256)
Changes in operating assets and liabilities:		
Accounts receivable	(1,124)	(1,705)
Inventories	965	(2,483)
Prepaid expenses and other assets	571	(294)
Accounts payable, accrued expenses and other current liabilities	1,894	2,790
Income taxes	(669)	312
Cash used in operating activities of continuing operations	(7,004)	(10,869)
Cash used in operating activities of discontinued operations	—	(712)
Net cash used in operating activities	(7,004)	(11,581)
Cash flows from investing activities:		
Purchases of property and equipment	(146)	(661)
Proceeds from sale of property, equipment and other assets	79	208
Net cash used in investing activities	(67)	(453)
Cash flows from financing activities:		
Net payments under demand line of credit	(2,055)	671
Proceeds from issuance of common stock and warrants, net of offering costs	10,200	7,115
Proceeds from exercise of warrants	240	—
Proceeds from debt offerings	3,750	—
Net cash provided by financing activities	12,135	7,786
Effect of exchange rates on cash	(183)	(14)
Net change in cash	4,881	(4,262)
Cash at beginning of year	2,958	7,220
Cash at end of year	\$7,839	\$2,958
See accompanying notes to the consolidated financial statements.		

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements

1. Description of Business

Clean Diesel Technologies, Inc. ("CDTi" or the "Company") is a leading provider of technology and solutions to the automotive emissions control markets. The Company possesses market leading expertise in emissions catalyst design and engineering for automotive and off-road applications

The Company is transitioning its business from being a niche manufacturer of emissions control solutions for the automotive and heavy duty diesel markets to becoming an advanced materials technology provider for these markets. The Company has a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGMs") in coatings on vehicle catalytic converters. Recently, the Company has expanded its materials platform to include new synergized-PGM diesel oxidation catalysts (SPGM™ DOC), Base-Metal Activated Rhodium Support (BMARS™), and Spinel™ technologies, and it is in the process of introducing these new catalyst technologies to OEMs and other vehicle catalyst manufacturers in a proprietary powder form. The Company believes that this powder-to-coat business model will allow it to achieve greater scale and higher return on its technology investment than in the past.

The Company's business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants. It has operations in the United States ("U.S."), Canada, the United Kingdom, France, Japan and Sweden as well as an Asian investment.

2. Liquidity and Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. Therefore, the consolidated financial statements contemplate the realization of assets and liquidation of liabilities in the ordinary course of business. The Company has suffered recurring losses and negative cash flows from operations since inception, resulting in an accumulated deficit of \$223.1 million at December 31, 2016. The Company has funded its operations through asset sales, credit facilities and other borrowings and equity sales. At December 31, 2016, the Company had \$7.8 million in cash.

The Company's continuation as a going concern is dependent upon its ability to obtain adequate financing, which the Company has successfully secured since inception, including financing from equity sales and asset divestitures. However, there is no assurance that the Company will be able to achieve projected levels of revenue and maintain access to sufficient working capital, and accordingly, there is substantial doubt as to whether the Company's existing cash resources and working capital are sufficient to enable it to continue its operations within one year from the financial statement issuance date. The Company is currently working towards obtaining a new credit facility that would provide the Company the flexibility it needs as it implements its new business strategy. If the Company is unable to obtain the necessary capital, it will be forced to license or liquidate its assets, significantly curtail or cease its operations and/or seek reorganization under the U.S. Bankruptcy Code.

The Company has a \$7.5 million secured demand facility backed by its receivables and inventory with Faunus Group International, Inc. ("FGI"). At December 31, 2016, the Company had \$1.5 million in borrowings outstanding under this facility with \$6.0 million available, subject to the availability of eligible accounts receivable and inventory balances for collateral. There is no guarantee that the Company will be able to borrow to the full limit of \$7.5 million if FGI chooses not to finance a portion of its receivables or inventory. Additionally, FGI can cancel the facility at any time. For additional information, refer to Note 10, "Debt".

On May 19, 2015, the Company filed a shelf registration statement on Form S-3 with the SEC, which was declared effective on November 17, 2015. The Form S-3 permits the Company to sell in one or more registered transactions up to an aggregate of \$50.0 million of various securities not to exceed one-third of the Company's public float in any 12-month period. As of December 31, 2016, the Company had sold an aggregate of \$3.1 million using the Form S-3.

During the twelve months ended December 31, 2016, the Company entered into the following agreements or made amendments to existing debt in order to address cash requirements and improve the Company's capital structure:

· April 1, 2016 Kanis Promissory Note: Kanis S.A agreed to lend the Company \$2.0 million at 8% per annum.

· April 1, 2016 Kanis Amendment to Loan Agreement: The Company amended all prior conversion rights in the \$7.5 million Kanis loan agreement to provide Kanis the right to convert the loan and accrued interest at \$3.60 or market

F-7

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

2. Liquidity and Going Concern (Continued)

price. The amendment further allowed the Company to mandatorily convert the loan and accrued interest upon a Liquidity Event at a discount of 25% below the Liquidity Event price.

· April 11, 2016 Bell Director Note: Lon E. Bell, Ph.D. one of the Company's directors, agreed to lend the Company \$0.5 million at 8% per annum.

· June 30, 2016 Kanis Exchange Agreement: Kanis S.A agreed to an exchange of \$7.5 million in principal plus accrued interest for shares of the Company's common stock, conditional upon receipt of shareholder approval.

· June 30, 2016 Bell Exchange Agreement: Dr. Bell agreed to an exchange of \$0.5 million in principal plus accrued interest for shares of the Company's common stock, conditional upon receipt of shareholder approval.

· June 30, 2016 Haldor Topsøe Convertible Notes: The Company agreed to sell and issue (i) a Senior Convertible Promissory Note in the principal amount of \$0.75 million and a Convertible Promissory Note in the principal amount of \$0.5 million, each of which is convertible into the Company's equity securities.

On August 25, 2016, the Company's shareholders approved debt conversion transactions with Kanis S.A. and Lon E. Bell. Combined with the conversion of convertible debt held by Haldor Topsøe A/S, the Company issued approximately 5.5 million shares of common stock in exchange for the extinguishment of approximately \$8.9 million of total indebtedness.

On November 3, 2016, the Company entered into a securities purchase agreement with institutional and individual accredited investors and certain of its officers and directors to raise gross proceeds of approximately \$10.3 million in a private placement of common stock at a per-share price of \$2.00. The offering was consummated in two closings. The initial closing for 949,960 shares of common stock, for gross proceeds of approximately \$1.9 million, was completed on November 4, 2016. The second closing for approximately 4.2 million shares, for gross proceeds of approximately \$8.4 million, was completed on December 16, 2016. The Company paid approximately \$0.1 million of transaction costs related to the equity offerings. In addition, the Company issued common stock and warrants to the placement agent of the equity offering as payment for their services (see Note 11 for further information).

In addition, on December 16, 2016, Haldor Topsoe elected to convert the Senior Note, and issued to Haldor Topsøe and aggregate of 462,535 shares of common stock in conversion of \$0.75 million in principal amount of indebtedness.

The Company intends to use the net proceeds from the offering for general corporate purposes, including, but not limited to, working capital, general and administrative expenses, capital expenditures, implementation of strategic priorities, and other corporate uses.

3. Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries. All intercompany transactions, including intercompany profits and losses and intercompany balances, have been eliminated in consolidation.

Discontinued Operations

When the Company commits to a plan to dispose of a component of the Company or a group of components of the Company, it is required to be reported in discontinued operations if the disposal represents a strategic shift that has (or will have) a major effect on the Company's operations and financial results when certain events have occurred as defined by ASU 2014-08 "Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment

(Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity." A business' operations are classified as discontinued operations for all periods that would be presented. In the statements of cash flows, the cash flows of discontinued operations are separately classified and aggregated.

F-8

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

Discontinued operations includes accruals and related costs for the Company's estimated liability to settle its ongoing indemnification matters with Johnson Matthey ("JM") associated with the sale of Applied Utility Systems, Inc. ("AUS"), a former subsidiary of the Company, in 2009.

For additional information, refer to Note 21, "Discontinued Operations".

All discussions and amounts in the consolidated financial statements and related notes for all periods presented relate to continuing operations only, unless otherwise noted.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S requires management of the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. These estimates and assumptions are based on management's best estimates and judgment. On an ongoing basis, the Company evaluates its estimates and assumptions, including those related to impairment of goodwill and long-lived assets, stock-based compensation, the fair value of financial instruments including warrants, allowance for doubtful accounts, inventory valuation, taxes and contingent and accrued liabilities. The Company bases its estimates on historical experience and various other factors, including the current economic environment, which it believes to be reasonable under the circumstances. Estimates and assumptions are adjusted when facts and circumstances dictate. Actual results may differ from these estimates under different assumptions and conditions. Management believes that the estimates are reasonable.

Cash

Cash consists of cash balances on hand and on deposit at banks. Cash on deposit at banks at times may exceed the Federal Deposit Insurance Corporation (FDIC) limits. The Company believes no significant concentration of credit risk exists with respect to these cash balances.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. Accounts receivable are presented net of a reserve for doubtful accounts of \$0.4 million and \$0.3 million at December 31, 2016 and 2015, respectively. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company determines the allowance based on historical write-off experience and past due balances over 90 days that are reviewed individually for collectability. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off balance sheet credit exposure related to its customer.

Inventories

Inventories are stated at the lower of cost (FIFO method) or market (net realizable value). Finished goods inventory includes materials, labor and manufacturing overhead. The Company establishes provisions for inventory that is obsolete or when quantities on hand are in excess of estimated forecasted demand. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of sales.

The Company's inventory includes precious metals (platinum, palladium and rhodium) for use in the manufacturing of catalysts. The precious metals are valued at the lower of cost or market, consistent with the Company's other inventory.

Property and Equipment

Property and equipment is capitalized at cost and is stated at cost less accumulated depreciation and amortization. Depreciation and amortization is determined using the straight line method over the estimated useful lives of the various asset classes. Machinery and equipment are depreciated over 2 to 10 years; furniture and fixtures, computer hardware and software and vehicles are depreciated over 2 to 5 years. Property and equipment held under capital leases and leasehold improvements are amortized over the shorter of estimated useful lives or the lease term. Repairs and maintenance are charged to expense as incurred and major replacements or betterments are capitalized.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

Goodwill and Intangible Assets

Goodwill is the excess of the purchase price of an acquired entity over the fair value of net identified tangible and intangible assets acquired and is recorded in the reporting unit (operating segment or one level below operating segment) that is expected to benefit from the business combination. Goodwill is not amortized, but rather tested for impairment at least annually or more often whenever events or circumstances indicate that goodwill might be impaired. The Company performs its annual impairment test as of October 31.

Goodwill is tested at the reporting unit level using a two-step impairment test. The first step is to compare the fair value of the reporting unit to its carrying value, including goodwill. If the carrying value of the reporting unit exceeds the fair value, a second step is performed in order to determine the amount of impairment loss, if any. The second step compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess. Prior to performing the two-step impairment test, the Company may make a qualitative assessment of the likelihood of goodwill impairment in order to determine whether a detailed quantitative analysis is required.

The Company's Engine Control Systems reporting unit, contains all of the Company's allocated goodwill. See note 15 for further discussion of the impairment which occurred in 2016.

The Company's intangible assets consist of trade names, acquired patents and technology, and customer relationships and have finite lives. Intangible assets are carried at cost, less accumulated amortization. Amortization is computed on a straight-line or accelerated basis over the estimated useful lives of the respective assets, ranging from 4 to 20 years.

Long Lived Assets

Assets such as property and equipment and amortizable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the sum of the expected undiscounted future net cash flows of an asset or asset group is less than its carrying amount and is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

Warrants and Derivative Liabilities

The Company accounts for the issuance of Company derivative equity instruments in accordance with Accounting Standards Codification ("ASC") 815-40 "Derivative and Hedging". The Company reviews common stock purchase warrants at each balance sheet date based upon the characteristics and provision of each particular instrument and classifies them on the balance sheet as equity or a liability. Below are some of the factors the Company considers with the corresponding balance sheet classification:

Equity if the awards (i) require physical settlement or net-share settlement, or (ii) give the Company a choice of net-cash settlement or settlement in the Company's own shares (physical settlement or net-share settlement), or as Liabilities if the awards (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the Company's control), or (ii) give the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement).

The Company assesses classification of common stock purchase warrants and other freestanding derivatives at each reporting date to determine whether a change in classification between assets and liabilities and equity is required.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. 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. A valuation allowance against deferred tax assets is required if, based on the weight of available evidence, it is more likely than

not that some portion or all of the deferred tax assets will not be realized.

F-10

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

The valuation allowance should be sufficient to reduce the deferred tax assets to the amount that is more likely than not to be realized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Changes in recognition or measurement are reflected in the period in which the change occurs. The Company records interest and penalties related to unrecognized tax benefit in income tax expense.

Revenue Recognition

Revenues are derived primarily from the sale of products. The Company generally recognizes revenue when products are shipped and the customer takes ownership and assumes risk of loss, collection of the relevant receivable is reasonably assured, persuasive evidence of an arrangement exists and the sales price is fixed or determinable. There are certain customers where risk of loss transfers at destination point and revenue is recognized when product is delivered to the destination. For these customers, revenue is recognized upon receipt at the customer's warehouse. When terms of sale include subjective customer acceptance criteria, the Company defers revenue until the acceptance criteria are met. The determination of whether or not the customer acceptance terms are perfunctory or inconsequential impacts the amount and timing of the revenue recognized.

Research and Development

Research and development costs are generally expensed as incurred. These expenses include the salary and benefits for the research and development staff as well as travel, research materials, testing and legal expense related to patenting intellectual property. Also included is any depreciation related to assets utilized in the development of new products.

Stock-Based Compensation

Equity awards consist of stock options and restricted stock units ("RSUs"). The Company measures the compensation cost for all stock-based awards at fair value on the date of grant and recognizes it on a straight-line basis over the service period for awards expected to vest, which is generally three years.

The Company measures the fair value of stock options using the Black-Scholes option-pricing model and certain assumptions, including the expected life of the stock options, an expected forfeiture rate and the expected volatility of its common stock. The fair value of RSUs is based on the closing price of the Company's common stock on the grant date.

Product Warranty

The Company provides for the estimated cost of product warranties in cost of sales, at the time product revenue is recognized. Warranty costs are estimated primarily using historical warranty information in conjunction with current engineering assessments applied to the Company's expected repair or replacement costs.

Foreign Currency

The functional currency of the Heavy Duty Diesel Systems division's Engine Control Systems Limited subsidiary in Canada is the Canadian dollar, while that of its subsidiary Engine Control Systems Europe AB in Sweden is the Swedish krona and the division's Clean Diesel Technologies Limited U.K. subsidiary, is the British pound sterling. The functional currency of the Catalyst division's Japanese branch office and Asian investment is the Japanese Yen. Accordingly, the assets and liabilities of the foreign locations are translated into U.S. dollars at period-end exchange rates. Revenue and expense accounts are translated at the average exchange rates for the period. The resulting foreign currency exchange adjustments are charged or credited directly to other comprehensive income or loss as a separate component of stockholders' equity. Unrealized foreign currency exchange gains and losses on certain intercompany transactions that are of a long-term investment nature (i.e. settlement is not planned or anticipated in the foreseeable future) are also recorded in other comprehensive income or loss in stockholders' equity. Accumulated other comprehensive loss contained only foreign currency translation adjustments as of December 31, 2016 and 2015.

The Company has exposure to multiple currencies. The primary exposure is between the U.S. dollar, the Canadian dollar, the Euro, British pound sterling and Swedish krona. Gains and losses arising from transactions denominated in currencies other than the functional currency of the entity are included in other income (expense) in the consolidated

statements of comprehensive loss. Gains and losses arising from transactions denominated in foreign currencies are primarily related to inter-

F-11

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

company loans that have been determined to be temporary in nature, cash, accounts receivable and accounts payable denominated in non-functional currencies.

Net Loss per Share

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted average number of common shares and dilutive potential common shares. Dilutive potential common shares include employee stock options, RSUs, warrants and debt that are convertible into the Company's common stock.

Diluted net loss per share excludes certain dilutive potential common shares outstanding as their effect is anti-dilutive. Because the Company incurred net losses in the years ended December 31, 2016 and 2015, the effect of potentially dilutive securities has been excluded in the computation of net loss per share as their impact would be anti-dilutive. Potentially dilutive common stock equivalents excluded were 2.1 million and 1.2 million shares during the years ended December 31, 2016 and 2015, respectively.

Fair Value Measurements

Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset and liability. As a basis for considering such assumptions, a fair value hierarchy has been established that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

• Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable including quoted prices for similar instruments in active markets and quoted prices for identical or similar instruments in markets that are not active; and

• Level 3: Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Fair Value of Financial Instruments

ASC Topic 825, "Financial Instruments", requires disclosure of the fair value of financial instruments for which the determination of fair value is practicable. The fair values of the Company's cash, trade accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses and other current liabilities approximate carrying values due to the short maturity of these instruments. The fair value of borrowings under the line of credit approximates their carrying value due to the variable interest rates. The fair value of shareholder notes payable, calculated using level 3 inputs, and a net present value model, was \$1.8 million and \$7.6 million at December 31, 2016 and 2015, respectively. The fair value for the warrants classified as liability and the bifurcated derivative liabilities were calculated using level 3 inputs, including Black-Scholes option-pricing model as well as Monte Carlo Simulation model. These inputs are disclosed in Note 13 "Fair Value Measurements"

Reclassifications

Certain prior-period amounts have been reclassified to conform to the current period presentation. These changes had no impact on the previously reported consolidated results of operations or stockholders' equity. The Company had been transitioning from a niche manufacturer of emission control solutions for the automotive and heavy duty diesel markets to becoming an advanced materials technology provider for these markets. During the second quarter of 2016, the transition of the operational strategy was completed and the Company now views its operations and measures its business as one reportable segment. As a result, all segment disclosure has been modified to reflect the current year presentations.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

Recently Issued Accounting Guidance

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-9, "Revenue from Contracts with Customers (Topic 606)". ASU No. 2014-9 supersedes the revenue recognition requirements in "Revenue Recognition (Topic 605)". ASU No. 2014-9 requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. In July 2015, the FASB finalized the delay of the effective date by one year, making the new standard effective for interim periods and annual periods beginning after December 15, 2017. Early adoption is permitted, but it is not permitted earlier than the original effective date. ASU No. 2014-9 provides for either full retrospective adoption or a modified retrospective adoption by which it is applied only to the most current period presented. While the Company has not finalized the impact of the adoption of ASU No. 2014-9 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern". ASU No. 2014-15 defines management's responsibility to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. It is effective for annual reporting periods ending after December 15, 2016, and for annual and interim reporting periods thereafter. Early adoption is permitted. The Company has elected to early adopt the provision and has provided the appropriate disclosure in Note 2.

In April 2015, the FASB issued ASU No. 2015-03, "Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs" which requires companies to present debt issuance costs the same way they currently present debt discounts, as a direct deduction from the carrying value of that debt liability. ASU No. 2015-03 does not impact the recognition and measurement guidance for debt issuance costs. The provisions in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. Early adoption is allowed for all entities for financial statements that have not been previously issued. Entities would apply the new guidance retrospectively to all prior periods (i.e., the balance sheet for each period is adjusted). The adoption of this provision did not have a material impact on the consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-11, "Inventory (Topic 330): Simplifying the Measurement of Inventory". ASU No. 2015-11 changes the measurement principle for inventory from the "lower of cost or market" to "lower of cost and net realizable value." Net realizable value is defined as the "estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation." ASU No. 2015-11 eliminates the guidance that entities consider replacement cost or net realizable value less an approximately normal profit margin in the subsequent measurement of inventory when cost is determined on a first-in, first-out or average cost basis. It is effective for annual reporting periods beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The Company has not yet determined whether it will elect to early adopt ASU No. 2015-11, and it is currently in the process of evaluating the impact of the adoption of ASU No. 2015-11 on its consolidated financial statements.

In January 2016, FASB issued ASU No. 2016-1, "Recognition and Measurement of Financial Assets and Financial Liabilities". ASU No. 2016-1 requires equity investments to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet

or the accompanying notes to the financial statements and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. ASU No. 2016-1 is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company is currently in the process of evaluating the impact of the adoption of ASU No. 2016-1 on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-2, "Leases (Topic 842)." ASU No. 2016-2 requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous U.S. generally accepted accounting

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

3. Significant Accounting Policies (Continued)

principles. It is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. Entities are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is evaluating the impact of adoption of ASU No. 2016-2 on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, "Compensation - Stock Compensation: Improvements to Employee Share-Based Payment Accounting". ASU No. 2016-09 will change how companies account for certain aspects of share-based payments to employees. Entities will be required to recognize the income tax effects of awards in the statement of income when the awards vest or are settled, the guidance on employers' accounting for an employee's use of shares to satisfy the employer's statutory income tax withholding obligation and for forfeitures is changing and the update requires companies to present excess tax benefits as an operating activity on the statement of cash flows rather than as a financing activity. ASU No. 2016-09 is effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. Early adoption is permitted. The Company adopted ASU No. 2016-09 in the first quarter of 2017. The adoption of this provision did not have a material impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments: a consensus of the Emerging Task Force." ASU 2016-15 provides guidance on how certain cash receipts and payments are presented and classified in the statement of cash flows, including debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, and separately identifiable cash flows and application of the predominance principle. The standard is intended to reduce current diversity in practice. The standard will be effective for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. Early adoption is permitted. The Company has not yet evaluated the impact of the adoption of this accounting standard update on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, "Intra-Entity Transfers of Assets of Other Than Inventory." Current GAAP prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. ASU 2016-16 updates the current guidance by requiring that entities recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments in this ASU do not change GAAP for the pre-tax effects of an intra-entity asset transfer under Topic 810, Consolidation, or for the income tax effects of an intra-entity transfer of inventory. The standard will be effective for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of this accounting standard on its consolidated financial statements.

4. Inventories

Inventories consist of the following (in thousands):

	December 31,	
	2016	2015
Raw materials	\$3,291	\$3,894
Work in process	790	844
Finished goods	3,044	3,180
	\$7,125	\$7,918

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

5. Property and Equipment

Property and equipment consists of the following (in thousands):

	December 31,	
	2016	2015
Buildings and improvements	\$—	\$195
Furniture and fixtures	2,124	2,248
Computer hardware and software	1,228	1,370
Machinery and equipment	11,078	11,961
Vehicles	31	86
	14,461	15,860
Less accumulated depreciation	(13,303)	(14,322)
	\$1,158	\$1,538

Depreciation expense was \$0.3 million and \$0.4 million for the years ended December 31, 2016 and 2015, respectively.

6. Goodwill and Intangible Assets

Goodwill

The balance of goodwill as of December 31, 2016 and 2015 was \$0.0 million and \$4.7 million. In connection with the annual impairment analysis performed during the fourth quarter, the Company recognized an impairment charge of \$4.7 million (see Note 15 for further details).

Intangible Assets

Intangible assets consist of the following (in thousands):

	Useful Life	December 31,	
	in Years	2016	2015
Trade name	15 - 20	\$1,204	\$1,186
Patents and know-how	5 - 12	4,090	4,002
Customer relationships	4 - 8	721	724
		6,015	5,912
Less accumulated amortization		(4,532)	(4,011)
		\$1,483	\$1,901

The Company recorded amortization expense related to amortizable intangible assets of \$0.5 million and \$0.6 million for the years ended December 31, 2016 and 2015, respectively.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

6. Goodwill and Intangible Assets (Continued)

Estimated amortization expense for existing intangible assets for each of the next five years is as follows (in thousands):

Years ending December 31:

2017	\$435
2018	\$161
2019	\$161
2020	\$161
2021	\$161
Thereafter	\$404
	\$1,483

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	December 31,	
	2016	2015
Accrued salaries and benefits	\$759	\$1,332
Accrued severance and other charges(1)	1,738	1,092
Accrued warranty(2)	338	228
Warrant liability(3)	1,226	3,072
Liability for consigned precious metals	1,282	543
Other	1,002	1,587
	\$6,345	\$7,854

(1)For additional information, refer to Note 8, "Severance and Other Charges".

(2)For additional information, refer to Note 9, "Accrued Warranty".

(3)For additional information, refer to Note 13, "Fair Value Measurements".

8. Severance and Other Charges

Severance, exit and other charges consist of the following (in thousands):

	Years Ended	
	December 31,	
	2016	2015
Employee severance expense	\$1,227	\$1,210
Other closure costs	—	272
Lease exit costs	1,328	—
Total severance and other charges	\$2,555	\$1,482

The Company incurred severance costs in 2015 related to its North American locations, including \$0.8 million of severance benefits covering a one year period for our former president and chief operating officer and our former general counsel, corporate secretary and vice president, administration, pursuant to separation and release agreements. Additionally, on December 11, 2015, the Company announced its intention to close its Canadian manufacturing facility. Costs associated with this closure, primarily severance costs, of \$0.6 million have been accrued as of December 31, 2015.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

8. Severance and Other Charges (Continued)

During 2016, the Company accrued approximately \$1.3 million of lease exit costs associated with its manufacturing facility in Canada. In addition, the Company incurred additional severance costs of approximately \$1.2 million associated its Canadian manufacturing facility as well as other North American locations.

The following summarizes the activity in the Company's accrual for severance and other exit costs (in thousands):

	Severance	Lease Exit Costs	Total
December 31, 2014	\$ 293	\$42	\$335
Provision	1,210	—	1,210
Payments	(411)	(42)	(453)
December 31, 2015	\$ 1,092	\$—	\$1,092
Provision	1,227	1,328	2,555
Payments	(1,601)	(308)	(1,909)
December 31, 2016(1)	\$ 718	\$1,020	\$1,738

(1) The Company expects to pay this accrual during the year ended December 31, 2017.

9. Accrued Warranty

The Company establishes reserves for future product warranty costs that are expected to be incurred pursuant to specific warranty provisions with its customers. The Company generally warrants its products against defects between one and five years from date of shipment, depending on the product. The warranty reserves are established at the time of sale and updated throughout the warranty period based upon numerous factors including historical warranty return rates and expenses over various warranty periods. Historically, warranty returns have not been material.

The following summarizes the activity in the Company's accrual for product warranty (in thousands):

	Years Ended December 31,	
	2016	2015
Balance at beginning of period	\$228	\$373
Accrued warranty expense	431	301
Warranty claims paid	(324)	(389)
Translation adjustment	3	(57)
Balance at end of period	\$338	\$228

10. Debt

Debt consists of the following (in thousands):

	December 31, 2016	December 31, 2015
Line of credit with FGI	\$ 1,458	\$ 3,513
\$2.0 million, 8% shareholder note due 2017 (1)	1,803	—
\$1.5 million, 8% shareholder note due 2018 (2)	—	1,623
\$3.0 million, 8% subordinated convertible shareholder notes due 2018 (2)	—	2,972
\$3.0 million, 8% shareholder note due 2018 (2)	—	2,964
	3,261	11,072
Less current portion	(3,261)	(3,513)
	\$ —	\$ 7,559

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

10. Debt (Continued)

Debt discount related to extinguishment and amendment of previous outstanding debt. The aggregate amount of (1) unamortized debt discount was \$0.2 million at December 31, 2016. For additional information, refer to the respective discussions below.

Debt discounts relate to warrants issued with shareholder notes and amendments. The aggregate amount of (2) unamortized debt discount was \$0.1 million at December 31, 2015. For additional information, refer to the respective discussions below.

Line of Credit with FGI

The Company maintains a \$7.5 million secured demand facility with FGI backed by its receivables and inventory. The Company also granted FGI a first lien collateral interest in substantially all of its assets. The current termination date is August 15, 2017, however, FGI can cancel the facility at any time and demand payment.

Under the FGI facility, FGI can elect to purchase eligible accounts receivable from the Company and the Credit Subsidiaries at up to 80% of the value of such receivables (retaining a 20% reserve). Purchased receivables are subject to full recourse to the Company in the event of nonpayment by the customer. FGI becomes responsible for the servicing and administration of the accounts receivable purchased. The Company is not obligated to offer accounts in any month and FGI has the right to decline to purchase any accounts. At FGI's election, FGI may advance the Company up to 80% of the value of any purchased accounts receivable, subject to the \$7.5 million limit. Reserves retained by FGI on any purchased receivable are expected to be refunded to the Company net of interest and fees on advances once the receivables are collected from customers. The Company may also borrow against eligible inventory up to the inventory sublimit, as determined by FGI, subject to the aggregate \$7.5 million limit under the FGI facility and certain other conditions. At December 31, 2016, the inventory sublimit amount was the lesser of \$1.5 million or 50% of the aggregate purchase price paid for accounts receivable purchased under the FGI facility. While the overall credit limit and the inventory sublimit were not changed, borrowing against the Company's significant OEM customer's inventory has been limited to \$0.2 million by FGI due to their concerns about customer concentration as of December 31, 2016.

The interest rate on advances or borrowings under the FGI facility is the greater of (i) 6.50% per annum and (ii) 2.50% per annum above the prime rate, as defined in the FGI facility and was 6.50% at December 31, 2016 and 2015. Any advances or borrowings under the FGI facility are due on demand. The Company also agreed to pay FGI collateral management fees of 0.30% per month on the face amount of eligible receivables as to which advances have been made and 0.38% per month on borrowings against inventory, if any. At any time outstanding advances or borrowings under the FGI facility are less than \$2.4 million, the Company agreed to pay FGI standby fees of (i) the interest rate on the difference between \$2.4 million and the average outstanding amounts and (ii) 0.44% per month on 80% of the amount by which advances or borrowings are less than the agreed \$2.4 million minimum.

At December 31, 2016, the Company had \$0.6 million of gross accounts receivable pledged to FGI as collateral for short-term debt well as \$0.8 million in borrowings outstanding against eligible inventory. The Company was in compliance with the terms of the FGI facility at December 31, 2016. However, there is no guarantee that the Company will be able to borrow to the full limit of \$7.5 million if FGI chooses not to finance a portion of its receivables or inventory.

Kanis S. A. Indebtedness

As of December 31, 2015, the Company had entered into various loan commitments with Kanis S.A with an aggregate outstanding principal balance of \$7.5 million. These loans are described in the table above as follows:

\$1.5 million, 8% shareholder note due 2018

\$3.0 million, 8% subordinated convertible shareholder note due 2018

\$3.0 million, 8% shareholder note due 2018

On April 1, 2016, the Company executed a Promissory Note (the “Kanis Note”) and entered into an amendment of existing loan agreements (the “Kanis Agreement”) with Kanis S.A. Pursuant to the terms of the Kanis Note, Kanis S.A. agreed to lend the Company \$2.0 million at 8% per annum with a maturity date of September 30, 2017. Pursuant to the terms of the Kanis Agreement, the Company and Kanis S.A. agreed to amend prior loans with an aggregate outstanding principal balance of \$7.5 million (collectively, the “Loan Agreements”), such that: (i) Kanis S.A. had the right to convert the principal balance of the Loan Agreements and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTi’s common stock on the date before the date of the Kanis

F-18

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

10. Debt (Continued)

Agreement or as of the date when Kanis S.A. exercises its conversion right; and (ii) the Company had the right to mandatorily convert the \$7.5 million principal balance and any accrued interest thereon into its common stock upon maturity of the Loan Agreements or earlier upon the occurrence of a Liquidity Event at a conversion price equal to the lower of the closing price of CDTi as of the date immediately before the date of the Kanis Agreement or at a 25% discount to the Liquidity Event price. A Liquidity Event is defined as a strategic investment in CDTi or a public stock offering by CDTi. The Company could prepay the principal and any interest due on the Loan Agreements at any time before their maturity date without penalty.

Certain features of the Kanis Note resulting from the Kanis Agreement required bifurcation and were determined to be an embedded derivative comprised of a conversion feature and a call option. The embedded derivative was separated from the Kanis Note and carried as a derivative liability on the balance sheet at fair value, with changes in fair value reported through earnings. The conversion feature could have been exercised at either \$3.60, which is the closing stock price the day prior to the original agreement or at the market price when the conversion was exercised. The call option could have been executed by the Company in the event the Company completes a Liquidity Event. The call option would be settled at a 25% discount to the Liquidity Event pricing. In addition, the Kanis Agreement was considered to trigger an extinguishment of the debt. As a result the Company recorded a loss of approximately \$1.6 million for the three and six months ended June 30, 2016 in connection with the Kanis agreement. For additional information on the bifurcated derivative liability, please see Note 13, "Fair Value Measurements".

On June 30, 2016, the Company entered into a Letter Agreement (the "Kanis Exchange Agreement") with Kanis S.A. The Company agreed to an exchange with Kanis of an aggregate of \$7.5 million in principal amount of promissory notes and other indebtedness (collectively, the "Kanis Notes") held by Kanis, plus accrued interest, for a number of shares of the Company's common stock equal to (a) the principal amount of the Kanis Notes plus the accrued interest thereon through and including the date of the settlement of the exchange contemplated by the Kanis Exchange Agreement, divided by (b) \$1.6215.

At a special meeting of stockholders held on August 25, 2016, the Company's stockholders approved the transactions contemplated by the Kanis Exchange Agreement. On August 30, 2016, the Company consummated the Kanis Exchange Agreement, pursuant to which an aggregate of 4,872,032 shares of common stock was issued to Kanis in exchange for the delivery to the Company of the Kanis Notes and the extinguishment of \$7.9 million of indebtedness, including \$0.4 million of accrued interest and the bifurcated derivative liability. The exchange resulted in a loss on extinguishment of \$10.2 million. Subsequent to the August 30, 2016 conversion, the Company's sole remaining debt with Kanis S.A. was the loan agreement for \$2.0 million, at 8% interest per annum with a maturity date of September 30, 2017, entered into on April 1, 2016.

In January 2017, the Company repaid the entire \$2.0 million balance.

Director note

On April 11, 2016, the Company executed a Convertible Promissory Note (the "Director Note") with Lon E. Bell, Ph.D., one of the Company's Directors. Pursuant to the terms of the Director Note, Dr. Bell agreed to lend the Company \$0.5 million at 8% per annum and a maturity date of September 30, 2017. Dr. Bell had the right to convert the principal balance of the Director Note and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTi on the date before the date of the Director Note or as of the date when Dr. Bell exercises his conversion right. The Company had the right to mandatorily convert the principal balance of the Director Note and any accrued interest thereon into its common stock

upon maturity at a conversion price equal to the lower of the closing price of CDTi on the date before the date of the Director Note or on the maturity date. The Company also had the right to mandatorily convert the principal amount of the Director Note plus accrued interest thereon into its common stock concurrently with the closing of a Liquidity Event, as defined, at a conversion price equal to the lower of the closing price of CDTi as of the date immediately before the date of this Director Note or at a 25% discount to the Liquidity Event price. A Liquidity Event is defined as a strategic investment in CDTi or a public stock offering by CDTi.

Effective May 12, 2016, the Director Note was amended and restated to amend the conversion features contained therein. The Director Note, which originally had a floating conversion price, allowed Dr. Bell to convert the principal balance of the note and any accrued interest thereon at any time before payment into shares of the Company's common stock at a fixed conversion price of \$3.55 per share (subject to adjustment for stock splits, reverse stock splits, and similar events) (the "Conversion Price"), which was the closing consolidated bid price of the Company's common stock on the trading day immediately prior to

F-19

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

10. Debt (Continued)

the date of issuance. In addition, the Company had the right to mandatorily convert the principal balance of the Director Note plus any accrued interest into shares of the Company's common stock at the Conversion Price upon the earlier of the Maturity Date and the closing of a Liquidity Event if, and only if, the Conversion Price was less than the average closing price of the Company's common stock for the five consecutive trading days ending on the trading day immediately preceding the date the Company exercises its conversion rights.

On June 30, 2016, the Company entered into a Letter Agreement (the "Bell Exchange Agreement") with Dr. Bell. The Company agreed to an exchange with Dr. Bell of the Director Note for a number of shares of the Company's common stock equal to (a) the principal amount of the Bell Note plus the accrued interest thereon through and including the date of the settlement of the exchange contemplated by the Bell Exchange Agreement, divided by (b) \$1.6215.

At a special meeting of stockholders held on August 25, 2016, the stockholders approved the transactions contemplated by the Bell Exchange Agreement. On August 30, 2016, the Company consummated the Bell Exchange Agreement transaction, pursuant to which an aggregate of 317,950 shares of common stock was issued to Dr. Bell in exchange for the delivery to the Company of the Bell Note and the extinguishment of \$0.5 million of indebtedness, including accrued interest. The exchange resulted in a loss on extinguishment of \$0.6 million.

Note Purchase Agreement and Convertible Notes

On June 30, 2016, the Company also entered into a Note Purchase Agreement (the "Note Purchase Agreement") with Haldor Topsøe A/S, a company organized under the laws of Denmark ("Haldor Topsøe"). The Company agreed to sell and issue (i) a Senior Convertible Promissory Note (the "Senior Note") in the principal amount of \$0.75 million and (ii) a Convertible Promissory Note (the "Note", and with the Senior Note, the "Convertible Notes") in the principal amount of \$0.5 million, each of which is convertible into the Company's equity securities.

The Convertible Notes provided for interest at a rate of 8% per annum, matured on December 31, 2016 and bore no prepayment penalty. The Convertible Notes provided that they shall at no time be convertible into more than 779,350 shares (subject to adjustment for stock splits, reverse stock splits, and similar events) of the Company's common stock and/or other securities convertible or exercisable for such number of shares of the Company's common stock.

The Convertible Notes permitted Haldor Topsøe to convert the principal balance of the Convertible Notes into shares of the Company's common stock at a fixed conversion price of \$1.6215 per share at any time. In addition, the Senior Note permitted Haldor Topsøe to convert the principal balance of the Senior Note into equity securities that the Company may issue in a future financing including any instruments or securities exchangeable for or convertible into equity securities, at the same price and on the same terms at which the Company sells equity securities in such future financing. The Company had the right to mandatorily convert the Convertible Notes. As long as the Company's common stock continued to be listed on The NASDAQ Stock Market, LLC ("NASDAQ") and the Company was not in default under the Note, the Company had the right to mandatorily convert the principal balance of the Note into shares of its common stock at the conversion price of \$1.6215 per share at any time before payment and following the date of conversion of the Kanis Notes into the Company's common stock. The Company has the right to mandatorily convert the Senior Note, subject to satisfaction of the same conditions to conversion of the Note, upon consummation of a Qualified Financing into the equity securities the Company issues in the Qualified Financing at the same price and on the same terms at which it sells such equity securities in the Qualified Financing. A "Qualified Financing" is defined as an equity or equity-linked financing in which the Company received aggregate gross proceeds of at least \$5.0 million (including the principal amount of the Senior Note converted in such financing).

Accrued interest under the Convertible Notes is not convertible into the Company's equity securities and any interest that has accrued on principal amount converted into equity securities will be paid in cash at the time of such conversion.

Pursuant to the Note Purchase Agreement, the Company agreed, if requested by Haldor Topsøe, to expand the size of its board of directors by one member and appoint one person designated by Haldor Topsøe. Thereafter, until the later of (i) the date that the Convertible Notes have been paid in full or (ii) if 100% of the principal amount of the Convertible Notes have been converted into the Company's common stock and/or other equity securities, the date Haldor Topsøe no longer owns at least eighty percent (80%) of such securities, the Company's board shall include one person designated by Haldor Topsøe in the

F-20

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

10. Debt (Continued)

board's slate of nominees to be submitted to stockholders at each meeting of stockholders of the Company where directors are to be elected.

On August 30, 2016, Haldor Topsøe elected to convert the Note for which the Company issued to Haldor Topsøe an aggregate of 308,357 shares of common stock in conversion of \$0.5 million in principal amount of indebtedness. On December 16, 2016, Haldor Topsøe elected to convert the Senior Note, and issued to Haldor Topsøe and aggregate of 462,535 shares of common stock in conversion of \$0.75 million in principal amount of indebtedness.

For additional information on the warrants discussed within this Note, refer to Note 11, "Stockholders' Equity" and Note 12 "Warrants", respectively.

Annual scheduled principal payments of debt based on earliest redemption date as of December 31, 2016 are (in thousands):

Years ending December 31:

2017	\$3,458
2018	—
Total	\$3,458

11. Stockholders' Equity

On February 12, 2016, at a special meeting of the Company's stockholders, the Company's stockholders voted to approve an amendment to the Restated Certificate of Incorporation to increase the number of authorized shares from 24.0 million shares to 100.0 million shares. Further, on February 12, 2016, the Company filed with the Secretary of State of Delaware a Certificate of Amendment to the Restated Certificate of Incorporation (the "Amendment") which increased the number of authorized shares from 24.0 million shares to 100.0 million shares, ninety-nine million nine hundred thousand (99.9 million) of which were designated as common stock and one hundred thousand (0.1 million) of which were designated as preferred stock. On May 25, 2016 at the Company's Annual Meeting of Stockholders, the stockholders also voted to approve the amendment of the Restated Certificate of Incorporation to effect a reverse stock split of the Company's common stock which to reduce the total number of shares authorized under the Restated Certificate of Incorporation from 100.0 million to 20.0 million. On July 21, 2016, the Company filed a Certificate of Amendment to its Restated Certificate of Incorporation, as amended, with the Secretary of State of Delaware to effect a one-for-five reverse stock split of the Company's common stock, (the "Reverse Stock Split"). The amendment became effective on July 22, 2016. As a result of the Reverse Stock Split, every five (5) shares of the Company's issued and outstanding common stock were combined and reclassified into one (1) share of the Company's common stock. The Reverse Stock Split did not change the par value of the Company's common stock. All share and per share information disclosed in this report, including the conversion features of all warrants (shares and exercise prices) reflect the Reverse Stock Split.

On December 16, 2016, the Company filed with the Secretary of State of Delaware a Certificate of Amendment to the Company's Restated Certificate of Incorporation (the "Amendment") which increased the number of authorized shares from 20,000,000 shares to 50,100,000 shares, of which 50,000,000 are designated as common stock and 100,000 are designated as preferred stock.

June 2015 Offering

In June 2015, the Company agreed to offer and sell up to 500,000 units at a price to the public of \$10.25 per unit (the "June 2015 Offering"). Each unit consisted of one share of common stock and 0.2 of a warrant to purchase one share of common stock. The June 2015 Offering warrants have an exercise price of \$13.25 per share and can be exercised during the period commencing after six months and ending five and a half years from the date of issuance.

The Company received gross proceeds of \$5.1 million and net proceeds of \$4.5 million after deducting the underwriting discounts and other offering expenses. The June 2015 Offering warrants are within the scope of ASC

815-40 and are required to be recorded as liabilities. Accordingly, of the \$4.5 million in net proceeds, \$3.7 million was allocated to the common stock and included in equity and \$0.8 million was allocated to the warrant liability based on the fair value of the warrants on the issuance date. Additionally, \$0.1 million of the underwriter discounts and other offering costs were allocated to the June 2015 Offering

F-21

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

11. Stockholders' Equity (Continued)

warrants, based on the relative fair value of the June 2015 Offering warrants and the common stock on the issuance date, and was included in other income (expense), net in the accompanying statements of comprehensive loss for the year ended December 31, 2015.

November 2015 Offering

In November 2015, the Company entered into a securities and purchase agreement with certain institutional investors (the "Purchasers") providing for the issuance and sale by the Company of 176,772 shares of the Company's common stock and Series B pre-funded warrants (the "Pre-Funded Warrants") to purchase an aggregate of 337,228 shares of its common stock. The offering price was \$6.10 per share of common stock and the offering price for the Pre-Funded Warrant was \$6.05 for each to purchase one share of common stock. The Pre-Funded Warrants are immediately exercisable at an exercise price of \$0.05 per share and expire two years from the date of issuance. In a concurrent private placement, the Company issued 0.3 of a Series A warrant to purchase one share of common stock for each share of common stock purchased or pre-funded through the Pre-Funded Warrants in the registered offering. Each whole Series A Warrant can be exercised for a share of Common Stock. The Series A Warrants cover, in the aggregate, 154,200 shares of common stock and become exercisable seven months following the date of issuance at an exercise price of \$8.50 per share and expire five years from the date they become exercisable. In addition, in exchange for the surrender and cancellation for outstanding warrants to purchase 171,279 shares of common stock, with a weighted average exercise price of \$15.95 per share, held by the Purchasers, the Company issued Series C-1, Series C-2 and Series C-3 warrants to purchase an aggregate of 171,279 shares of common stock which will become exercisable seven months following the date of issuance at an exercise price of \$8.50 per share. Each Exchange Warrant will expire seven months from the expiration date set forth in the corresponding cancelled warrant. The transactions noted just above are collectively referred to as the "November 2015 Offering".

The Company received gross proceeds of \$3.1 million and net proceeds of \$2.6 million after deducting placement agent fees and other offering expenses. Accordingly, of the \$3.1 million in gross proceeds initially included in equity, \$0.1 million of the offering costs were allocated to common stock, based on the relative fair value of the common stock and the November 2015 Offering warrants on the issuance date. The November 2015 Offering warrants are within the scope of ASC 815-40 and are required to be recorded as liabilities. Accordingly, \$3.4 million was allocated to the warrant liability based on the fair value of the warrants on the issuance date. As the assigned fair values of the November 2015 Offering warrants were greater than the net cash proceeds allocated to common stock, the \$0.4 million excess was treated as offering costs and included in other income (expense), net in the accompanying statements of comprehensive loss for the year ended December 31, 2015, along with the \$0.4 million of offering costs allocated to the November 2015 Offering warrants.

November 2016 Offering

On November 3, 2016, the Company entered into a securities purchase agreement with certain investors (the "Purchasers") providing for the issuance and sale of 5,172,250 shares of the Company's common stock at a price of \$2.00 per share (the "November 2016 Offering"). On November 4, 2016, and December 16, 2016 the Company sold 949,960 and 4,222,290 shares of Common Stock, respectively, under the November 2016 Offering. The Company also issued to the placement agent, in consideration for its services as placement agent for the November 2016 Offering, a total of 489,475 shares of Common Stock and a five-year warrant to purchase up to 489,475 shares of Common Stock at an exercise price of \$2.20 per share

On October 24, 2016, the Company received a written consent from Kanis S.A., the holder of a majority of the Company's outstanding shares of common stock as of such date, approving the offer and sale of securities by the Company in a private placement transaction, or series of related private placement transactions, on terms similar to the terms of the November 2016 Offering.

The Company received net proceeds of \$10.2 million after deducting placement agent fees and other offering expenses. The November 2016 Offering warrants are within the scope of ASC 815-40 and are required to be recorded as liabilities. Accordingly, of the \$10.2 million in net proceeds, \$9.3 million was allocated to the common stock and

included in equity and \$0.9 million was allocated to the warrant liability based on the fair value of the warrants on the issuance date. The Company intends to use the net proceeds for general corporate purposes, which may include working capital, general and administrative expenses, capital expenditures and implementation of its strategic priorities.

F-22

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

11. Stockholders' Equity (Continued)

Exchange Transactions

As discussed in Note 10, on August 30, 2016, the Company consummated the Kanis Exchange Agreement and Bell Exchange Agreement transactions, pursuant to which the Company (i) issued to Kanis an aggregate of 4,872,032 shares of common stock in exchange for the delivery to the Company of the Kanis Notes and the extinguishment of \$7.9 million of indebtedness, and (ii) issued to Dr. Bell an aggregate of 317,950 shares of common stock in exchange for the delivery to the Company of the Director Note and the extinguishment of \$0.5 million of indebtedness

Note Conversion

As discussed in Note 10, on August 31, 2016, the Company elected to convert \$0.5 million in principal amount of the Haldor Notes and issued Haldor Topsøe 308,357 shares of the Company's common stock. On December 16, 2016, Haldor Topsøe elected to convert \$0.75 million in principal amount of the Haldor Notes and issued Haldor Topsøe 462,535 shares of the Company's common stock.

Other Sales and Issuances of Common Stock and Warrants

On December 16, 2016, the Company entered into a securities purchase agreement with MDB Capital Group, LLC ("MDB"), providing for the sale of 81,550 shares of the Company's common stock at a price of \$2.00 per share for an aggregate purchase price of \$0.2 million. The purchase price was paid by the cancellation of trade payables of the Company to MDB in the amount of the purchase price.

12. Warrants

From time to time, the Company issues warrants to purchase its common stock. Warrants have been issued for consulting services, in connection with the Company's issuance of debt and sales of its common stock. For additional information regarding the warrants discussed in this Note, refer to Note 10, "Debt" and Note 11 "Stockholders' Equity", respectively.

Warrants activity is summarized as follows:

	Shares(1)	Weighted Average Exercise Price	Range of Exercise Prices
Outstanding at December 31, 2014	322,011	\$ 17.71	\$6.25 - \$52.00
Issued	591,423	\$ 4.50	\$0.05 - \$6.25
Exchange warrants issued	171,276	\$ 8.50	8.50
Exchange warrants surrendered	(171,276)	\$ 15.95	\$13.25 - \$21.00
Outstanding at December 31, 2015	913,434	\$ 3.54	\$6.25 - \$52.00 (2)
Issued	489,475	\$ 2.20	\$2.20
Exercised	(410,824)	\$ 1.73	\$0.05 - \$3.00
Expired	(12,216)	\$ 22.50	\$22.50
Outstanding at December 31, 2016	979,869	\$ 6.36	\$0.05 - \$21.00
Exercisable at December 31, 2016	979,869	\$ 6.36	\$6.25 - \$21.00

(1) Outstanding and exercisable information includes 21,920 equity-classified warrants as of December 31, 2016.

(2) Includes the effects of repricing. Refer to the November 2015 Offering in Note 11 "Stockholders' Equity."

Warrant Liability

The Company's warrant liability is carried at fair value and is classified as Level 3 in the fair value hierarchy because the warrants are valued based on unobservable inputs.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

12. Warrants (Continued)

The Company determines the fair value of its warrant liability using the Black-Scholes option-pricing model unless the awards are subject to market conditions, in which case it uses a Monte Carlo simulation model, which utilizes multiple input variables to estimate the probability that market conditions will be achieved. These models are dependent on several variables such as the instrument's expected term, expected strike price, expected risk-free interest rate over the expected term of the instrument, expected dividend yield rate over the expected term and the expected volatility. The expected strike price for warrants with full-ratchet down-round price protection is based on a weighted average probability analysis of the strike price changes expected during the term as a result of the full-ratchet down-round price protection.

The assumptions used in the Black-Scholes option-pricing model to estimate the fair value of the warrant liability as of December 31, 2016 were as follows:

Expected volatility 97.7% - 106.4%

Risk-free interest rate 1.40% - 1.92%

Dividend yield —

Expected life in years 2.8 - 5.0

The assumptions used in the Monte Carlo simulation model to estimate the fair value of the warrant liability as of December 31, 2016 were as follows:

Expected volatility 97.7%-106.4%

Risk-free interest rate 1.03%-1.43%

Dividend yield —

Expected life in years 1.5-2.9

The warrant liability, included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets, is re-measured at the end of each reporting period with changes in fair value recognized in other income (expense), net in the consolidated statements of comprehensive loss. Upon the exercise of a warrant that is classified as a liability, the fair value of the warrant exercised is re-measured on the exercise date and reclassified from warrant liability to additional paid-in capital.

13. Fair Value Measurements

The Company measures certain financial assets and liabilities at fair value in accordance with a hierarchy which requires an entity to maximize the use of observable inputs which reflect market data obtained from independent sources and minimize the use of unobservable inputs. There are three levels of inputs that may be used to measure fair value:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable including quoted prices for similar instruments in active markets and quoted prices for identical or similar instruments in markets that are not active; and

Level 3: Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

13. Fair Value Measurements (Continued)

Assets and liabilities measured at fair value on the Company's balance sheet on a recurring basis include the following at December 31, 2016 and December 31, 2015 (in thousands):

Warrant Liability	Level 1	Level 2	Level 3
-------------------	---------	---------	---------

December 31, 2016	—	—	\$ 1,226
-------------------	---	---	----------

December 31, 2015	—	—	\$ 3,072
-------------------	---	---	----------

There were no transfers in and out of Level 1 and Level 2 fair value measurements during the year ended December 31, 2016.

The following is a reconciliation of the warrant liability, included in accrued expenses and other current liabilities in the accompanying unaudited condensed consolidated balance sheets, measured at fair value using Level 3 inputs (in thousands):

	Years Ended December 31,	
	2016	2015
Balance at beginning of period	\$3,072	\$1,474
Issuance of common stock warrants	858	4,215
Exercise of common stock warrants	(1,150)	—
Gain on change in fair value	(1,554)	(2,617)
Balance at end of period	\$1,226	\$3,072

The following is a reconciliation of the embedded bifurcated derivative liability measured at fair value using significant unobservable inputs, Level 3 (in thousands):

	Years Ended December 31,	
	2016	2015
Balance at beginning of period	\$ —	\$ —
Transfers in and/or out of Level 3	—	—
Initial valuation of bifurcated derivative liability	3,936	—
Extinguishment of bifurcated derivative liability	(3,936)	—
Balance at end of period	\$ —	\$ —

Upon amendment of the Kanis debt on April 1, 2016, the convertible debt required bifurcation and accounting at fair value. The resulting embedded derivative was comprised of a conversion option, the exercise of which would require shareholder approval, as well as a call option the Company could exercise in the event of a Liquidity Event. The call option would be at a 25% discount to the Liquidity Event price. The company used a Monte Carlo simulation model to estimate the fair value of the embedded derivative portion of the Kanis debt. The assumptions used in the Monte Carlo simulation model to estimate the fair value of the derivative liability included volatility of 109%, a risk free rate of 0.8% and an expected term of 2.5 years. On August 30, 2016, the Kanis debt was extinguished eliminating the embedded derivative.

The fair values of the Company's cash, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses and other current liabilities approximate carrying values due to the short maturity of these instruments. The fair value of the line of credit approximates its carrying value due to the variable interest rates.

Using a net present value model, the fair value of the Company's current notes payable is \$1.8 million at December 31, 2016.

The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of assets and liabilities and their placement within the fair value hierarchy.

F-25

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

14. Stock-Based Compensation

The Clean Diesel Technologies, Inc. Stock Incentive Plan (formerly known as the Clean Diesel Technologies, Inc. 1994 Incentive Plan), as amended (the "Plan"), provides for the awarding of incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares, performance awards, bonuses or other forms of share-based awards, or combinations of these to the Company's directors, officers, employees, consultants and advisors (except consultants or advisors in capital-raising transactions) as determined by the board of directors. At the Company's Annual Meeting of Shareholders held on May 23, 2012, the Company's shareholders approved certain amendments to the Plan, the most significant of which changed the Plan name, removed the evergreen provision and established a maximum number of 1.4 million shares to be reserved for issuance under the Plan, disallowed the repricing of outstanding stock options without shareholder approval, removed the ability to issue cash bonus awards under the Plan and modified the change in control provisions within the Plan. As of December 31, 2016, there were 81,766 shares available for future grants under the Plan.

Effective December 16, 2016, the Company adopted the Clean Diesel Technologies, Inc. 2016 Omnibus Incentive Plan (the "Omnibus Plan"), pursuant to the approval of the Omnibus plan by the Company's stockholders by written consent dated October 24, 2016. The Omnibus plan was adopted by the Company's Board of Directors (the "Board") on October 11, 2016. Under the Omnibus Plan, the Company is authorized to grant equity-based awards in the form of stock options, restricted common stock, restricted stock units, stock appreciation rights, and other stock based awards to employees (including executive officers), directors and consultants of the Company and its subsidiaries. The Omnibus Plan authorized the issuance of 2,250,000 shares of the Company's common stock.

Total stock-based compensation expense was \$1.6 million and \$0.8 million for the years ended December 31, 2016 and 2015, respectively.

Stock Options

Stock option activity is summarized as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (thousands)
Outstanding at December 31, 2015	256,963	\$ 20.01	7.7	—
Granted	875,000	\$ 2.24	—	—
Cancelled	(24,500)	\$ 8.47	—	—
Vested shares expired	(34,175)	\$ 36.68	—	\$ —
Outstanding at December 31, 2016	1,073,288	\$ 5.26	9.4	\$ 5,500
Exercisable at December 31, 2016	471,374	\$ 8.82	8.8	\$ 2,750

The aggregate intrinsic value represents the difference between the exercise price and the Company's closing stock price on the last trading day of the year.

Stock options granted under the Plan typically expire ten years from the date of grant and are issued at a price equal to the fair market value of the underlying stock on the date of grant. The Company's board of directors may establish such vesting and other conditions with respect to options as it deems appropriate.

The Company estimates the fair value of stock options using a Black-Scholes option-pricing model. The weighted-average assumptions and grant date fair value for the options granted during year ended December 31, 2016 were as follows:

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

14. Stock-Based Compensation (Continued)

	Years Ended December 31,	
	2016	2015
Expected volatility	153.7%	126.0 %
	168.5%	
	1.19%	
Risk-free interest rate	-	1.7 %
	2.18%	
Dividend yield	—	—
Expected life in years	6.0	5.4
Weighted average grant date fair value	\$2.12	\$7.60

The expected term of the options has historically been based upon the historical term until exercise or expiration of all granted options. Due to the significant change in the Company following the Merger and significant change in the terms of the options granted, CDTI's pre-Merger historical exercise data was not considered to provide a reasonable basis for estimating the expected term for current option grants. As such, the expected term of stock options granted in 2015 was determined using the "simplified method" as allowed under ASC 718-10-S99, "Compensation—Stock Compensation: Overall: SEC Materials." The "simplified method" calculates the expected term as the average of the vesting term and original contractual term of the options. The expected volatility is based on the volatility of the Company over the corresponding expected term of the option. The risk-free interest rate is the constant maturity rate published by the U.S. Federal Reserve Board that corresponds to the expected term of the option. The dividend yield is assumed as 0% because the Company has not paid dividends and does not expect to pay dividends in the future. Compensation costs for stock options that vest over time are recognized over the vesting period on a straight-line basis. As of December 31, 2016, the Company had \$1.3 million of unrecognized compensation cost related to stock option grants that remained to be recognized over vesting periods. These costs are expected to be recognized over a weighted average period of 3.7 years.

Restricted Stock Units

RSU activity is as follows:

	Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2015	39,405	\$ 12.55
Granted	5,789	\$ 2.64
Vested	(28,806)	\$ 11.38
Forfeited	(3,999)	\$ 13.05
Nonvested units at December 31, 2016	12,389	\$ 10.50

As of December 31, 2016, the Company had approximately \$37.5 thousand of unrecognized compensation expense related to RSUs, which will be recognized over a weighted average estimated remaining life of 0.9 years.

15. Impairment

The Company performs its annual impairment test during the fourth quarter, after the annual budgeting process is completed. Furthermore, goodwill is reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Each interim period, management assesses whether or not an indicator of impairment is present that would necessitate that a goodwill impairment analysis be performed in an interim period.

other than during the fourth quarter.

During the Company's annual impairment analysis during the fourth quarter of 2016, management used a discount rate of 15% and a terminal growth rate of 3%. The discount rate used in the discount cash flow method was based on a weighted-average cost of capital determined from relevant market comparisons, adjusted for specific reporting unit risks (i.e. primarily the uncertainty of achieving projected operating cash flows). The terminal value growth rate was applied to the final year of the projected period and reflected the Company's estimate of stable, perpetual growth. The inputs utilized in the analyses are

F-27

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

15. Income Taxes (Continued)

classified as Level 3 inputs within the fair value hierarchy as defined in ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820").

Due to the complexity and the effort required to estimate the fair value of the reporting units in the step one of the impairment test and to estimate the fair values of all assets and liabilities of the reporting units in the second step of the test, the fair value estimates were derived based on assumptions and analyses that are subject to change. Such assumptions include but are not limited to the following: changes in its cost of capital, growth of the reporting unit's revenue, cost structure of the reporting unit, successful completion of research and development and customer acceptance of new products, expected changes in emissions regulations and approval of the reporting unit's product by regulatory agencies. Based on the Company's analyses, the implied fair value of goodwill was substantially lower than the carrying value of goodwill for its reporting unit.

As a result during the fourth quarter of 2016, the Company recognized, an impairment charge of \$4.7 million. This impairment charge was included as a separate component of operating expenses for the year ended December 31, 2016. As a result, as of December 31, 2016, the Company had no goodwill on its consolidated balance sheet.

16. Income Taxes

Income (loss) from continuing operations before income taxes include the following components (in thousands):

	Years Ended	
	December 31,	
	2016	2015
U.S.-based operations	\$(17,344)	\$(7,770)
Non U.S.-based operations	(7,088)	(1,051)
	\$(24,432)	\$(8,821)

Income tax expense (benefit) attributable to loss from continuing operations is summarized as follows (in thousands):

	Current Deferred Total		
Year ended December 31, 2016:			
State and local	\$ 22	\$ —	\$ 22
Foreign	(210)	(770)	(980)
Total	\$(188)	\$(770)	\$(958)
Year ended December 31, 2015:			
U.S. Federal	\$ —	\$ —	\$ —
State and local	4	—	4
Foreign	(269)	(134)	(403)
Total	\$(265)	\$(134)	\$(399)

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes (Continued)

Income taxes attributable to loss from continuing operations differ from the amounts computed by applying the U.S. federal statutory rate of 34% to loss from continuing operations before income taxes as shown below (in thousands):

	Years Ended	
	December 31,	
	2016	2015
Expected tax benefit	\$ (8,307)	\$ (2,999)
Net tax effects of:		
Foreign tax rate differential	1,331	167
State taxes, net of federal benefit	219	(602)
Return to provision adjustment	13,386	(619)
Research and other credits	443	(59)
Permanent difference on convertible notes and warrants	2,923	(589)
Goodwill impairment	533	—
Other	61	52
Change in deferred tax asset valuation allowance	(11,547)	4,250
	\$ (958)	\$ (399)

Deferred tax assets and liabilities consist of the following (in thousands):

	December 31,	
	2016	2015
Deferred tax assets:		
Research and development credits	\$ 2,063	\$ 2,763
Other credits	—	487
Operating loss carry forwards	7,320	17,249
Interest	460	—
Inventories	289	254
Allowance for doubtful accounts	129	116
Depreciation	353	382
Deferred research and development expenses for income tax	—	240
Non-cash compensation	946	1,120
Other	929	921
Total gross deferred tax assets	12,489	23,532
Valuation allowance	(11,441)	(23,091)
Net deferred tax assets	\$ 1,048	\$ 441
Deferred tax liabilities:		
Other identifiable intangible assets	\$ (494)	\$ (634)
Total gross deferred tax liabilities	(494)	(634)
Net deferred tax assets (liabilities)	\$ 554	\$ (193)

The Company had approximately \$14.7 million and \$14.8 million of federal and state income tax net operating loss carryforwards at December 31, 2016, respectively. The foreign net operating losses can be carried forward indefinitely. Future utilization of the federal and state net operating losses and credit carryforwards is subject to a substantial annual limitation due to ownership change limitations as required by Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), as well as similar state limitations.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes (Continued)

In connection with the settlement of the Kanis S.A. debt exchange (see Note 10), a change in control of the Company occurred with Kanis S.A. becoming the largest owner of the Company's common stock in an amount greater than 50% of the issued and outstanding shares of common stock. As a result, the Company performed a study to evaluate the status of net operating loss carryforwards as a result of the ownership change during the year. The results of the study provided that there was indeed an "ownership change" as of August 30, 2016 as defined for U.S. federal income tax purposes. The "ownership change" will significantly limit the use of the Company's net operating losses and credits in future tax years.

Of the \$14.7 million federal loss carryforwards approximately \$11.9 million of the loss will be subject to an annual limitation of \$1.1 million within the next 5 years and \$0.3 million for the next 15 years. The federal net operating loss carryforwards will expire in fiscal year 2036. As a result of the "ownership change" the federal research and development credits have been limited and based on the limitation the Company does not anticipate being able to use any of these credits that existed as of the date of the Merger in future tax years. Of the \$14.8 million of state net operating loss carryforwards approximately \$10.4 million of the loss will be subject to an annual limitation of \$1.1 million within the next 5 years and \$0.3 million for the next 15 years. The state net operating loss carryforwards will expire in fiscal year 2036. The Company has state research and development credits of \$3.9 million however they have placed a 20% reserve on the credit since a thorough R&D study was not performed. Since the state credits have an indefinite life, the Company did not write them off even though it is also limited under Section 383. The Company has a full valuation allowance against the related deferred tax assets for its U.S. and U.K. entities as it is more likely than not that they will not be realized by the Company.

In assessing the potential realization of deferred tax assets, consideration is given to whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the Company attaining future taxable income during the periods in which those temporary differences become deductible. In addition, the utilization of net operating loss carryforwards may be limited due to restrictions imposed under applicable federal and state tax laws due to a change in ownership. Based upon the level of historical operating losses and future projections, management believes it is more likely than not that the Company will not realize the deferred tax assets.

The Company has not recognized a deferred tax liability on undistributed earnings of its foreign subsidiaries, because these earnings are intended to be permanently reinvested. The amount of the unrecognized deferred tax liability depends on judgment required to analyze the withholding tax due, the applicable tax law and factual circumstances in effect at the time of any such distributions. Therefore, the Company believes it is not practicable at this time to reliably determine the amount of unrecognized deferred tax liability related to its undistributed earnings; however, these undistributed earnings are immaterial. If circumstances change and it becomes apparent that some or all of the undistributed earnings of a subsidiary will be remitted and income taxes have not been recognized by the parent entity, the parent entity shall accrue as an expense of the current period income taxes attributable to that remittance.

The following changes occurred in the amount of unrecognized tax benefits including related interest and penalties, included in the income taxes payable on the consolidated balance sheet (in thousands):

	Years Ended December 31,	
	2016	2015
Balance at beginning of year	\$634	\$683
Additions for current year tax provisions	49	32
Additions/Reduction for tax positions of prior years	786	—
Reduction for prior year tax provisions	—	(81)
Balance at end of year	\$1,469	\$634

If recognized, the entire amount of the unrecognized tax benefits would affect the effective tax rate. As of December 31, 2016 and 2015, the Company had \$0.2 million and \$0.1 million , respectively, accrued for payment of interest and penalties related to unrecognized tax benefits.

F-30

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes (Continued)

The Company operates in multiple tax jurisdictions, both within and outside of the United States. Although the timing of the resolution and/or closure of audits is not certain, the Company does not believe it is reasonably possible that its unrecognized tax benefits would materially change in the next twelve months. The following tax years remain open to examination by the major domestic taxing jurisdictions to which it is subject:

Open Tax
Years

United States—Federal	2013 - 2016
United States—State	2012 - 2016
Canada	2011 - 2016
Sweden	2014 - 2016
United Kingdom	2012 - 2016

17. Commitments and Contingencies

Lease Commitments

The Company leases certain equipment and facilities under operating leases that expire through 2020. The Company recognizes its minimum lease payments, including escalation clauses, on a straight-line basis over the minimum lease term of the lease. Rent expense was \$0.6 million and \$0.9 million during the years ended December 31, 2016 and 2015, respectively.

Future minimum lease payments under non-cancelable operating leases (with initial or remaining lease terms in excess of one year) as of December 31, 2016 are (in thousands):

Years ending December 31:

2017	\$501
2018	462
2019	2
2020	1
2021 and thereafter	—

Total minimum lease payments \$966

California Air Resources Board ("CARB")

By email dated June 26, 2015, CARB asserted the Company had deficiencies in compliance with the Verification Procedure, Aftermarket Parts Regulations and the Vehicle Code. The initial penalty calculated by CARB for these alleged violations was \$1.8 million, with the largest component relating to the use of empty center bodies to allow trucks to be placed back in service while warranty claims are being evaluated. This process is now explicitly permitted by regulation, but was not permitted at the time of the alleged violation. Although the Company disagreed, and continues to disagree, with CARB's findings, the Company has cooperated with CARB's investigation and discussed with CARB whether and to what extent the payment of monetary penalties would be appropriate. After review and evaluation of CARB's findings and publicly available CARB settlements for similar matters, the Company has accrued an expense of less than \$0.1 million as of December 31, 2016 for a proposed settlement provided to CARB to resolve this matter. During 2016, CARB responded to the Company's proposed settlement with a counter-proposal of \$0.8 million by cutting certain components of their initial penalty in half and reducing certain penalties. During the first quarter of 2017, the Company and CARB reached a settlement in which the Company will pay approximately \$0.1 million in 2017.

For information related to commitments and contingencies related to AUS, a former subsidiary of the Company that was sold in 2009, refer to Note 21, "Discontinued Operations".

In addition to the foregoing, the Company is involved in legal proceedings from time to time in the ordinary course of its business. Management does not believe that any of these claims and proceedings against it is likely to have, individually or in the aggregate, a material adverse effect on the Company's consolidated financial condition, results of operations or cash flows.

F-31

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

17. Commitments and Contingencies (Continued)

Accordingly, the Company cannot determine the final amount, if any, of its liability beyond the amount accrued in the consolidated financial statements as of December 31, 2016, nor is it possible to estimate what litigation-related costs will be in the future.

18. Geographic Information

In the past, the Company operated in two reportable business division segments based on the products it delivered. Beginning in the last quarter of 2015, the Company began transitioning from a niche manufacturer of emission control solutions for the automotive and heavy duty diesel markets to becoming an advanced materials technology provider for these markets. During the second quarter of 2016, the transition of the operating strategy was completed and the Company now views its operations and measures its business as one reportable segment.

Net sales by geographic region based on location of sales organization is as follows (in thousands):

	Years Ended	
	December 31,	
	2016	2015
United States	\$23,870	\$24,323
Canada	9,583	12,143
Europe	3,386	3,272
Total international	12,969	15,415
Total revenues	\$36,839	\$39,738

Property and equipment, net and total assets by geographic region as of December 31, 2016 and 2015 is as follows (in thousands):

	Property and Equipment, net		Total Assets	
	2016	2015	2016	2015
United States	\$1,082	\$1,247	\$15,126	\$11,266
Canada	71	290	8,352	11,641
Europe	5	1	1,352	2,195
Total international	76	291	9,704	13,836
Total	\$1,158	\$1,538	\$24,830	\$25,102

19. Concentrations

For the years ended December 31, 2016 and 2015, Honda accounted for 59% and 57%, respectively, of the Company's revenues. This customer accounted for 35% and 31% of the Company's accounts receivable at December 31, 2016 and 2015, respectively.

For the year ended December 31, 2016, the Company had one supplier that accounted for approximately 30% of the Company's material purchases. For the year ended December 31, 2015, the Company had two suppliers that accounted for approximately 58% of the Company's material purchases.

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

20. Supplementary Cash Flow Information

Supplementary cash flow information for 2016, and 2015 is as follows (in thousands):

	Years Ended December 31,	
	2016	2015
Cash paid for interest	694	1,075
Cash paid for income taxes	43	227
Non-cash operating and financing activities		
Kanis S.A. notes payable plus accrued interest settled with common stock (Note 10)	7,900	—
Haldor Topsøe note payable settled with common stock (Note 10)	1,250	—
Director Note payable plus accrued interest settled with common stock (Note 10)	515	—
Issuance of common stock to placement agent in connection with equity offering (Note 11)	5	—
Issuance of warrants to placement agent in connection with equity offering (Note 11)	857	—
Accounts Payable settled with common stock	184	—

21. Discontinued Operations

Applied Utility Systems, Inc.

The Company is undergoing a sales and use tax audit by the State of California (the "State") on AUS for the period of 2007 through 2009. The audit has identified a project performed by the Company during that time period for which sales tax was not collected and remitted and for which the State asserts that proper documentation of resale may not have been obtained and that the Company owes sales tax of \$1.5 million, inclusive of interest. The Company contends and believes that it received sufficient and proper documentation from its customer to support not collecting and remitting sales tax from that customer and is actively disputing the audit report with the State. On August 12, 2013, the Company appeared at an appeals conference with the State Board of Equalization ("BOE"). On July 21, 2014, the Company received a Decision and Recommendation ("D&R") from the BOE. The D&R's conclusion was that the basis for the calculation of the aforementioned \$1.5 million tax due should be reduced from \$12.2 million to \$9.0 million with a commensurate reduction in the tax owed to the State. Regardless of this finding, the Company continues to believe that it will prevail in this matter, as it believes that the State did not adequately address the legal arguments related to the Company's acceptance of the valid resale certificate from its customer. The Company has not agreed to these findings, and therefore, it will be appealing at a higher level at the BOE. Based on a re-audit, the BOE lowered the tax due to \$0.9 million, inclusive of interest. The Company continues to disagree with these findings based on the aforementioned reasons. However, in October 2015, the Company offered to settle this case for \$0.1 million, which is based on the expected cost of continuing to contest this audit. Accordingly, an accrual was charged to discontinued operations during the year ended December 31, 2015 to reflect the offer to settle this case. Should the Company not prevail with the offer to settle this case, it plans to continue with the appeals process. Further, should the Company not prevail in this case, it will pursue reimbursement from the customer for all assessments from the State. On November 15, 2013, BP Products North America ("BP") instituted claims against Johnson Matthey ("JM") as the parent company of and purchaser of Applied Utility Systems, Inc. ("AUS"), a former subsidiary of the Company. On May 12, 2010, JM tendered to the Company a claim for indemnification under the Asset Purchase Agreement dated October 1, 2009 (the "Asset Purchase Agreement") among JM, the Company and AUS. On June 11, 2013, BP, JM and the Company entered into a settlement agreement and mutual release pursuant to which they settled all claims. This settlement agreement had no material impact on the Company. Under the indemnification clauses of the Asset Purchase Agreement, the Company may be liable for legal expenses incurred by JM. These legal costs may be offset against funds withheld by JM from the acquisition of AUS.

In connection with the Asset Purchase Agreement, on October 1, 2009, JM presented the Company with an indemnification claim seeking recovery of the net amount of \$0.9 million after offsetting the funds withheld by JM from the acquisition of AUS. These claims were for matters relating to various customer contracts that JM purchased, including the BP contract discussed

F-33

Table of Contents

CLEAN DIESEL TECHNOLOGIES, INC.

Notes to Consolidated Financial Statements (Continued)

21. Discontinued Operations (Continued)

above. The Company and JM entered into discussions relating to the application of offsets and the validity of the claims presented. On June 3, 2015, JM and the Company entered into a settlement and release agreement pursuant to which they settled all claims for \$0.7 million. This settlement was paid with an initial \$0.1 million installment upon execution of the settlement and release agreement, and the remaining balance was paid in July 2015.

The following table presents revenue and expense information for discontinued operations (in thousands):

	Years Ended December 31, 2015
Revenue	\$—
Expenses	—(112)
Net loss from discontinued operations	\$—\$(112)

F-34

Table of Contents

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Exhibit	Filing Date	Filed Herewith
3.1.1	Composite Certificate of Incorporation of Clean Diesel Technologies, Inc.	10-K	001-33710	3.1	3/30/2016	
3.1.2	Certificate of Amendment to the Restated Certificate of Incorporation of Clean Diesel Technologies, Inc.	8-K	001-33710	3.1	7/26/2016	
3.1.3	Certificate of Amendment to the Restated Certificate of Incorporation of Clean Diesel Technologies, Inc.	8-K	001-33710	3.1	12/16/2016	
3.2	By-Laws of Clean Diesel Technologies, Inc. as amended through November 6, 2008.	10-Q	001-33710	3.1	11/10/2008	
4.1	Specimen of Certificate for Clean Diesel Technologies, Inc. Common Stock.	S-3	333-166865	4.1	11/10/2010	
4.20	Form of Investor Warrant issued on July 3, 2013.	8-K	001-33710	4.1	7/3/2013	
4.3	Form of Investor Warrant issued on April 4, 2014.	8-K	001-33710	4.1	4/1/2014	
4.4	Form of Investor Series A Warrant issued on November 7, 2014.	8-K	001-33710	4.1	11/4/2014	
4.5	Form of Investor Series B Warrant issued on November 7, 2014.	8-K	001-33710	4.2	11/4/2014	
4.6	Form of Series A Warrant.	8-K	001-33710	4.1	11/23/2015	
4.70	Form of Series B Pre-Funded Warrant.	8-K	001-33710	4.2	11/23/2015	
4.8	Form of Series C-1 Warrant.	8-K	001-33710	4.3(a)	11/23/2015	
4.9	Form of Series C-2 Warrant.	8-K	001-33710	4.3(b)	11/23/2015	
4.1	Form of Series C-3 Warrant.	8-K	001-33710	4.3(c)	11/23/2015	
4.11	Form of Warrant issued to Kanis S.A., dated February 16, 2012.	8-K	001-33710	10.2	2/17/2012	
4.12	Warrant issued to Kanis S.A., dated July 3, 2013.	8-K	001-33710	99.2	7/3/2013	
4.13	Form of Warrant, dated November 11, 2014, issued to Kanis S.A.	10-K	001-33710	10.18	3/18/2015	

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Filing Date	Herewith
		Form	File Number	Exhibit		
4.14	Form of Warrant issued on July 5, 2011 to the underwriters named in the Underwriting Agreement, dated June 28, 2011, by and among Clean Diesel Technologies, Inc., the selling stockholders named therein, and Roth Capital Partners, LLC, as the representative of the underwriters.	8-K	001-33710	10.1	7/1/2011	
4.15	Form of Underwriter Warrant.	8-K	001-33710	99.1	7/3/2013	
4.16	Warrant, dated November 4, 2016, between Clean Diesel Technologies, Inc. and MDB Capital Group LLC.	8-K	001-33710	10.3	11/8/2016	
4.17	Warrant, dated December 16, 2016, between Clean Diesel Technologies, Inc. and MDB Capital Group LLC.	8-K	001-33710	10.2	12/16/2016	
10.1	Joint Research Agreement on Zero Precious Group Metal Catalyst, dated June 8, 2010, between Honda R&D Co., Ltd. and Catalytic Solutions, Inc. and extended by the Memorandum of Joint Research Agreement on Zero Precious Group Metal Catalyst, dated April 1, 2012, between Honda R&D Co., Ltd. and Catalytic Solutions, Inc.	10-K	001-33710	10.1	3/31/2014	
10.2.1	Form of Agreement of Sale of Accounts and Security Agreement, dated February 14, 2011 between Faunus Group International, Inc., on the one hand, and Clean Diesel Technologies, Inc. and certain of its subsidiaries, on the other hand.	8-K	001-33710	10.1	2/16/2011	
10.2.2	Omnibus Amendment to Sale of Accounts and Security Agreements and Guaranty Agreement dated August 15, 2012, among Clean Diesel Technologies, Inc., certain of its subsidiaries and Faunus Group International, Inc.	8-K	001-33710	10.1	8/21/2012	
10.2.3	Agreement, dated October 15, 2014, between Engine Control Systems Ltd. and Faunus Group International, Inc.	8-K	001-33710	10.1	10/21/2014	
10.3	Form of Agreement Guaranty, dated February 14, 2011 between Faunus Group International, Inc. and Clean Diesel Technologies, Inc., Clean Diesel International LLC, Catalytic Solutions, Inc., Engine Control Systems, Ltd., Engine Control Systems Limited, Clean Diesel Technologies Limited, Engine Control Systems Europe AB, ECS Holdings, Inc., Catalytic Solutions Holdings, Inc. and CSI Aliso, Inc.	8-K	001-33710	10.2	2/16/2011	

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Filing Date	Herewith
		Form	File Number	Exhibit		
10.4*	Joint Venture Agreement, dated February 19, 2013, between Pirelli & C. Ambiente SpA and Clean Diesel Technologies, Inc.	8-K/A	001-33710	10.1	5/6/2013	
10.5	Eco Emission Enterprise srl Liquidation letter, dated November 21, 2013, between Pirelli & C. Ambiente SpA and Clean Diesel Technologies, Inc. (incorporated by reference to Exhibit 10.16 to CDTi's Annual Report on Form 10-K (SEC file number 001-33710) filed on March 31, 2014).	10-K	001-33710	10.16	3/31/2014	
10.6†	Employment Agreement, dated December 14, 2016, between Stephen J. Golden, Ph.D., and CDTi.					X
10.7†	Stock Incentive Plan as amended through May 20, 2015.	DEF 14A	001-33710	Appx. A	4/2/2015	
10.8†	Form of U.S. Participant Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.3	8/9/2012	
10.9†	Form of Non-U.S. Participant Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.4	8/9/2012	
10.10†	Form of Non-Employee Director Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.5	8/9/2012	
10.11†	Form of U.S. Participant Notice of Grant of Restricted Share Units and Agreement.	10-Q	001-33710	10.6	8/9/2012	
10.12†	Form of Non-U.S. Participant Notice of Grant of Restricted Share Units and Agreement.	10-Q	001-33710	10.7	8/9/2012	
10.13†	Management Short Term Incentive Plan.	8-K	001-33710	10.3	6/13/2011	
10.14†	Executive Long Term Incentive Plan	8-K	001-33710	10.1	12/18/2012	
10.15	Second Purchase and Sale Agreement, dated December 18, 2009, between Tanaka Kikinzoku Kogyo K.K. and Catalytic Solutions, Inc.	10-K	011-33710	10.37	3/31/2014	
10.16	Purchase and Sale Agreement and the Amendment to Purchase and Sale Agreement, each dated December 22, 2008, between Tanaka Kikinzoku Kogyo K.K. and Catalytic Solutions, Inc.	10-K	011-33710	10.38	3/31/2014	
10.17		10-K	011-33710	10.39	3/31/2014	

New Shareholders Agreement, dated December 18, 2009,
between Tanaka Holdings Co., Ltd., Tanaka Kikinzoku
Kogyo K.K., Catalytic Solutions, Inc. and TC Catalyst,
Inc.

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Filing Date	Herewith
		Form	File Number	Exhibit		
10.18	TKK-CDTi Addendum Agreement, dated March 13, 2015, between Tanaka Holdings Co., Ltd., Tanaka Kikinzoku Kogyo K.K., TC Catalyst, Inc. and Catalytic Solutions, Inc.	10-K	011-33710	10.44	3/18/2015	
10.19	North American Purchase and Sale Agreement, dated June 5, 2015, between Honda North America and each of the other Honda Companies named in the Agreement and Clean Diesel Technologies, Inc.	10-Q	001-33710	10.2	8/6/2015	
10.20.1†	Employment Agreement, dated July 27, 2015, between Hans Eric Bippus and Clean Diesel Technologies, Inc.	10-Q	001-33710	10.3	8/6/2015	
10.20.2†	Addendum to Employment Agreement, dated March 29, 2016, between Clean Diesel Technologies, Inc. and Hans Eric Bippus.	10-K	001-33710	10.64	3/30/2016	
10.21.1†	Employment Agreement, dated October 22, 2015, between Matthew Beale and Clean Diesel Technologies, Inc.	10-Q	001-33710	10.3	11/13/2015	
10.21.2†	Addendum to Employment Agreement, dated March 29, 2016, between Clean Diesel Technologies, Inc. and Matthew Beale.	10-K	001-33710	10.62	3/30/2016	
10.21.3†	Addendum to Employment Agreement, dated June 1, 2016, between Clean Diesel Technologies, Inc. and Matthew Beale.	8-K	001-33710	10.3	6/1/2016	
10.22	Letter Agreement dated October 7, 2015 between Clean Diesel Technologies, Inc. and Kanis S.A.	8-K	001-33710	10.1	10/13/2015	
10.23	Placement Agent Agreement, dated November 23, 2015, by and between Clean Diesel Technologies, Inc. and Oppenheimer & Co., Inc., as Representative of the Several Placement Agents named therein.	8-K	001-33710	10.1	11/23/2015	
10.24	Securities Purchase Agreement, dated November 23, 2015, by and among Clean Diesel Technologies, Inc. and the Purchasers set forth therein.	8-K	001-33710	10.2	11/23/2015	
10.25†	Separation Agreement and Release, dated December 11, 2015, by and between Clean Diesel Technologies, Inc. and Christopher Harris.	10-K	001-33710	10.6	3/30/2016	
10.26†		10-K	001-33710	10.61	3/30/2016	

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Separation Agreement and Release, dated December 11, 2015, by and between Clean Diesel Technologies, Inc. and Pedro Lopez-Baldrich.

10.27† Employment Agreement, dated as of January 11, 2017,
between Clean Diesel Technologies, Inc. and Peter J. Chase. 8-K 001-33710 10.1 1/31/2017

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed	
		Form	File Number	Exhibit	Filing Date	Herewith
10.28	Promissory Note, dated April 1, 2016, issued by Clean Diesel Technologies, Inc.	8-K	001-33710	10.1	4/7/2016	
10.29	Amendment to Loan Agreement, dated April 1, 2016, by and between Clean Diesel Technologies, Inc. and Kanis S.A.	8-K	001-33710	10.2	4/7/2016	
10.30.1	Convertible Promissory Note, dated April 11, 2016, issued by Clean Diesel Technologies, Inc. in favor of Lon E. Bell, Ph.D.	8-K	001-33710	10.1	4/15/2016	
10.30.2	Convertible Promissory Note of Clean Diesel Technologies, Inc., in the principal amount of \$500,000, originally dated April 11, 2016 and amended and restated effective May 12, 2016.	8-K	001-33710	10.1	5/20/2016	
10.31†	Separation Agreement and Release, dated as of May 31, 2016, between Clean Diesel Technologies, Inc. and David Shea.	8-K	001-33710	10.1	6/1/2016	
10.32†	Employment Agreement, dated as of May 25, 2016, between Clean Diesel Technologies, Inc. and Tracy Kern.	8-K	001-33710	10.2	6/1/2016	
10.33	Letter Agreement, dated June 30, 2016, between Clean Diesel Technologies, Inc. and Kanis S.A.	8-K	001-33710	10.1	7/1/2016	
10.34	Letter Agreement, dated June 30, 2016, between Clean Diesel Technologies, Inc. and Lon E. Bell, Ph.D.	8-K	001-33710	10.2	7/1/2016	
10.35	Debt Subordination Agreement, dated June 30, 2016, between Clean Diesel Technologies, Inc., Kanis S.A. and Haldor Topsøe A/S.	8-K	001-33710	10.3	7/1/2016	
10.36	Note Purchase Agreement, dated June 30, 2016, between Clean Diesel Technologies, Inc. and Haldor Topsøe A/S.	8-K	001-33710	10.4	7/1/2016	
10.37	Senior Convertible Promissory Note of Clean Diesel Technologies, Inc., in the principal amount of \$750,000, dated June 30, 2016.	8-K	001-33710	10.5	7/1/2016	
10.38	Convertible Promissory Note of Clean Diesel Technologies, Inc., in the principal amount of \$500,000, dated June 30, 2016.	8-K	001-33710	10.6	7/1/2016	
10.39		8-K	001-33710	10.1	11/8/2016	

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Securities Purchase Agreement, dated November 3, 2016,
between Clean Diesel Technologies, Inc. and the Investors
listed on the schedule of buyers attached thereto.

10.4 Registration Rights Agreement, dated November 4, 2016,
between Clean Diesel Technologies, Inc. and the Investors 8-K 001-33710 10.2 11/8/2016
party thereto.

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File Number	Exhibit	Filing Date	
10.41	Securities Purchase Agreement, dated December 16, 2016, between the Registrant and MDB Capital Group LLC.	8-K	001-33710	10.3	12/16/2016	
10.42†	Clean Diesel Technologies, Inc. 2016 Omnibus Incentive Plan.	8-K	001-33710	10.1	12/16/2016	
10.43†	Form of Restricted Stock Unit Agreement (Employee; 2016 Plan).					X
10.44†	Form of Non-Qualified Stock Option Agreement (Employee; 2016 Plan).					X
10.45†	Form of Incentive Stock Option Agreement (2016 Plan).					X
10.46†	Form of Restricted Stock Unit Agreement (Non-Employee Director; 2016 Plan).					X
10.47†	Form of Non-Qualified Stock Option Agreement (Non-Employee Director; 2016 Plan).					X
21.1	List of Subsidiaries	10-K	001-33710	21	3/30/2016	
23.1	Consent of BDO USA, LLP					X
24.1	Power of Attorney (included on signature page)					X
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X

Edgar Filing: CLEAN DIESEL TECHNOLOGIES INC - Form 10-K

101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X

Table of Contents

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed
		Form	File Number	Exhibit	Filing Date Herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				X

Each a management contract or compensatory plan or arrangement required to be filed as an exhibit to this annual report on Form 10-K.

Confidential treatment has been granted for certain portions omitted from this exhibit pursuant to an order granted by *the Commission under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. Confidential portions of this exhibit have been separately filed with the Securities and Exchange Commission.

The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of section 18 of the Exchange Act of 1934, as amended, and is not to be incorporated by reference into any #filing of Clean Diesel Technologies, Inc. under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.