ENERGY FOCUS, INC/DE
Form 10-K
April 01, 2019

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, 2018
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ___________ to ___________

Commission file number 0-24230
ENERGY FOCUS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	94-3021850
(State of incorporation)	(I.R.S. Employer Identification No.)

32000 Aurora Road, Suite B
Solon, Ohio 44139
(Address of principal executive offices, including zip code)

Registrant’s telephone number, including area code: 440.715.1300

Securities registered pursuant to Section 12(b) of the Act: None

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

Title of Each Class
Common Stock, Par Value $0.0001

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined by Rule 405 of the Securities Act of 1933. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange 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 every Interactive Date File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

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

Large accelerated filer		Accelerated filer
Non-accelerated filer	(Do not check if a smaller reporting company)	Smaller reporting company
		Emerging growth 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 value of the Company’s common stock held by non-affiliates of the Company was approximately $22.5 million as of June 29, 2018, the last day of the Company’s most recently completed second fiscal quarter, when the last reported sales price was $1.90 per share.
Number of the registrant’s shares of common stock outstanding as of March 28, 2019: 12,191,120

Documents Incorporated by Reference
Portions of the Company’s definitive Proxy Statement for its 2018 Annual Meeting of Stockholders are incorporated by reference into Part III, Items 10-14 of this Annual Report on Form 10-K.

TABLE OF CONTENTS

	PART I	Page
ITEM 1.	BUSINESS	4
ITEM 1A.	RISK FACTORS	9
ITEM 1B.	UNRESOLVED STAFF COMMENTS	20
ITEM 2.	PROPERTIES	20
ITEM 3.	LEGAL PROCEEDINGS	20
ITEM 4.	MINE SAFETY DISCLOSURES	21
	PART II	
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES	22
ITEM 6.	SELECTED FINANCIAL DATA	23
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	24
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	39
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES	68
ITEM 9A.	CONTROLS AND PROCEDURES	68
ITEM 9B.	OTHER INFORMATION	69
	PART III	
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE	69
ITEM 11.	EXECUTIVE COMPENSATION	69
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	69

ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE	70
ITEM 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	70
	PART IV	
ITEM 15.	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	70
ITEM 16.	FORM 10-K SUMMARY	70
	SIGNATURES	71
	EXHIBIT INDEX	72

PART I

Forward-looking statements

Unless the context otherwise requires, all references to "Energy Focus," "we," "us," "our," "our company," or "the Company" to Energy Focus, Inc., a Delaware corporation, and its subsidiary, and their respective predecessor entities for the applicable periods, considered as a single enterprise.

This Annual Report on Form 10-K ("Annual Report") includes statements that express our opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, "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. These forward-looking statements can generally be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "feels," "seeks," "forecasts," "projects," "intends," "plans," "may," "will," "should," "could" or "wou their negative or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual Report and include statements regarding our intentions, beliefs, or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, strategies, capital expenditures, and the industry in which we operate.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Although we base these forward-looking statements on assumptions that we believe are reasonable when made, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and industry developments may differ materially from statements made in or suggested by the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and industry developments are consistent with the forward-looking statements contained in this Annual Report, those results or developments may not be indicative of results or developments in subsequent periods.

We believe that important factors that could cause our actual results to differ materially from forward-looking statements include, but are not limited to, the risks and uncertainties outlined under "Risk Factors" under Item 1A and other matters described in this Annual Report generally. Some of these factors include:

- our need for additional financing in the near term to continue our operations;
- our ability to continue as a going concern for a reasonable period of time;
- our ability to implement plans to increase sales and control expenses;
- our reliance on a limited number of customers for a significant portion of our revenue, and our ability to maintain or grow such sales levels;
- our ability to increase demand in our targeted markets and to manage sales cycles that are difficult to predict and may span several quarters;
- the timing of large customer orders, significant expenses and fluctuations between demand and capacity as we invest in growth opportunities;
- our ability to compete effectively against companies with lower cost structures or greater resources, or more rapid development efforts, and new competitors in our target markets; our ability to successfully scale our network of sales representatives, agents, and distributors to match the sales reach of larger, established competitors;
- market acceptance of LED lighting technology;
- our ability to attract and retain qualified personnel, and to do so in a timely manner;
- the impact of any type of legal inquiry, claim, or dispute;
- general economic conditions in the United States and in other markets in which we operate or secure products;
-

- our dependence on military maritime customers and on the levels of government funding available to such customers, as well as the funding resources of our other customers in the public sector and commercial markets;
- our reliance on a limited number of third-party suppliers, our ability to obtain critical components and finished products from such suppliers on acceptable terms, and the impact of our fluctuating demand on the stability of such suppliers; our ability to timely and efficiently transport products from our third-party suppliers to our facility by ocean marine channels;
- our ability to respond to new lighting technologies and market trends, and fulfill our warranty obligations with safe and reliable products;
- any delays we may encounter in making new products available or fulfilling customer specifications;
- any flaws or defects in our products or in the manner in which they are used or installed;

- our ability to protect our intellectual property rights and other confidential information, and manage infringement claims by others;
- our compliance with government contracting laws and regulations, through both direct and indirect sale channels, as well as other laws, such as those relating to the environment and health and safety;
- risks inherent in international markets, such as economic and political uncertainty, changing regulatory and tax requirements and currency fluctuations, including tariffs and other potential barriers to international trade; and
- our ability to maintain effective internal controls and otherwise comply with our obligations as a public company and under Nasdaq listing standards.

In light of the foregoing, we caution you not to place undue reliance on our forward-looking statements. Any forward-looking statement that we make in this Annual Report speaks only as of the date of such statement, and we undertake no obligation to update any forward-looking statement or to publicly announce the results of any revision to any of those statements to reflect future events or developments. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless specifically expressed as such, and should only be viewed as historical data.

Energy Focus® and Intellitube® are our registered trademarks. We may also refer to trademarks of other corporations and organizations in this document.

ITEM 1. BUSINESS

Overview

The Company was founded in 1985 as Fiberstars, Inc., a California corporation, and reincorporated in Delaware in November 2006. In May 2007, Fiberstars, Inc. merged with and became Energy Focus, Inc., also a Delaware corporation. Our principal executive offices are located at 32000 Aurora Road, Suite B, Solon, Ohio 44139. Our telephone number is 440.715.1300. Our website address is www.energyfocus.com. Information on our website is not part of this Annual Report.

Energy Focus, Inc. and its subsidiary engage in the design, development, manufacturing, marketing, and sale of energy-efficient lighting systems. We operate in a single industry segment, developing and selling our energy-efficient light-emitting diode ("LED") lighting products into the general commercial, industrial and military maritime markets. Our goal is to become a trusted leader in the LED lighting retrofit market by replacing fluorescent lamps in institutional buildings and high-intensity discharge ("HID") lighting in low-bay and high-bay applications with our innovative, high-quality commercial and military tubular LED ("TLED") products.

In 2018, we made significant strides in expanding and diversifying our new product portfolio. We introduced six new product families, including our commercial fixture family, our double-ended ballast bypass T8 and T5 high-output TLEDs, our Navy highbay retrofit kit, the Invisitube ultra-low EMI TLED and our dimmable industrial downlight. Our new products, including the RedCap emergency battery backup tube introduced in Q4 2017, have gained traction, with sales of new products introduced in the past two years increasing from less than one percent of total revenue in Q4 2017 to 17 percent in the fourth quarter of 2018, the highest new product revenue in the last two years. Our legacy military luminaire product line, including our flood, waterline security lights, globes and berth lights grew by over 90 percent from 2017 to 2018 and we saw some return of our military Intellitube® sales, as we achieved more competitive pricing through our cost reductions. During the year, we reduced the costs of eight legacy product families in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at the high end of the competitive range and we expect aggressive price erosion to continue to be a headwind until our more innovative and differentiated new products ramp in volume.

During 2018, we continued to streamline our operations to build on the restructuring initiative implemented during the first quarter of 2017, which included an organizational consolidation of management functions, the addition of a hybrid sales model, combining our existing direct sales force with sales agencies to expand our market presence throughout the U.S. and the closing of several offices, and resulted in significantly decreased operating expenses from 2016 levels.

Despite progress in these areas, our 2018 results reflect continued challenges due to long and unpredictable sales cycles, delays in customer retrofit budgets and project starts, continuing aggressive price competition and a lower priced legacy product portfolio that was not available until the end of 2018 and impacted the development timeline for our next generation smart lighting products.

Over the past several months, we have evaluated and pursued, and expect to continue to assess the Company's strategic options, as we seek additional external funding sources and to achieve a profitable business model and maximize value for our stockholders. Our ongoing plans to achieve profitability include continuing to develop new technologies into differentiated and sustainable product lines that allow us to effectively compete to expand our customer base, execute our marketing and sales plans, and continue to improve our supply chain and organizational structure.

Our industry

We develop advanced LED retrofit solutions that enable our customers to run their facilities with greater energy efficiency, productivity and employee wellness. We achieve this by being a technology leader, providing high-quality, energy-efficient, “flicker-free”, long-lived, and mercury-free TLED products to replace existing linear fluorescent lamp products in general purpose lighting applications and HID lamps in low-bay and high bay lighting applications. We believe these applications represent a dominant portion of the LED lighting market and energy savings potential for our targeted commercial, industrial and military maritime markets.

LED lighting, and particularly LED retrofit of fluorescent and incandescent lights in existing buildings, represents a large and growing market.We estimate the 2017 North American commercial and industrial linear fixtures market, including retrofit applications, to be approximately $16.0 billion. A 2018 report by Navigant Research entitled, “Tubular LEDs,” forecasts that TLEDs, the segment most important to Energy Focus, will grow at a 7.6% compound annual growth rate from 2018 to 2027. LEDs are still in the very early phases of adoption in our target markets. IBIS Industry Reports projects that, by 2020, healthcare, education, commercial and industrial markets will still only be 17% to 18% penetrated, leaving a large opportunity

for future growth. The increasing demand for LED lighting is being driven by energy and cost savings, environmental considerations and human health.

Energy consumption can be reduced by approximately 50% by replacing fluorescent tubes with LED tubes and by another 50% (75% total) by utilizing smart lighting technologies, including dimmable TLEDs with ambient light and occupancy sensors. For this reason, building codes are increasingly requiring not only LEDs, but dimmable LEDs. Governments around the world are implementing regulations and standards that incentivize the use of LED lighting, both smart and conventional, to reduce energy consumption and, therefore, carbon dioxide emissions. In 2018, our new product research and development investments were focused on smart lighting technologies to capitalize on these trends.

There is a growing awareness in the industry of the profound influence lighting can have on human health and well being. The interference of blue light with human circadian rhythms is well known. This can be alleviated by smart lighting techniques that change the correlated color temperature (“CCT”) of the LEDs depending on the time of day in order to emulate natural light. Flicker, which is the modulation of the intensity of LED light at the frequency of the power supply, is well known to cause headaches, eye strain, fatigue, mood triggers and other health issues as well as interfering with electronic equipment such as barcode scanners. The Department of Energy (“DOE”), which has been a leading advocate of the solid-state lighting (“SSL”) revolution, presented a report at LightFair in May 2018, supporting these and other findings. For these reasons, there is growing demand for flicker-free LED lighting, particularly in healthcare and education where concentration, learning and wellness are imperative. Energy Focus tubes are UL-certified at less than 1% optical flicker, positioning us well to capitalize on this growing opportunity.

Smart, or connected, lighting is disrupting the LED industry and providing new opportunities for growth. The DOE defines connected lighting as an LED lighting system with integrated sensors and controllers that are networked, enabling lighting products within the system to communicate with each other and transmit data. In addition to enabling the intensity and CCT of lights to respond to ambient light, time of day and the activities of building occupants, connectivity enables building automation functions that extend well beyond lighting. Examples include asset tracking, indoor wayfinding, location-based services, air quality, humidity, smoke, fire and carbon monoxide detection, security and surveillance, and Internet-of-Things (IoT). Since lighting sockets are ubiquitous and have access to power, tubes and fixtures are ideal vehicles to retrofit these capabilities into existing buildings. Our next generation smart lighting product portfolio, in development, capitalizes on these opportunities.

While the market is large, growing and underpenetrated, it has also been characterized in recent years by an increasing number of competitors, aggressive price erosion and commoditization. Our strategy to combat these trends is to move up the value chain by developing solutions that address unmet customer needs with differentiated products, such as our emergency battery backup and smart lighting platform, that deliver greater value to our customers.

Our products and strengths

We design, develop, manufacture and market a wide variety of LED lighting technologies to serve our primary end markets, including the following:

Commercial products to serve our targeted commercial markets:

- Direct-wire single-ended and double-ended TLED replacements for linear fluorescent lamps;
- Commercial Intellitube® TLED replacement for linear fluorescent lamps;
- LED fixtures and panels for fluorescent replacement or HID replacement in low-bay and high-bay applications;
- LED down-lights;
- LED dock lights and wall-packs;

- LED vapor tight lighting fixtures;
- LED retrofit kits; and
- RedCap™ emergency battery backup TLEDs.

Military maritime LED lighting products to serve the U.S. Navy and allied foreign navies:

- Military Intellitube®;
- Military globe lights;
- Military berth lights;
- Invisitube ultra-low EMI TLED;
- Military LED retrofit kits; and

- Military fixtures.

Our LED products are more energy-efficient than traditional lighting products, such as incandescent bulbs and fluorescent lamps, and we believe they can provide significant long-term energy and maintenance cost savings, reduce carbon emissions and improve the sustainability profile of our customers.

The key features of our products are as follows:

- Many of our products make use of proprietary optical and electronics delivery systems that enable high efficiencies with superior lighting qualities and proven records of extremely high product reliability.
- Our products have exceptionally long life and are backed by a 10-year warranty.
- Our products have extremely low flicker. Optical flicker, or fluctuations in brightness over time, is largely invisible to the human eye, but has been proven to exert stress on the human brain, causing headaches and eye strain, which reduce occupant comfort and productivity. The Institute of Electrical and Electronics Engineers (“IEEE”) one of the world's largest technical professional society promoting the development and application of electrotechnology and allied sciences for the benefit of humanity, recommends optical flicker of five percent or less. Our 500D series TLED products are certified by Underwriters Laboratories (“UL®”) as “low optical flicker, less than 1%”.
- Many of our products meet the lighting efficiency standards mandated by the Energy Independence and Security Act of 2007.
- Many of our products qualify for federal and state tax and rebate incentives for commercial consumers available in certain states.

Our product development strengths, which we believe provide a strategic competitive advantage, include the following:

- A long research, engineering, and market developmental history, with broad and intimate understanding of lighting technologies and LED lighting applications;
- Concentration on developing and providing high-quality, price competitive TLED lamps to replace fluorescent and HID lamps for commercial markets;
- Providing high quality and high performing LED and TLED products with a proven history of reliability; and
- A deep understanding of the adoption dynamics and decision-making process for LED lighting products in existing commercial building markets.

As we seek to develop new connected lighting LED solutions, we have invested in connected lighting research and development activities and partnerships. The DOE Report estimated that as of 2015, the penetration rates for any type of lighting controls to be 32 percent for commercial applications and six percent for industrial applications. Lighting controls, including dimming, sensor and daylighting technologies, can yield significant energy savings. The controllability of LED technology and the ability to integrate sensing, data processing and network interface hardware into our existing products will allow us to further differentiate our LED solutions and provide greater value to our customers.

Sales and marketing

We have a hybrid sales model, combining our existing direct sales force with sales agencies to expand our market presence throughout the U.S. As of December 31, 2018, we expanded our sales coverage to the entire U.S. through six geographic regions and 50 sales agencies, each of which has, on average, 10 agents representing Energy Focus products. As a result of this transition, we have substantially expanded from a primarily Midwest focus to build market presence and awareness in other regions of the U.S. with significant demand potential, including the Northeast, Southeast and California.

We focus on markets where the economic benefits and technical specifications of our lighting product offerings are most compelling. Our LED lighting products fall into two separate applications, commercial markets, focused on quality, efficacy, total cost of ownership and return on investment, and military maritime markets, requiring higher military specifications for durability and dependability.

With the introduction of our military Intellitube® product in 2011, our results historically had been driven by our military maritime market, until the competitive landscape changed in late 2016 due to the entrance of new competitors, drastic decline in pricing and limited remaining opportunities.

In light of the changing military maritime market, over the past several years we have continued to diversify our military maritime business through the development of LED fixtures, globe and berth lights and our continued efforts to expand sales beyond the U.S. Navy, and have been focused on expanding our commercial and industrial market presence where the

economic benefits and technical specifications of our lighting product offerings are compelling, such as the healthcare, education and industrial verticals. For example:

- Given the 24/7 lighting requirements of hospital systems we believe that our LED solutions offer the quality, performance, long lifetime, return on investment and low flicker lightning that is particularly attractive to this target market. Since 2015 we have been the trusted LED lighting partner for a major northeast Ohio hospital system and as a result of our continued success, we have been able to leverage this relationship to introduce our lighting solutions and value proposition to an increasing number of hospital systems.
- As we advocate for the benefits of low flicker LED lighting in schools, both in terms of energy-efficiency and in creating a healthy and effective learning environment, we continue to receive orders to retrofit local school districts, colleges and universities.

- Low and high bay applications are generally used in commercial and industrial markets to provide light to large open areas like big-box retail stores, warehouses and manufacturing facilities. In the past few years, technological and cost improvements have allowed LED low and high bay applications to be more competitive against traditional low and high bay applications. In the industrial market in particular, due to the usage of HID lighting, the energy savings that can be achieved by switching to our LED products could be substantial and we believe we have attractive product offerings in this space.

Concentration of sales

In 2018, one customer, a distributor to the U.S. Navy, accounted for 41.9 percent of net sales and total sales to distributors to the U.S. Navy represented 46.2 percent of net sales. In 2017, three customers accounted for 48.4 percent of net sales. In 2017, two commercial customers, a major northeastern Ohio hospital system and a large regional retrofit company located in Texas accounted for 18.3 percent, and 12.8 percent of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17.3 percent of net sales. Total sales to distributors to the U.S. Navy represented 22.0 percent of net sales in 2017.

Competition

Our LED lighting products compete against a variety of lighting products, including conventional light sources such as compact fluorescent lamps and HID lamps, as well as other TLEDs and full fixture lighting products. Our ability to compete depends substantially upon the superior performance and lower total cost of ownership of our products. Principal competitors in our markets include large lamp manufacturers and lighting fixture companies based in the U.S., as well as TLED manufacturers mostly based in Asia, whose financial resources may substantially exceed and cost structure may be well below ours. These competitors may introduce new or improved products that may reduce or eliminate some of the competitive advantage of our products, and may have substantially lower pricing. We anticipate that the competition for our products will also come from new technologies that offer increased energy efficiency, lower maintenance costs, and/or advanced features. We compete with LED systems produced by large lighting companies such as Philips Lighting, Ideal Industries, Osram Sylvania and GE Lighting, as well as, smaller manufacturers or distributors such as LED Smart, Revolution Lighting Technologies and Orion Energy Systems. Some of these competitors offer products with performance characteristics similar to those of our products.

Manufacturing and suppliers

We produce our lighting products and systems through a combination of internal manufacturing and assembly at our Solon, Ohio facility, and sourced finished goods, manufactured to our specifications. Our internal lighting system manufacturing consists primarily of final assembly, testing, and quality control. We have worked with several vendors to design custom components to meet our specific needs. Our quality assurance program provides for testing of all

sub-assemblies at key stages in the assembly process, as well as testing of finished products produced both internally and sourced through third parties.

Manufacturing costs are managed through the balance of internal production and an outsourced production model for certain parts and components, as well as finished goods in specific product lines, to a small number of vendors in various locations throughout the world, primarily in the United States, Taiwan, and China. In some cases, we rely upon a single supplier to source certain components, sub-assemblies, or finished goods. We continually attempt to improve our global supply chain practices to satisfy client demands in terms of quality and volumes, while controlling our costs and achieving targeted gross margins, and this includes the evaluation of additional outsourcing of internal production where cost, quality and performance can be maintained or improved.

Product development

Product development has been a key area of operating focus and competitive differentiation for us in designing and developing industry leading LED lighting products. Gross product development expenses for the years ended December 31, 2018, 2017, and 2016 were $2.6 million, $2.9 million, and $3.6 million respectively.

Intellectual property

We have a policy of seeking to protect our intellectual property through patents, license agreements, trademark registrations, confidential disclosure agreements, and trade secrets as management deems appropriate. Certain of our patents are key to our current product lines. Additionally, we have various pending United States patent applications, and various pending Patent Cooperation Treaty patent applications filed with the World Intellectual Property Organization that serve as the basis for national patent filings in countries of interest. Our issued patents expire at various times through July 2032. Generally, the term of patent protection is twenty years from the earliest effective filing date of the patent application. There can be no assurance; however, that our issued patents are valid or that any patents applied for will be issued, and that our competitors or clients will not copy aspects of our lighting systems or obtain information that we regard as proprietary. There can also be no assurance that others will not independently develop products similar to ours. The laws of some foreign countries in which we manufacture, sell or may sell our products do not protect proprietary rights to products to the same extent as the laws of the United States.

Insurance

All of our properties and equipment are covered by insurance and we believe that such insurance is adequate. In addition, we maintain general liability and workers’ compensation insurance in amounts we believe to be consistent with our risk of loss and industry practice.

Employees

At December 31, 2018, we had 58 full-time employees, five of whom were located in Taiwan and 53 in the United States. We also had eight temporary contract employees at December 31, 2018. None of our employees or contract employees are subject to collective bargaining agreements.

Business segments

We currently operate in a single business segment that includes the marketing and sale of commercial and military maritime lighting products. Please refer to Note 4, “Discontinued Operations” and Note 12, “Product and Geographic Information,” included in Item 8 of this Annual Report, for additional information.

Available information

Our website is located at www.energyfocus.com. We make available free of charge, on or through our website, our annual, quarterly, and current reports, as well as any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with the Securities and Exchange Commission. Information contained on our website is not part of this Annual Report.

ITEM 1A. RISK FACTORS

Risks associated with our business

We rely on financing to operate our business and will require additional financing in the near-term, which we may not be able to raise on favorable terms or at all, and our failure to obtain funding when needed may force us to delay, scale back or eliminate our business plan or even discontinue or curtail our operations.

For the year ended December 31, 2018, we reported a net loss from continuing operations of $9.1 million and are dependent upon the availability of financing in order to continue our business.

In 2015, we raised approximately $23.6 million from a common stock offering and on March 29, 2019, we raised approximately $1.7 million from the issuance of subordinated convertible promissory notes to a group of our investors (the "Convertible Notes"). On December 11, 2018, we entered into a $5.0 million revolving line of credit ("Credit Facility") with Austin Financial Services ("Austin"). As of December 31, 2018, we had cash and cash equivalents of approximately $6.3 million and had a balance of $2.2 million under the Credit Facility. As of March 31, 2019, we estimate that our cash and cash equivalents were approximately $3.9 million and our outstanding balance was $1.9 million under the Credit Facility. Over the past several months, we have evaluated and pursued, and we expect that we will continue to assess the Company's strategic options, including additional external funding sources, to achieve a profitable business model and maximize value for our stockholders.

The remaining proceeds from the offering and the Convertible Notes will only continue to provide funding for the near-term and our ability to draw on the Credit Facility is limited based on the amount of qualified accounts receivable, plus a portion of the net realizable value of our eligible inventory. The repayment of outstanding advances and interest under the Credit Facility may be accelerated upon an event of default including, but not limited to, failure to make timely payments or breach of any terms set forth in the loan agreement. The Credit Facility is secured by our assets and is subject to customary affirmative and negative operating covenants and defaults and restricting indebtedness, liens, corporate transactions, dividends, and affiliate transactions, among others. The lender has the ability to terminate the Credit Facility with 90-days' notice.

Even with the Credit Facility, we may not generate sufficient cash flows from our operations or be able to borrow sufficient funds under the Credit Facility to sustain our operations. As such, we will need additional external financing during 2019 and will continue to review and pursue external funding sources including, but not limited to, the following:

- obtaining financing from traditional or non-traditional investment capital organizations or individuals; and
- obtaining funding from the sale of our common stock or other equity or debt instruments.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional financing contains risks, including:

- additional equity financing may not be available to us on satisfactory terms and any equity we are able to issue could lead to dilution for current stockholders and have rights, preferences and privileges senior to our common stock;
- loans or other debt instruments may have terms and/or conditions, such as interest rate, restrictive covenants and control or revocation provisions, which are not acceptable to management or our Board of Directors; and
- the current environment in capital markets combined with our capital constraints may prevent us from being able to obtain adequate debt financing.

If we fail to obtain required additional financing to sustain our business before we are able to produce levels of revenue to meet our financial needs, we will need to delay, scale back or eliminate our business plan and further reduce our operating costs and headcount, each of which would have a material adverse effect on our business, future prospects, and financial condition. A lack of additional financing could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtain our operations and, as a result, investors in the Company could lose their entire investment.

Our independent registered public accounting firm’s opinion on our audited financial statements for the fiscal year ended December 31, 2018, included in this annual report on Form 10-K, contains a modification relating to our ability to continue as a going concern.

Our independent registered public accounting firm’s opinion on our audited financial statements for the year ended December 31, 2018 includes a modification stating that our losses and negative cash flows from operations and uncertainty in generating sufficient cash to meet our obligations and sustain our operations raise substantial doubt about our ability to

continue as a going concern. In addition, Note 3 to our financial statements for the year ended December 31, 2018 includes a modification describing the existence of conditions that raise substantial doubt about our ability to continue as a going concern for a reasonable period of time.

While we continue to pursue funding sources and transactions that could raise capital, there can be no assurances that we will be successful in these efforts or will be able to resolve our liquidity issues or eliminate our operating losses. If we are unable to obtain sufficient funding, we would need to scale back or eliminate our business plan, further reduce our operating costs and headcount, or discontinue or curtail our operations. Accordingly, our business, prospects, financial condition and results of operations will be materially and adversely affected, and we may be unable to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets re carried on our audited consolidated financial statements, and it is likely that investors will lose all or a part of their investment. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have a history of operating losses and will incur losses in the future as we continue our efforts to grow sales and streamline our operations at a profitable level.

We have incurred substantial losses in the past and reported net losses from continuing operations of $9.1 million and $11.3 million for the years ended December 31, 2018 and 2017. As of December 31, 2018, we had an accumulated deficit of $117.3 million, cash and cash equivalents of approximately $6.3 million and had a balance of $2.2 million on our line of credit. As of March 31, 2019, we estimate that our cash and cash equivalents were approximately $3.9 million and our outstanding balance was $1.9 million under the Credit Facility.

In order for us to operate our business profitably, we need to grow our sales, maintain cost control discipline while balancing development of our new product pipeline and potential long-term revenue growth, continue our efforts to reduce product cost, drive further operating efficiencies and develop and execute a strategic product pipeline for profitable and compelling energy-efficient LED lighting products. There is a risk that our strategy to return to profitability may not be as successful as we envision. We require additional financing in the near-term and, if our operations do not achieve, or we experience an unanticipated delay in achieving, our intended level and pace of profitability, we will continue to need additional funding, none of which may be available on favorable terms or at all and could require us to sell certain assets or discontinue or curtail our operations.

We derive a significant portion of our revenue from a few customers and the loss of one of these customers, or a reduction in their demand for our products, could adversely affect our business, financial condition, results of operations, and prospects.

Historically our customer base has been highly concentrated and one or a few customers have represented a substantial portion of our net sales. In 2018, one customer, a distributor to the U.S. Navy accounted for 41.9 percent, of net sales and total sales to distributors to the U.S. Navy represented 46.2 percent of net sales. In 2017, three customers accounted for 48.4 percent of net sales. In 2017, Two commercial customers, a major northeastern Ohio hospital system and a large regional retrofit company located in Texas accounted for 18.3 percent, and 12.8 percent of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17.3 percent of net sales. Total sales to distributors to the U.S. Navy represented 22.0 percent of net sales in 2017. We generally do not have long-term contracts with our customers that commit them to purchase any minimum amount of our products or require them to continue to do business with us. We could lose business from any one of our significant customer for a variety of reasons, many of which are outside of our control, including, changes in levels of government funding and rebate programs, our inability to comply with government contracting laws and regulations, changes in customers' procurement strategies or their lighting retrofit plans, changes in product specifications, additional competitors entering particular markets, our failure to keep pace with technological advances and cost reductions, and damage to

our professional reputation, among others.

We are attempting to expand and diversify our customer base, reducing the dependence on one or a few customers, including through the addition of our agency driven sales channel strategy. Although as of December 31, 2017, we had expanded our sales coverage to the entire U.S. through six geographic regions and now have 50 sales agents, our efforts to expand our customer base are generally in the early stages, and we cannot provide any assurance we will be successful. We anticipate that a limited number of customers could continue to comprise a substantial portion of our revenue for the foreseeable future. If we continue to do business with our significant customers, our concentration can cause variability in our results because we cannot control the timing or amounts of their purchases. If a significant customer ceases to do or drastically reduces its business with us, these events can occur with little or no notice and could adversely affect our results of operations and cash flows in particular periods.

Our inability to expand our customer base and manage long sales cycles could adversely impact our business and operating results, and expanding to new target markets may open us up to additional risks and challenges.

Our efforts to grow sales in our existing markets and penetrate additional markets are generally in the early stages, and we cannot provide any assurance we will be successful. Our initial sales cycle is long, generally twelve to eighteen months or more, and each targeted market may require us to develop different expertise and sales, supply, or distribution channels. We may dedicate significant resources to a targeted customer or industry before we achieve meaningful results or are able to effectively evaluate our success. As we target new customers and industries, we will also face different technological, pricing, supply, regulatory and competitive challenges that we may not have experience with, or that may evolve more rapidly than we can address. As a result, our efforts to expand sales in current markets and into new markets may not succeed, may divert management resources from our existing operations and may require significant financial commitments to unproven areas of our business, all of which may harm our financial performance and thwart our efforts to achieve profitable operations.

If we are unable to implement plans to increase sales and control expenses to manage future growth effectively, our profitability goals and liquidity will be adversely affected.

Our ability to achieve our desired growth depends on the adoption of LEDs within the general lighting market and our ability to affect and adapt to this rate of adoption. The pace of continued growth in this market is uncertain, and in order to grow our sales, we may need to:

- manage organizational complexity and communication;
- expand the skills and capabilities of our current management team;
- add experienced senior level managers;
- attract and retain qualified employees;
- adequately maintain and adjust the operational and financial controls that support our business;
- expand research and development, sales and marketing, technical support, distribution capabilities, manufacturing planning and administrative functions;
- maintain or establish additional manufacturing facilities and equipment, as well as secure sufficient third-party manufacturing resources, to adequately meet customer demand; and
- manage an increasingly complex supply chain that has the ability to maintain a sufficient supply of materials and deliver on time to our manufacturing facilities.

These efforts to grow our business, both in terms of size and in diversity of customer bases served, may put a significant strain on our resources. During 2017, we implemented comprehensive cost-saving initiatives to reduce our net loss and mitigate doubt about our ability to continue as a going concern. These initiatives have improved efficiency and streamlined our operations, but we will need additional funding and further cost-cutting may be needed to manage liquidity and future growth may exceed our current capacity and require rapid expansion in certain functional areas.

We may lack sufficient funding to appropriately expand or incur significant expenses as we attempt to scale our resources and make investments in our business that we believe are necessary to achieve short-term and long-term growth goals. Such investments take time to become fully operational, and we may not be able to expand quickly enough to exploit targeted market opportunities. In addition to our own manufacturing capacity, we are increasingly utilizing contract manufacturers and original design manufacturers (“ODMs”) to produce our products for us. There are also inherent execution risks in expanding product lines and production capacity, whether through our facilities or that of a third-party manufacturer, that could increase costs and reduce our operating results, including design and construction cost overruns, poor production process yields and reduced quality control. If we are unable to fund any necessary expansion or manage our growth effectively, we may not be able to adequately meet demand, our expenses

could increase without a proportionate increase in revenue, our margins could decrease, and our business and results of operations could be adversely affected.

Our results of operations, financial condition and business could be harmed if we are unable to balance customer demand and capacity.

As customer demand for our products changes, we must be able to adjust our production capacity to meet demand. We are continually taking steps to address our manufacturing capacity needs for our products. If we are not able to increase or decrease our production capacity at our targeted rate or if there are unforeseen costs associated with adjusting our capacity levels, we may not be able to achieve our financial targets. In addition, as we introduce new products and further develop product generations, we must balance the production and inventory of prior generation products with the production and inventory of new generation products, whether manufactured by us or our contract manufacturers, to maintain a product mix that will satisfy

customer demand and mitigate the risk of incurring cost write-downs on the previous generation products, related raw materials and tooling.

If customer demand does not materialize at the rate forecasted, we may not be able to scale back our manufacturing expenses or overhead costs to correspond to the demand. This could result in lower margins, write-downs of our inventory and adversely impact our business and results of operations. Additionally, if product demand decreases or we fail to forecast demand accurately, our results may be adversely impacted due to higher costs resulting from lower factory utilization, causing higher fixed costs per unit produced. In addition, our efforts to improve quoted delivery lead-time performance may result in corresponding reductions in order backlog. A decline in backlog levels could result in more variability and less predictability in our quarter-to-quarter net sales and operating results.

If we are not able to compete effectively against companies with lower cost structures or greater resources, and new competitors who enter our target markets, our sales will be adversely affected.

The lighting industry is highly competitive. In the high-performance lighting markets in which we sell our advanced lighting systems, our products compete with lighting products utilizing traditional lighting technology provided by many vendors. For sales of military maritime products, we compete with a small number of qualified military lighting lamp and fixture suppliers. In certain commercial applications, we typically compete with LED systems produced by large lighting companies. Our primary competitors include Royal Philips, Ideal Industries, Osram Sylvania, LED Smart, Revolution Lighting Technologies and Orion Energy Systems, Inc. Some of these competitors offer products with performance characteristics similar to those of our products. Many of our competitors are larger, more established companies with greater resources to devote to research and development, manufacturing and marketing, as well as greater brand recognition. In addition, larger competitors who purchase greater unit volumes from component suppliers may be able to negotiate lower bill of material costs, thereby enabling them to offer lower pricing to end customers. Moreover, the relatively low barriers to entry into the lighting industry and the limited proprietary nature of many lighting products also permit new competitors to enter the industry easily and with lower costs.

In each of our markets, we also anticipate the possibility that LED manufacturers, including those that currently supply us with LEDs, may seek to compete with us. Our competitors’ lighting technologies and products may be more readily accepted by customers than our products will be. Moreover, if one or more of our competitors or suppliers were to merge, the change in the competitive landscape could adversely affect our competitive position. Additionally, to the extent that competition in our markets intensifies, we may be required to further reduce our prices in order to remain competitive. If we do not compete effectively, or if we reduce our prices without making commensurate reductions in our costs, our net sales, margins, and profitability and our future prospects for success may be harmed.

We depend on independent agents and sales representatives for a substantial portion of our net sales, and the failure to manage our relationships with these third parties, or the termination of these relationships, could cause our net sales to decline and harm our business.

Our 2017 restructuring initiative included the addition of an agency driven sales channel strategy in order to expand our market presence throughout the U.S. As of December 31, 2017, we had expanded our sales coverage to the entire U.S. through six geographic regions and 50 sales agents. As a result, we have increased our reliance on independent sales agent channels to market and sell our products. In addition, these parties provide technical sales support to end-users. The current agreements with our agents are generally non-exclusive, meaning they can sell products of our competitors. Any such agreements we enter into in the future may be on similar terms. Our agents may not be motivated to or successfully pursue the sales opportunities available to them, or they may prefer to sell or be more familiar with the products of our competitors. If our agents do not achieve our sales objectives or these relationships take significant time to develop, our revenue may decline, fail to grow or not increase as rapidly as we intend in order to achieve profitability and grow our business.

Furthermore, our agreements are generally short-term, and can be cancelled by either party without significant financial consequence. The termination of or the inability to negotiate extensions of these contracts on acceptable terms could adversely impact sales of our products. Additionally, we cannot be certain that we or end-users will be satisfied by their performance. If these agents significantly change their terms with us, or change their end-user relationships, there could be a significant impact on our net sales and profits.

If LED lighting technology fails to gain widespread market acceptance or we are unable to respond effectively as new lighting technologies and market trends emerge, our competitive position and our ability to generate revenue, and profits may be harmed.

To be successful, we depend on continued market acceptance of our existing LED technology. Although adoption of LED lighting continues to grow, the use of LED lighting products for general illumination is in its early stages, is still limited, and faces significant challenges. Potential customers may be reluctant to adopt LED lighting products as an alternative to traditional lighting technology because of its higher initial cost or perceived risks relating to its novelty, reliability, usefulness, light quality, and cost-effectiveness when compared to other established lighting sources available in the market. Changes in economic and market conditions may also make traditional lighting technologies more appealing. For example, declining energy prices in certain regions or countries may favor existing lighting technologies that are less energy-efficient, reducing the rate of adoption for LED lighting products in those areas. Notwithstanding continued performance improvements and cost reductions of LED lighting, limited customer awareness of the benefits of LED lighting products, lack of widely accepted standards governing LED lighting products and customer unwillingness to adopt LED lighting products could significantly limit the demand for LED lighting products. Even potential customers that are inclined to adopt energy-efficient lighting technology may defer investment as LED lighting products continue to experience rapid technological advances. Any of the foregoing could adversely impact our results of operations and limit our market opportunities.

In addition, we will need to keep pace with rapid changes in LED technology, changing customer requirements, new product introductions and cost reductions by competitors and evolving industry standards, any of which could render our existing products obsolete if we fail to respond in a timely manner. The development, introduction, and acceptance of new, re-designed or reduced cost products incorporating advanced technology is a complex process subject to numerous uncertainties, including:

- available funding to sustain adequate development efforts;
- achievement of technology breakthroughs required to make commercially viable devices;
- the accuracy of our predictions for market requirements;
- our ability to predict, influence, and/or react to evolving standards;
- acceptance of our new product designs;
- acceptance of new technologies in certain markets;
- the combination of other desired technological advances with lighting products, such as controls;
- the availability of qualified research and development personnel;
- our timely completion of product designs and development;
- our ability to develop repeatable processes to manufacture new products in sufficient quantities, with the desired specifications, and at competitive costs;
- our ability to effectively transfer products and technology from development to manufacturing; and
- market acceptance of our products.

We could experience delays in the introduction of these products. We could also devote substantial resources to the development of new technologies or products that are ultimately not successful.

If effective new sources of light other than LEDs are discovered, our current products and technologies could become less competitive or obsolete. If others develop innovative proprietary lighting technology that is superior to ours, or if we fail to accurately anticipate technology, pricing and market trends, respond on a timely basis with our own development of new and reliable products and enhancements to existing products, and achieve broad market acceptance of these products and enhancements, our competitive position may be harmed and we may not achieve sufficient growth in our net sales to attain or sustain profitability.

If we are unable to attract or retain qualified personnel, our business and product development efforts could be harmed.

We have had significant turnover in our management team and other employees since 2013 and cannot be certain that these and other key employees will continue in their respective capacities for any period of time, and these employees may be difficult to replace. Our future success will also depend on our ability to attract and retain qualified technical, sales, marketing, and management personnel, for whom competition is very intense. As we attempt to rapidly grow our business, it could be especially difficult to attract and retain sufficient qualified personnel, especially in light of our lean cost-structure. The loss of, or failure to attract, hire, and retain any such persons could delay product development cycles, disrupt our operations, increase our costs, or otherwise harm our business or results of operations.

We may be subject to legal claims against us or claims by us which could have a significant impact on our resulting financial performance.

At any given time, we may be subject to litigation or claims related to our products, suppliers, customers, employees, stockholders, distributors, sales representatives, intellectual property, and sales of our assets, among other things, the disposition of which may have an adverse effect upon our business, financial condition, or results of operation. The outcome of

litigation is difficult to assess or quantify. Lawsuits can result in the payment of substantial damages by defendants. If we are required to pay substantial damages and expenses as a result of these or other types of lawsuits our business and results of operations would be adversely affected. Regardless of whether any claims against us are valid or whether we are liable, claims may be expensive to defend and may divert time and money away from our operations. Insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. A judgment or other liability in excess of our insurance coverage for any claims could adversely affect our business and the results of our operations.

Our operating results may fluctuate due to factors that are difficult to forecast and not within our control.

Our past operating results may not be accurate indicators of future performance, and you should not rely on such results to predict our future performance. Our operating results have fluctuated significantly in the past, and could fluctuate in the future. Factors that may contribute to fluctuations include:

- changes in aggregate capital spending, cyclicality and other economic conditions, or domestic and international demand in the industries;
- the timing of large customer orders to which we may have limited visibility and cannot control;
- competition for our products, including the entry of new competitors and significant declines in competitive pricing;
- our ability to effectively manage our working capital;
- our ability to generate increased demand in our current and targeted markets, particularly those in which we have limited experience;
- our ability to satisfy consumer demands in a timely and cost-effective manner;
- pricing and availability of labor and materials;
- quality testing and reliability of new products;
- our inability to adjust certain fixed costs and expenses for changes in demand and the timing and significance of expenditures that may be incurred to facilitate our growth;
- seasonal fluctuations in demand and our revenue; and
- disruption in component supply from foreign vendors.

Depressed general economic conditions may adversely affect our operating results and financial condition.

Our business is sensitive to changes in general economic conditions, both inside and outside the United States. Slow growth in the economy or an economic downturn, particularly one affecting construction and building renovation, or that cause end-users to reduce or delay their purchases of lighting products, services, or retrofit activities, would have a material adverse effect on our business, cash flows, financial condition and results of operations. LED lighting retrofit projects, in particular, tend to require a significant capital commitment, which is offset by cost savings achieved over time. As such, a lack of available capital, whether due to economic factors or conditions in the capital or debt markets, could have the effect of reducing demand for our products. A decrease in demand could adversely affect our ability to meet our working capital requirements and growth objectives, or could otherwise adversely affect our business, financial condition, and results of operations.

Customers may be unable to obtain financing to make purchases from us.

Some of our customers require financing in order to purchase our products and the initial investment is higher than is required with traditional lighting products. The potential inability of these customers to access the capital needed to finance purchases of our products and meet their payment obligations to us could adversely impact the appeal of our products relative to those with lower upfront costs and have a negative impact on our financial condition and results of operations. There can be no assurance that third party finance companies will provide capital to our customers.

A portion of our business is dependent upon the existence of government funding, which may not be available into the future and could result in a reduction in sales and harm to our business.

Some of our customers are dependent on governmental funding, including foreign allied navies and U.S. military bases. If any of these other target customers abandon, curtail, or delay planned LED lighting retrofit projects as a result of the levels of funding available to them or changes in budget priorities, it would adversely affect our opportunities to generate product sales.

If critical components and finished products that we currently purchase from a small number of third-party suppliers become unavailable or increase in price, or if our suppliers or delivery channels fail to meet our requirements for quality, quantity, and timeliness, our revenue and reputation in the marketplace could be harmed, which would damage our business.

In an effort to reduce manufacturing costs, we have outsourced the production of certain parts and components, as well as finished goods in our product lines, to a small number of vendors in various locations throughout the world, primarily in the United States, Taiwan and China. We generally purchase these sole or limited source items with purchase orders, and we have limited guaranteed supply arrangements with such suppliers. While we believe alternative sources for these components and products are available, we have selected these particular suppliers based on their ability to consistently provide the best quality product at the most cost-effective price, to meet our specifications, and to deliver within scheduled time frames. We do not control the time and resources that these suppliers devote to our business, and we cannot be sure that these suppliers will perform their obligations to us. If our suppliers fail to perform their obligations in a timely manner or at satisfactory quality levels, we may suffer lost sales, reductions in revenue and damage to our reputation in the market, all of which would adversely affect our business. As our demand for our products fluctuates and can be hard to predict, we may not need a sustained level of inventory, which may cause financial hardship for our suppliers or they may need to divert production capacity elsewhere. In the past, we have had to purchase quantities of certain components that are critical to our product manufacturing and were in excess of our estimated near-term requirements as a result of supplier delivery constraints and concerns over component availability, and we may need to do so in the future. As a result, we have had, and may need to continue, to devote additional working capital to support a large amount of component and raw material inventory that may not be used over a reasonable period to produce saleable products, and we may be required to increase our excess and obsolete inventory reserves to provide for these excess quantities, particularly if demand for our products does not meet our expectations.

We may be vulnerable to unanticipated price increases and payment term changes. Significant increases in the prices of sourced components and products could cause our product prices to increase, which may reduce demand for our products or make us more susceptible to competition. Furthermore, in the event that we are unable to pass along increases in operating costs to our customers, margins and profitability may be adversely affected. Accordingly, the loss of all or one of these suppliers could have a material adverse effect on our operations until such time as an alternative supplier could be found.

Additionally, consolidation in the lighting industry could result in one or more current suppliers being acquired by a competitor, rendering us unable to continue purchasing key components and products at competitive prices. We may be subject to various import duties applicable to materials manufactured in foreign countries and may be affected by various other import and export restrictions, as well as other considerations or developments impacting upon international trade, including economic or political instability, shipping delays and product quotas. These international trade factors will, under certain circumstances, have an impact on the cost of components, which will have an impact on the cost to us of the manufactured product and the wholesale and retail prices of our products.

We rely on arrangements with independent shipping companies for the delivery of our products from vendors abroad. The failure or inability of these shipping companies to deliver products or the unavailability of shipping or port services, even
temporarily, could have a material adverse effect on our business. We may also be adversely affected by an increase in freight surcharges due to rising fuel costs and added security costs.

Our products could contain defects or they may be installed or operated incorrectly, which could reduce sales of those products or result in claims against us.

Despite product testing, defects may be found in our existing or future products. This could result in, among other things, a delay in the recognition or loss of net sales, the write-down or destruction of existing inventory, insurance recoveries that fail to cover the full costs associated with product recalls, significant warranty, support, and repair costs, diversion of the attention of our engineering personnel from our product development efforts, and damage to our relationships with our customers. The occurrence of these problems could also result in reputational damage or the

delay or loss of market acceptance of our lighting products, and would likely harm our business. In addition, our customers may specify quality, performance, and reliability standards that we must meet. If our products do not meet these standards, we may be required to replace or rework the products. In some cases, our products may contain undetected defects or flaws that only become evident after shipment. Even if our products meet standard specifications, our customers may attempt to use our products in applications for which they were not designed or in products that were not designed or manufactured properly, resulting in product failures and creating customer satisfaction issues.

Some of our products use line voltages (such as 120 or 240 AC), which involve enhanced risk of electrical shock, injury or death in the event of a short circuit or other malfunction. Defects, integration issues or other performance problems in our lighting products could result in personal injury or financial or other damages to end-users or could damage market acceptance of our products. Our customers and end-users could also seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend and the adverse publicity generated by such a claim against us or others in our industry could negatively impact our reputation.

We provide warranty periods ranging from one to ten years on our products. The standard warranty on nearly all of our new LED lighting products, which now represent the majority of our revenue, is ten years. Although we believe our reserves are appropriate, we are making projections about the future reliability of new products and technologies, and we may experience increased variability in warranty claims. Increased warranty claims could result in significant losses due to a rise in warranty expense and costs associated with customer support.

If we are unable to obtain and adequately protect our intellectual property rights or are subject to claims that our products infringe on the intellectual property rights of others, our ability to commercialize our products could be substantially limited.

We consider our technology and processes proprietary. If we are not able to adequately protect or enforce the proprietary aspects of our technology, competitors may utilize our proprietary technology. As a result, our business, financial condition, and results of operations could be adversely affected. We protect our technology through a combination of patent, copyright, trademark and trade secret laws, employee and third-party nondisclosure agreements, and similar means. Despite our efforts, other parties may attempt to disclose, obtain, or use our technologies. Our competitors may also be able to independently develop products that are substantially equivalent or superior to our products or slightly modify our products. In addition, the laws of some foreign countries do not protect our proprietary rights as fully as do the laws of the United States. As a result, we may not be able to protect our proprietary rights adequately in the United States or abroad. Furthermore, there can be no assurance that we will be issued patents for which we have applied or obtain additional patents, or that we will be able to obtain licenses to patents or other intellectual property rights of third parties that we may need to support our business in the future. The inability to obtain certain patents or rights to third-party patents and other intellectual property rights in the future could have a material adverse effect on our business.

Our industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which may result in protracted and expensive litigation. We have engaged in litigation in the past and litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation may also be necessary to defend against claims of infringement or invalidity by others. Additionally, we could be required to defend against individuals and groups who have been purchasing intellectual property assets for the sole purpose of making claims of infringement and attempting to extract settlements from companies like ours. Litigation could delay development or sales efforts and an adverse outcome in litigation or any similar proceedings could subject us to significant liabilities, require us to license disputed rights from others or require us to cease marketing or using certain products or technologies. We may not be able to obtain any licenses on acceptable terms, if at all, and may attempt to redesign those products that contain allegedly infringing intellectual property, which may not be possible. We also may have to indemnify certain customers if it is determined that we have infringed upon or misappropriated another party’s intellectual property. The costs of addressing any intellectual property litigation claim, including legal fees and expenses and the diversion of management resources, regardless of whether the claim is valid, could be significant and could materially harm our business, financial condition, and results of operations.

We may be subject to confidential information theft or misuse, which could harm our business and results of operations.

We face attempts by others to gain unauthorized access to our information technology systems on which we maintain proprietary and other confidential information. Our security measures may be breached as the result of industrial or other espionage actions of outside parties, employee error, malfeasance or otherwise, and as a result, an unauthorized party may obtain access to our systems. Additionally, outside parties may attempt to access our confidential information through other means, for example by fraudulently inducing our employees to disclose confidential information. We actively seek to prevent, detect and investigate any unauthorized access, which occasionally occurs

despite our best efforts. We might be unaware of any such access or unable to determine its magnitude and effects. The theft, corruption and/or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an incident could adversely affect our competitive position and the value of our investment in research and development could be reduced. Our business could be subject to significant disruption, widespread negative publicity and a loss of customers, and we could suffer legal liabilities and monetary or other losses.

Our business may suffer if we fail to comply with government contracting laws and regulations.

We derive a portion of our revenues from direct and indirect sales to U.S., state, local, and foreign governments and their respective agencies. Contracts with government customers are subject to various procurement laws and regulations, business prerequisites to qualify for such contracts, accounting procedures, intellectual property process, and contract provisions relating to their formation, administration and performance, which may provide for various rights and remedies in favor of the governments that are not typically applicable to or found in commercial contracts. Failure to comply with these laws, regulations, or provisions in our government contracts could result in litigation, the imposition of various civil and criminal penalties, termination of contracts, forfeiture of profits, suspension of payments, or suspension from future government

contracting. If our government contracts are terminated, if we are suspended from government work, or if our ability to compete for new contracts is adversely affected, our business could suffer due to, among other factors, lost sales, the costs of any government action or penalties, damages to our reputation and the inability to recover our investment in developing and marketing products for military maritime use.

The ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have significant U.S. net operating loss and tax credit carryforwards (the “Tax Attributes”). Under federal tax laws, we can carry forward and use our Tax Attributes to reduce our future U.S. taxable income and tax liabilities until such Tax Attributes expire in accordance with the Internal Revenue Code of 1986, as amended (the “IRC”). Section 382 and Section 383 of the IRC provide an annual limitation on our ability to utilize our Tax Attributes, as well as certain built-in-losses, against future U.S. taxable income in the event of a change in ownership, as defined under the IRC. Share issuances in connection with our past financing transactions or other future changes in our stock ownership, which may be beyond our control, could result in changes in ownership for purposes of the IRC. Such changes in ownership could further limit our ability to use our Tax Attributes. Accordingly, any such occurrences could adversely affect our financial condition, operating results and cash flows.

The cost of compliance with environmental, health, safety, and other laws and regulations could adversely affect our results of operations or financial condition.

We are subject to a broad range of environmental, health, safety, and other laws and regulations. These laws and regulations impose increasingly stringent environmental, health, and safety protection standards and permit requirements regarding, among other things, air emissions, wastewater storage, treatment, and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, and working conditions for our employees. Some environmental laws, such as Superfund, the Clean Water Act, and comparable laws in U.S. states and other jurisdictions world-wide, impose joint and several liability for the cost of environmental remediation, natural resource damages, third party claims, and other expenses, without regard to the fault or the legality of the original conduct, on those persons who contributed to the release of a hazardous substance into the environment. We may also be affected by future laws or regulations, including those imposed in response to energy, climate change, geopolitical, or similar concerns. These laws may impact the sourcing of raw materials and the manufacture and distribution of our products and place restrictions and other requirements on the products that we can sell in certain geographical locations.

We have international operations and are subject to risks associated with operating in international markets.

We outsource the production of certain parts and components, as well as finished goods in certain product lines, to a small number of vendors in various locations outside of the United States, including Taiwan and China. Although we do not currently generate significant sales from customers outside the United States, we are targeting foreign allied navies as a potential opportunity to generate additional sales of our military products.

International business operations are subject to inherent risks, including, among others:

- difficulty in enforcing agreements and collecting receivables through foreign legal systems;
- unexpected changes in regulatory requirements, tariffs, and other trade barriers or restrictions;
- potentially adverse tax consequences;
- the burdens of compliance with the U.S. Foreign Corrupt Practices Act, similar anti-bribery laws in other countries, and a wide variety of laws;
- import and export license requirements and restrictions of the United States and each other country in which we operate;

- exposure to different legal standards and reduced protection for intellectual property rights in some countries;
- currency fluctuations and restrictions; and
- political, social, and economic instability, including war and the threat of war, acts of terrorism, pandemics, boycotts, curtailment of trade, or other business restrictions.

If we do not anticipate and effectively manage these risks, these factors may have a material adverse impact on our business operations.

We believe that certification and compliance issues are critical to adoption of our lighting systems, and failure to obtain such certification or compliance would harm our business.

We are required to comply with certain legal requirements governing the materials in our products. Although we are not aware of any efforts to amend any existing legal requirements or implement new legal requirements in a manner with which we cannot comply, our net sales might be adversely affected if such an amendment or implementation were to occur.

Moreover, although not legally required to do so, we strive to obtain certification for substantially all our products. In the United States, we seek certification on substantially all of our products from UL®, Intertek Testing Services (ETL®), or DesignLights Consortium (DLC™). Where appropriate in jurisdictions outside the United States and Europe, we seek to obtain other similar national or regional certifications for our products. Although we believe that our broad knowledge and experience with electrical codes and safety standards have facilitated certification approvals, we cannot ensure that we will be able to obtain any such certifications for our new products or that, if certification standards are amended, that we will be able to maintain such certifications for our existing products. Moreover, although we are not aware of any effort to amend any existing certification standard or implement a new certification standard in a manner that would render us unable to maintain certification for our existing products or obtain ratification for new products, our net sales might be adversely affected if such an amendment or implementation were to occur.

As a public reporting company, we are subject to complex regulations concerning corporate governance and public disclosure that require us to incur significant expenses, divert management resources, and expose us to risks of non-compliance.

We are faced with complicated and evolving laws, regulations and standards relating to corporate governance and public disclosure. To comply with these requirements and operate as a public company, we incur legal, financial, accounting and administrative costs and other related expenses. As a smaller reporting company, these expenses may be significant to our financial results. In addition, due to our limited internal resources, we must devote substantial management and other resources to compliance efforts. As we attempt to rapidly grow our business, compliance efforts could become more complex and put additional strain on our resources. Despite our efforts, we cannot guarantee that we will effectively meet all of the requirements of these laws and regulations. If we fail to comply with any of the laws, rules and regulations applicable to U.S. public companies or with respect to publicly-traded stock, we may be subject to regulatory scrutiny, possible sanctions or higher risks of shareholder litigation, all of which could harm our reputation, lower our stock price or cause us to incur additional expenses.

Any material weaknesses in our internal control over financial reporting could, if not remediated, result in material misstatements in our financial statements.

As a public company reporting to the Securities and Exchange Commission, we are subject to the reporting requirements of the Securities Exchange Act of 1934, and the Sarbanes-Oxley Act of 2002, including section 404(a) that requires that we annually evaluate and report on our systems of internal controls. If material weaknesses or significant deficiencies in our internal controls are discovered or occur, our financial statements may contain material misstatements and we could be required to restate our financial results. This could result in a decrease in our stock price, securities litigation, and the diversion of significant management and financial resources.

We rely heavily on information technology in our operations and any material failure, weakness, interruption or breach of security could prevent us from effectively operating our business, which could have a material adverse effect on our business, financial condition, and results of operations.

We rely heavily on our information technology systems, including our enterprise resource planning (“ERP”) software, across our operations and corporate functions, including for management of our supply chain, payment of obligations,

data warehousing to support analytics, finance systems, accounting systems, and other various processes and procedures, some of which are handled by third parties.

Our ability to efficiently and effectively manage our business depends significantly on the reliability and capacity of these systems. Our business and results of operations may be adversely affected if we experience system usage problems. The failure of these systems to operate effectively, maintenance problems, system conversions, back-up failures, problems or lack of resources for upgrading or transitioning to new platforms or damage or interruption from circumstances beyond our control, including, without limitation, fire, natural disasters, power outages, systems failure, security breaches, cyber-attacks, viruses or human error could result in, among other things, transaction errors, processing inefficiencies, loss of data, inability to generate timely SEC reports, loss of sales and customers and reduce efficiency in our operations. Additionally, we and our customers could suffer financial and reputational harm if customer or Company proprietary information is compromised by such events. Remediation of such problems could result in significant unplanned capital investments and any damage or interruption could have a material adverse effect on our business, financial condition, and results of operations.

Risks associated with an investment in our common stock

As a "thinly-traded" stock with a relatively small public float, the market price of our common stock is highly volatile and may decline regardless of our operating performance.

Our common stock is "thinly-traded" and we have a relatively small public float, which increases volatility in the share price and makes it difficult for investors to buy or sell shares in the public market without materially affecting our share price. Since our listing on the NASDAQ Capital Market in August 2014, our market price has ranged from a low of $0.49 to a high of $29.20 and continues to experience significant volatility. Broad market and industry factors also may adversely affect the market price of our common stock, regardless of our actual operating performance. Factors that could cause wide fluctuations in our stock price may include, among other things:

- actual or anticipated variations in our financial condition and operating results;
- general economic conditions and trends;
- addition or loss of significant customers and the timing of significant customer purchases;
- our ability to effectively implement our growth plans and the significance and timing of associated expenses;
- unanticipated impairments and other changes that reduce our earnings;
- overall conditions or trends in our industry;
- the entry or exit of new competitors into our target markets;
- any litigation or legal claims;
- the terms and amount of any additional financing that we may obtain, if any;
- unfavorable publicity;
- additions or departures of key personnel;
- changes in the estimates of our operating results or changes in recommendations by any securities or industry analysts that elect to follow our common stock;
- market expectations following period of rapid growth; and
- sales of our common stock by us or our stockholders, including sales by our directors and officers.

Because our common stock is thinly-traded, investors seeking to buy or sell a certain quantity of our shares in the public market may be unable to do so within one or more trading days and it may be difficult for stockholders to sell all of their shares in the market at any given time at prevailing prices. Any attempts to buy or sell a significant quantity of our shares could materially affect our share price. In addition, because our common stock is thinly-traded and we have a relatively small public float, the market price of our shares may be disproportionately affected by any news, commentary or rumors regarding us or our industry, regardless of the source or veracity, which could also result in increased volatility.

In addition, in the past, following periods of volatility in the market price of a company's securities, securities litigation has often been instituted against these companies. Volatility in the market price of our shares could also increase the likelihood of regulatory scrutiny. Securities litigation, if instituted against us, or any regulatory inquiries or actions that we face could result in substantial costs, diversion of our management's attention and resources and unfavorable publicity, regardless of the merits of any claims made against us or the ultimate outcome of any such litigation or action.

We could issue additional shares of common stock without stockholder approval.

We are authorized to issue 30,000,000 shares of common stock, of which 12,090,695 shares were issued and outstanding as of December 31, 2018. Our Board of Directors has the authority, without action or vote of our stockholders, to issue authorized but unissued shares subject to the rules of the NASDAQ Capital Market. In addition,

in order to raise capital or acquire businesses in the future, we may need to issue securities that are convertible or exchangeable for shares of our common stock. For example, the Convertible Notes issued on March 29, 2019 are convertible into shares of our preferred stock at a conversion price that fluctuates based on the market price of our common stock. Any shares of preferred stock that are issued upon conversion of the Convertible Notes are convertible into shares of our common stock on a one-to-one basis.

Any such issuances could be made at a price that reflects a discount to the then-current trading price of our common stock. These issuances could be dilutive to our existing stockholders and cause the market price of our common stock to decline.

If securities analysts do not publish research or reports about our business, or if they downgrade our stock, the price of our stock could decline.

The trading market for our common stock is likely to be influenced by any research and reports that securities or industry analysts publish about us or our business. If one or more of these analysts downgrades our stock or publish unfavorable

research about our business, our stock price would likely decline. There are currently a limited number of analysts covering us, which could increase the influence of particular analysts or reports. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease and cause our stock price and trading volume to decline. Any of these effects could be especially significant because our common stock is “thinly-traded” and we have a relatively small public float.

Our failure to comply with the continued listing requirements of the NASDAQ Capital Market could adversely affect the price of our common stock and its liquidity.

We must comply with NASDAQ’s continued listing requirements related to, among other things, stockholders’ equity, market value, minimum bid price, and corporate governance in order to remain listed on the NASDAQ Capital Market. In January 2019, we received a notice of non-compliance from NASDAQ indicating that for the prior 30 consecutive business days, the closing bid price for our common stock was below the minimum $1.00 per share required pursuant to Nasdaq Listing Rule 5550(a)(2) (the “Bid Price Rule”). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we had an initial period of 180 calendar days to regain compliance with the Bid Price Rule. Our stock traded above $1.00 for the required number of days within the notice period to regain compliance with the Bid Price Rule; however, there can be no assurance that we will continue to remain in compliance with this or other continued listing requirements in the future. If we do not remain compliant with these continued listing requirements, we could be delisted. If we were delisted, it would be likely to have a negative impact on our stock price and liquidity. The delisting of our common stock could also deter broker-dealers from making a market in or otherwise generating interest in or recommending our common stock, and would adversely affect our ability to attract investors in our common stock. Furthermore, our ability to raise additional capital would be impaired. As a result of these factors, the value of the common stock could decline significantly.

We have never paid dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have never declared or paid dividends on our common stock, nor do we anticipate paying any cash dividends for the foreseeable future. We currently intend to retain future earnings, if any, to finance the operations and expansion of our business. Any future determination to pay cash dividends will be at the discretion of our Board of Directors and will be dependent upon the earnings, financial condition, operating results, capital requirements and other factors as deemed necessary by our Board of Directors.

The elimination of monetary liability against our directors under Delaware law and the existence of indemnification rights held by our directors, officers, and employees may result in substantial expenditures by the Company and may discourage lawsuits against our directors, officers, and employees.

Our Certificate of Incorporation eliminates the personal liability of our directors to our Company and our stockholders for damages for breach of fiduciary duty as a director to the extent permissible under Delaware law. Further, our Bylaws provide that we are obligated to indemnify any of our directors or officers to the fullest extent authorized by Delaware law and, subject to certain conditions, advance the expenses incurred by any director or officer in defending any action, suit or proceeding prior to its final disposition. Those indemnification obligations could result in the Company incurring substantial expenditures to cover the cost of settlement or damage awards against our directors or officers, which we may be unable to recoup. These provisions and resultant costs may also discourage us from bringing a lawsuit against any of our current or former directors or officers for breaches of their fiduciary duties, and may similarly discourage the filing of derivative litigation by our stockholders against our directors and officers even though such actions, if successful, might otherwise benefit us or our stockholders.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal executive offices and our manufacturing facility are located in an approximately 117,000 square foot facility in Solon, Ohio, under a lease agreement expiring on June 30, 2022. We believe this facility is adequate to support our current and anticipated operations.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be involved in legal proceedings arising from the normal course of business. See Note 14, "Legal Matters," included in Item 8 of this Annual Report.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.
Executive officers of the registrant

The following is the name, age, and present position of each of our current executive officers, as well as all prior positions held by each of them during the last five years and when each of them was first elected or appointed as an executive officer:

Name	Age	Current position and business experience
Theodore L. Tewksbury III, Ph.D.	62	Chairman of the Board, Chief Executive Officer and President – February 2017 to present Executive Chairman of the Board – December 2016 to February 2017 Dr. Tewksbury has been Founder and CEO of Tewksbury Partners, LLC, providing strategic consulting, advisory and board services to private and public technology companies, venture capital and private equity firms, since 2013. He had served as President and Chief Executive Officer (from November 2014) and a director (from September 2010) of Entropic Communications, a public company specializing in semiconductor solutions for the connected home, until its sale to MaxLinear, Inc., another public semiconductor company, in April 2015, and he remains a director of MaxLinear, Inc. He is also a director of Jariet Technologies, a private company specializing in digital microwave integrated circuits for wireless infrastructure, backhaul and military applications. From 2008 to 2013, Dr. Tewksbury served as President and Chief Executive Officer and a director of Integrated Device Corporation, a public semiconductor company.
Jerry Turin	56	Chief Financial Officer – May 2018 to present Mr. Turin has served as Energy Focus's Chief Financial Officer and Secretary since May 2018. Mr. Turin is an experienced Chief Financial Officer with more than 20 years of strategic leadership in corporate finance, business development, turnarounds, mergers and acquisitions, capital raising and investor relations within public and privately-held companies. Most recently, Mr. Turin served as Chief Financial Officer of Intematix, a venture-owned supplier of phosphors and lighting solutions for the LED market. He helped lead the company's turnaround through operational streamlining, manufacturing consolidation, gross margin expansion and an acquisition, culminating in its successful sale to a China-backed LED joint venture in 2017. Prior to that, Mr. Turin was the Chief Financial Officer of Oclaro, a publicly traded supplier of optical solutions for network equipment customers, from 2008 to 2013. In this role, he raised over $500 million in financing from equity, debt, divestitures and other transactions to fund revenue growth from $250 million to $600 million through a sector roll up of public and private optical companies. Before that, Mr. Turin served as Oclaro's Vice President of Finance and was Corporate Controller from 2005 to 2008. Earlier in his career, Mr. Turin was Director of Finance at Silicon Spice and Corporate Controller at Cirrus Logic. Mr. Turin received a Bachelor of Commerce degree from the University of Alberta and began his career with 11 years at Deloitte & Touche, where he was

promoted through multiple levels to Senior Manager.

PART II

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

Our common stock trades on The NASDAQ Capital Market ("NASDAQ") under the symbol "EFOI."

The following table sets forth the high and low market sales prices per share for our common stock for the years ended December 31, 2018 and 2017 as reported by NASDAQ:

	High	Low
First quarter 2018	$3.45	$2.15
Second quarter 2018	2.90	1.78
Third quarter 2018	2.40	1.80
Fourth quarter 2018	2.18	0.49
First quarter 2017	$5.18	$3.03
Second quarter 2017	3.52	2.32
Third quarter 2017	3.24	1.51
Fourth quarter 2017	3.46	2.00

Stockholders

There were approximately 82 holders of record of our common stock as of March 28, 2019, however, a large number of our stockholders hold their stock in "street name" in brokerage accounts. Therefore, they do not appear on the stockholder list maintained by our transfer agent.

Dividends

We have not declared or paid any cash dividends, and do not anticipate paying cash dividends in the near future.

Securities authorized for issuance under equity compensation plans

The following table details information regarding our existing equity compensation plans as of December 31, 2018:

	Equity Compensation Plan Information		
Plan category	Number of securities to be issued upon exercise of outstanding options, warrants	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities

	and rights			reflected in column (a))	
Equity compensation plans approved by security holders	839,729	$ 3.78	(2)	1,671,299	(1)

(1) Includes 401,484 shares available for issuance under the 2013 Employee Stock Purchase Plan and 1,269,815 shares available for issuance under our 2014 Stock Incentive Plan, which may be issued in the form of options, restricted stock, restricted stock units, and other equity-based awards.
(2) Does not include 546,858 shares that are restricted stock units and do not have an exercise price.

ITEM 6. SELECTED FINANCIAL DATA

The Selected Consolidated Financial Data set forth below have been derived from our financial statements. It should be read in conjunction with the information appearing under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of this report and the Consolidated Financial Statements and related notes found in Item 8 of this report.

SELECTED FINANCIAL DATA
(amounts in thousands, except per share data)

	2018	2017	2016	2015	2014
OPERATING SUMMARY					
Net sales	$18,107	$19,846	$30,998	$64,403	$22,700
Gross profit	3,412	4,821	7,677	29,292	7,778
Loss on impairment	—	185	857	—	—
Restructuring	111	1,662	—	—	—
Net (loss) income from continuing operations	(9,111)	(11,267)	(16,875)	9,471	(4,246)
Loss from discontinued operations	—	—	(12)	(691)	(1,599)
Net (loss) income	(9,111)	(11,267)	(16,887)	8,780	(5,845)
Net (loss) income per share - basic:					
From continuing operations	$(0.76)	$(0.95)	$(1.45)	$0.91	$(0.55)
From discontinued operations	—	—	—	(0.07)	(0.20)
Total	(0.76)	(0.95)	(1.45)	0.84	(0.75)
Net (loss) income per share - diluted:					
From continuing operations	$(0.76)	$(0.95)	$(1.45)	$0.88	$(0.55)
From discontinued operations	—	—	—	(0.06)	(0.20)
Total	(0.76)	(0.95)	(1.45)	0.82	(0.75)
Shares used in net (loss) income per share calculation:					
Basic	11,997	11,806	11,673	10,413	7,816
Diluted	11,997	11,806	11,673	10,752	7,816
FINANCIAL POSITION SUMMARY					
Total assets	$18,492	$22,151	$34,978	$55,702	$19,496
Cash and cash equivalents	6,335	10,761	16,629	34,640	7,435
Credit line borrowings	2,219	—	—	—	453
Current maturities of long-term debt	—	—	—	—	—
Long-term debt, net of current maturities	—	—	—	—	70
Stockholders' equity	11,052	19,292	29,938	45,320	9,773
Common shares outstanding	12,091	11,869	11,711	11,649	9,424

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 ("financial statements") and related notes thereto, included in Item 8 of this Annual Report.

Overview

Energy Focus, Inc. and its subsidiary engage in the design, development, manufacturing, marketing, and sale of energy-efficient lighting systems. We operate in a single industry segment, developing and selling our energy-efficient light-emitting diode ("LED") lighting products into the general commercial, industrial and military maritime markets. Our goal is to become a trusted leader in the LED lighting retrofit market by replacing fluorescent lamps in institutional buildings and high-intensity discharge ("HID") lighting in low-bay and high-bay applications with our innovative, high-quality commercial and military tubular LED ("TLED") products.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization and price erosion. We experienced this in our Navy business in late 2016 and early 2017 and in our commercial segment, where we once enjoyed significant price premiums for our flicker-free TLEDs with 10-year warranties, we now have a number of competitors offering similar capabilities at much lower prices. During the year, we reduced the costs of eight legacy product families in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at the high end of the competitive range and we expect aggressive price erosion and commoditization to continue to be a headwind until our more innovative and differentiated new products ramp in volume. These trends are not unique to Energy Focus as evidenced by the increasing number of industry peers facing challenges, exiting LED lighting, selling assets and even going out of business. In addition to continuous, scheduled cost reductions, our strategy to combat these trends it to move up the value chain, with more differentiated products and solutions, such as our smart lighting roadmap, that offer greater value to our customers.

In light of these factors, over this period we have evaluated the continued value of equipment and inventory and implemented restructuring and product development initiatives to reduce costs and streamline operations while continuing to pursue our new product pipeline and revenue growth. During 2016, the slowdown in demand from U.S. Navy resulted in a year-over-year decrease in military maritime sales of 67.7 percent from 2015 to 2016. As a result, we re-evaluated the economics of manufacturing components versus purchasing them for the manufacture of our military Intellitube® product and recorded an impairment loss at year-end for the related equipment and software, and in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"), we evaluated our 2016 year-end inventory quantities for excess levels and potential obsolescence and charged $3.3 million to cost of sales from continuing operations for excess and obsolete inventories.

The restructuring initiative implemented in the first quarter of 2017 included a new management team, an organizational consolidation of management functions and a hybrid sales model, combining our existing historical direct sales model with sales agencies to expand our market presence throughout the U.S. We closed our New York, New York, Arlington, Virginia and Rochester, Minnesota offices, reduced full-time equivalent headcount by 51 percent and significantly decreased operating expenses from 2016 levels (a net reduction of $8.4 million, which includes $1.8 million in offsetting restructuring and impairment charges). As of December 31, 2018, we expanded our sales coverage to the entire U.S. through six geographic regions and now have 50 sales agencies, each of which has, on average, 10 agents representing Energy Focus products. During 2017, we also implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down, as required by U.S. GAAP. This initiative resulted in a net reduction of our excess inventory reserves of $1.4 million in 2017.

In 2018, we made significant strides in expanding and diversifying our new product portfolio. We introduced six new product families, including our commercial fixture family, our double-ended ballast bypass T8 and T5 high-output TLEDs, our Navy retrofit kit, the Invisitube ultra-low EMI TLED and our dimmable industrial downlight. Our new products, including the RedCap emergency battery backup tube, introduced in Q4 2017, have gained traction, with sales of new products introduced in the past two years growing from less than one percent of total revenue in Q4 2017 to 17 percent in the fourth quarter of 2018, the highest new product revenue in the last two years. Our legacy luminaire product line, including our floods, waterline security lights, globes and berth lights, grew by over 90 percent from 2017 to 2018 and we saw some return of our military Intellitube® sales as we achieved more competitive pricing through our cost reductions.

Despite progress in these areas, our 2018 results reflect continued challenges due to long and unpredictable sales cycles, delays in customer retrofit budgets and project starts, continuing aggressive price competition and a lower priced legacy product portfolio that was not available until the end of 2018 and impacted the development timeline for our next generation smart

lighting products. The substantial doubt about our ability to continue as a going concern continued to exist as of December 31, 2018.

Over the past several months, we have evaluated and pursed, and we expect that we will continue to assess the Company’s strategic options, as we seek additional external funding sources and to achieve a profitable business model and maximize value for our stockholders. Our ongoing plans to achieve profitability include continuing to develop new technologies into sustainable product lines that allow us to effectively compete to expand our customer base, execute our marketing and sales plans, and continue to improve our supply chain and organizational structure.

At December 31, 2018, we had $6.3 million in cash and $2.2 million outstanding under the Credit Facility we entered into on December 11, 2018. On March 29, 2019, we received approximately $1.7 million in funding from the issuance of Convertible Notes (as discussed below). As a result, as of March 31, 2019, we estimate that our cash and cash equivalents were approximately $3.9 million and our outstanding balance was approximately $1.9 million under the Credit Facility. We continue to believe that the combination of our plans to obtain additional external funding, restructuring actions, current financial position, liquid resources, obligations due or anticipated within the next year, executive reorganization, and implementation of our product development and sales channel strategy, if adequately executed, will provide us with an ability to finance our operations through 2019 and will mitigate the substantial doubt about our ability to continue as a going concern.

Results of operations

The following table sets forth the percentage of net sales represented by certain items reflected on our Consolidated Statements of Operations for the following periods:

	2018	2017	2016
Net sales	100.0 %	100.0 %	100.0 %
Cost of sales	81.2	75.7	75.2
Gross profit	18.8	24.3	24.8
Operating expenses:			
Product development	14.3	14.8	11.4
Selling, general, and administrative	54.1	57.0	64.9
Loss on impairment	—	0.9	2.8
Restructuring	0.6	8.4	—
Total operating expenses	69.0	81.1	79.1
Loss from operations	(50.2)	(56.8)	(54.3)
Other expenses:			
Interest expense	—	—	—
Other expenses	—	0.4	—
Loss from continuing operations before income taxes	(50.2)	(57.3)	(54.3)
Provision for (Benefit from) income taxes	0.1	(0.5)	0.2
Net loss from continuing operations	(50.3)	(56.8)	(54.5)
Discontinued operations:			
Loss on sale of discontinued operations	—	—	—
Loss from discontinued operations before income taxes	—	—	—
Benefit from income taxes	—	—	—
Loss from discontinued operations	—	—	—
Net loss	(50.3)%	(56.8)%	(54.5)%

Net sales

A further breakdown of our net sales by product line is as follows (in thousands):

	2018	2017	2016
Commercial	$8,662	$15,217	$14,809
Military maritime	9,445	4,629	16,189
Total net sales	$18,107	$19,846	$30,998

While our net sales of $18.1 million in 2018 decreased 8.8 percent compared to 2017, our military maritime sales increased 104.0 percent in 2018 as compared to 2017, driven by higher sales of our military globe, flood light, fixture, and Intellitube® product lines. Net sales of our commercial products decreased 43.1 percent in 2018 as compared to 2017, reflecting fluctuations in the timing, pace, and size of commercial projects, including the implications of the long sales cycle in our industry, up to 18 months in many cases, contributing to a lengthy period of time between investment in expanded agency sales channels, development of a new pipeline of opportunities, and translation of a portion of those opportunities into revenues while facing significant price competition.

Net sales of $19.8 million in 2017 decreased 36.0 percent in comparison to $31.0 million in 2016, primarily due to a $11.6 million decrease in military maritime sales. Overall demand for our military maritime products increased in 2017 as compared to 2016, but our distributor for the U.S. Navy had the ability to satisfy much of that demand with product purchased in 2016 under an exclusive distribution agreement that ended on March 31, 2017. As a result, our 2017 military maritime sales decreased 71.4 percent as compared to 2016. Our commercial sales increased 2.8 percent in 2017 as compared to 2016, as we continued our efforts to diversify and expand our targeted vertical markets.

International sales

With the sale of our United Kingdom subsidiary CLL in 2015, we no longer generate significant sales from customers outside the United States. International net sales accounted for approximately two percent of net sales in 2018 and 2017, respectively, and approximately four percent of net sales in 2016. Changes in currency exchange rates did not have an impact on net sales in 2018, 2017, and 2016, as our sales, including international sales, are denominated in U.S. dollars.

Gross profit

Gross profit was $3.4 million in 2018, compared to $4.8 million in 2017. The decline in gross profit was principally driven by lower sales volumes year-over-year, reflecting fluctuations in the timing, pace and size of commercial projects. Our 2018 gross profit as a percent of net sales of 18.8 percent decreased from our 2017 gross profit as a percent of net sales of 24.3 percent. This decrease is attributable to higher unfavorable manufacturing variances and absorption in 2018 as compared to 2017, and the impact of selling large volumes of a low gross margin linear tube for military applications in the first quarter of 2018, prior to achieving cost reductions and improved margins on the product by the end of 2018. Additionally, the gross profit percentage in 2017 benefited from the reduction in our excess inventory reserves, as we implemented a strategic initiative to sell certain excess inventory in 2017 that had been written down in prior years.

Gross profit in 2017 decreased $2.9 million from the gross profit of $7.7 million in 2016. The year-over-year decline in gross profit was principally driven by lower sales volumes and changes in mix between our commercial and military maritime products, as sales of our commercial products represented 76.7 percent of total net sales in 2017 compared to 47.8 percent in 2016. Our 2017 gross profit as a percentage of net sales of 24.3 percent was comparable with our 2016 gross profit as a percent of net sales of 24.8 percent. As a result of our 2017 restructuring initiative and our efforts to improve operating efficiencies, we implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down in conjunction with our excess inventory reserve analysis in prior years, as required by U.S. GAAP. This initiative resulted in reduction of our excess inventory reserves of $1.4 million. Our 2016 gross margin was driven by product mix, as our commercial products, which had lower margins than our military maritime products, represented 47.8 percent of total net sales in 2016. The 2016 gross margin was negatively impacted by the recognition of a $3.3 million excess inventory reserve based on our year-end excess inventory reserve analysis.

Operating expenses

Product development

Product development expenses include salaries, including stock-based compensation and related benefits, contractor and consulting fees, legal fees, supplies and materials, as well as overhead items, such as depreciation and facilities costs. Product development costs are expensed as they are incurred. Cost recovery represents the combination of revenues and credits from government contracts.

Total gross and net product development spending, including credits from government contracts, is shown in the following table (in thousands):

	For the year ended December 31,		
	2018	2017	2016
Total gross product development expenses	$2,597	$2,940	$3,630
Cost recovery and other credits	—	—	(93)
Net product development expense	$2,597	$2,940	$3,537

Gross product development expenses were $2.6 million in 2018, a $0.3 million, or 11.7 percent, decrease compared to $2.9 million in 2017. The decrease primarily resulted from lower outside testing and legal fees of $0.4 million due to the timing of new product introductions. This decrease was partially offset by higher salaries and related benefits of $0.1 million due to staffing the San Jose Innovation Center. Gross 2017 product development expenses of $2.9 million decreased 19.0 percent compared to $3.6 million in 2016. The decrease primarily resulted from restructuring related operating cost reductions of $0.5 million, principally related to salaries, including stock-based compensation and related benefits of $0.3 million and reductions in outside testing and legal fees of approximately $0.2 million, as we focused our efforts on redefining our product road map in light of our restructuring initiative.

Selling, general, and administrative

Selling, general, and administrative expenses were $9.8 million, or 54.1 percent, of net sales in 2018, compared to $11.3 million, or 57.0 percent of net sales in 2017. Of the year-over-year $1.5 million decrease, approximately $0.9 million is a result of lower salaries, including stock-based compensation and related benefits, decreases of $0.2 million in each of the following categories: consulting fees, trade show and marketing expenses, and travel and related expenses, and decreases of $0.1 million each in rent expense and depreciation expense, as we continued our cost control initiatives. The lower expenses were partially offset by increased severance and benefits of $0.2 million, as a result of the Chief Financial Officer resignation.

Selling, general, and administrative expenses in 2017 decreased by $8.8 million, or 43.7 percent, from $20.1 million in 2016. Of the decrease, approximately $5.6 million is attributable to our restructuring initiative, resulting in reduced salaries, including stock-based compensation and related benefits of approximately $2.9 million, consulting fees of $1.1 million, recruiting and relocation expenses of $0.6 million, travel and related expenses of $0.5 million, and rent and related expenses of $0.5 million. Additionally, our operating cost control initiatives resulted in an additional $1.5 million in operating expense reductions, including decreased trade show and marketing expenses of $0.8 million and legal and professional fees of $0.6 million in 2017, as compared to 2016. Due to the overall lower sales volumes and the November 2016 termination of an outside sales representation agreement related to sales to the U.S. Navy, our 2017 sales commission expense decreased $1.0 million compared to 2016.

Loss on impairment

As a result of the decline in the level of expected future sales of our military maritime products and reductions in the cost of procuring components from our suppliers, during 2016 we re-evaluated the economics of manufacturing versus purchasing such components and determined that we would no longer use the equipment and software purchased to conduct this manufacturing. As of December 31, 2016, we evaluated the carrying value of the equipment and software compared to its fair value and determined that the equipment and software were impaired, recording an impairment loss of $0.9 million to adjust the carrying value of the equipment and software to its estimated net realizable value. Due to the specialized nature of this equipment we were not able to find a buyer for this equipment in 2017. As a result, we re-evaluated the carrying value of the

equipment and software compared to its fair value and recorded an additional impairment loss of $0.2 million as of December 31, 2017. We completed the sale of this equipment in the first quarter of 2018. Please refer to Note 6, “Property and Equipment,” included in Item 8 for further information.

Restructuring

In the first quarter of 2017, we announced a restructuring initiative with a goal of significantly reducing our annual operating costs from 2016 levels. This initiative included an organizational consolidation of management and oversight functions in order to streamline and better align the organization into more focused, efficient, and cost-effective reporting relationships.

The actions taken in the first quarter of 2017 included closing our offices in Rochester, Minnesota, New York, New York, and Arlington, Virginia and impacted 20 employees, primarily located in these offices. During the second quarter of 2017, we fully exited the New York and Arlington facilities and took additional actions to improve our operating efficiencies. These actions impacted an additional 17 production and administrative employees in our Solon location.

During 2017, we recorded restructuring charges totaling approximately $1.7 million consisting of approximately $0.8 million in severance and related benefits, approximately $0.7 million in facilities costs related to the termination of the Rochester lease obligations and the remaining lease obligations for the former New York and Arlington offices, and $0.2 million in other restructuring costs primarily related to fixed asset and prepaid expenses write-offs.

During 2018, we recorded restructuring charges totaling approximately $0.1 million, related to the revision of our initial estimates of the costs and offsetting sublease income and accretion expense for the remaining lease obligation for our former New York, New York and Arlington, Virginia offices.

As of December 31, 2018, we estimated that we would receive a total of approximately $0.7 million in sublease payments to offset our remaining lease obligations, which extend until June 2021, of approximately $1.1 million. We expect to incur insignificant additional costs over the remaining life of our lease obligations. Please refer to Note 3, “Restructuring,” included in Item 8 for further information.

Other expenses

Interest expense

We incurred $8 thousand in interest expense in 2018, primarily related to borrowings under the revolving credit facility we entered into on December 11, 2018. We incurred $2 thousand in interest expense in 2017 related to an insurance premium financing agreement. As a result of settling our long-term debt obligations during the fourth quarter of 2015, we incurred no interest expense for the year ended December 31, 2016.

Other expenses

We recognized other expenses of $7 thousand in 2018, compared to other expense of $99 thousand in 2017 and other income of $18 thousand in 2016. The expenses in 2018 primarily consisted of the non-cash amortization of fees related to the revolving credit facility we entered into on December 11, 2018, partially offset by a net gain on the sale and disposal of fixed assets. The expenses in 2017 and 2016 primarily consisted of losses on the disposal of fixed assets partially offset by interest income on our cash balances.

Income taxes

For the years ended December 31, 2018, 2017, and 2016, our effective tax rate was (0.1) percent, 1.0 percent, and (0.2) percent, respectively.

In 2018, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the $8.7 million additional federal net operating loss we recognized for the year. In 2017, our effective tax rate was lower than the statutory rate due to the remeasurement of our deferred tax assets resulting from the Tax Cuts and Jobs Act of 2017 (the "Act") and a decrease in the valuation allowance. In 2016, our effective tax rate was lower than the statutory tax rate due primarily due to an increase in the valuation allowance as a result of $10.6 million of additional net operating loss we recognized for that year.

On December 22, 2017, the Act was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35 percent to 21 percent effective for tax years beginning after December 31, 2017, repeal of the corporate Alternative Minimum Tax, elimination of certain deductions, and changes to the carryforward period and utilization of Net Operating Losses generated after December 31, 2017. We have calculated the impact of the Act in our year end income tax provision in accordance with our understanding of the Act and guidance available as of the date of this filing. As a result of the Act, we have recorded $0.1 million as additional income tax benefit in the fourth quarter of 2017, the period in which the legislation was enacted. This amount related to the release of the valuation allowance on our Alternative Minimum Tax Credit carry forward, which is expected to be fully refunded by 2021. We remeasured our deferred tax assets and liabilities, based on the rates at which they are expected to reverse in the future. The impact of the remeasurement was $5.9 million of additional tax expense, which was offset by a $5.9 million valuation allowance reduction resulting in no net impact to the financial statements. The U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies could interpret or issue guidance on how provisions of the Act will be applied or otherwise administered that is different from our interpretation. We may make adjustments to amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are made.

Deferred income tax assets are reduced by a valuation allowance when it is more likely than not that some portion of the deferred income tax assets will not be realized. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We have recorded a full valuation allowance against our deferred tax assets at December 31, 2018 and 2017, respectively. We had no net deferred liabilities at December 31, 2018 or 2017. We will continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2018, we had net operating loss carry-forwards of approximately $100.5 million for federal, state, and local income tax purposes. However, due to changes in our capital structure, approximately $46.0 million of this amount is available after the application of IRC Section 382 limitations. As a result of the Act, net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80 percent of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The $8.7 million in net operating losses generated in 2018 will be subject to the new limitations under the Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of $37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Please refer to Note 12, "Income Taxes," included in Item 8 for further information.

Net loss from continuing operations

Despite an $1.7 million, or 8.8 percent, decline in net sales, our net loss from continuing operations improved to $9.1 million in 2018 compared to $11.3 million in 2017. The improvement in our loss from continuing operations is primarily due to our continued cost control initiatives, resulting in an additional net decrease in operating expenses of $3.6 million, partially offset by the lower gross margins as discussed above. Net loss from continuing operations was $11.3 million in 2017, a decrease of $5.6 million compared to a net loss of $16.9 million in 2016. The improvement in our loss from continuing operations in 2017 as compared to 2016 is the directly attributable to our restructuring initiatives, which resulted in an $8.4 million year-over-year operating expense reduction, including $1.8 million in restructuring and asset impairment charges. Lower net sales, changes in product mix and investments in corporate infrastructure, charges recorded for excess inventory and the asset impairment on certain manufacturing equipment contributed to the difference in operating results.

Discontinued operations

In November 2013, we sold our pool products business. In February 2015, the buyer filed an arbitration claim asserting damages under the Purchase Agreement relating to product development and on March 18, 2016, a settlement agreement was executed for this claim. The legal fees incurred for the arbitration are included in the loss on sale of discontinued operations for 2016. See Note 4, “Discontinued Operations” and Note 15, “Legal Matters,” included in Item 8 of this Annual Report for more information on this claim.

Net loss

Net loss includes the results from continuing operations as well as the results from discontinued operations. Net loss was $9.1 million in 2018, a decrease of $2.2 million compared to a net loss of $11.3 million in 2017, as a result of the reasons discussed above. Net loss $11.3 million in 2017 represented a decrease of $5.6 million compared to a net loss of $16.9 million in 2016, as a result of the reasons discussed above.

Liquidity and capital resources

We generated a net loss of $9.1 million in 2018, compared to net loss of $11.3 million in 2017. We have incurred substantial losses in the past, and as of December 31, 2018, we had an accumulated deficit of $117.3 million.

The restructuring actions taken in 2017 resulted in a net decrease in operating expenses of $8.4 million, including restructuring and asset impairment charges of $1.8 million in 2017 and impairment charges of $0.2 million in 2016. In 2018, our continued cost control initiatives resulted in an additional decrease in operating expenses of $3.6 million, including restructuring charges of $0.1 million. As a result of these actions and initiatives, we have reduced our operating expenses to be more commensurate with our sales volumes, however, we continue to incur losses and have a substantial accumulated deficit, raising substantial doubt about our ability to continue as a going concern at December 31, 2018. Considering both quantitative and qualitative information, we continue to believe that the combination of our plans to obtain additional external financing, restructuring actions, current financial position, liquid resources, obligations due or anticipated within the next year, executive reorganization, and implementation of our product development and sales channel strategy, if adequately executed, will provide us with an ability to finance our operations through 2019 and will mitigate the substantial doubt about our ability to continue as a going concern.

In order for us to operate our business profitably, we need to grow our sales, maintain cost control discipline while balancing development of our new product pipeline and potential long-term revenue growth, continue our efforts to reduce product cost, drive further operating efficiencies and develop and execute a strategic product pipeline for profitable and compelling energy-efficient LED lighting products. There is a risk that our strategy to return to profitability may not be as successful as we envision. We require additional financing in the near-term and, if our operations do not achieve, or we experience an unanticipated delay in achieving, our intended level and pace of profitability, we will continue to need additional funding, none of which may be available on favorable terms or at all and could require us to discontinue or curtail our operations.

In 2015, we raised approximately $23.6 million from a common stock offering and on March 29, 2019, we raised approximately $1.7 million from the issuance of subordinated convertible promissory notes to certain investors (the “Convertible Notes”). The Convertible Notes will automatically convert into shares of our Series A Convertible Preferred Stock (the “Series A Preferred Stock”) on April 17, 2019 to the extent permitted without receiving stockholder approval under the equity issuance rules of the NASDAQ Capital Market (the “NASDAQ Cap”) and to the extent sufficient shares of Series A Preferred Stock are authorized under our certificate of incorporation (the “Charter”), based on a conversion price equal to the greater of (a) the volume-weighted average price of our common stock measured over the ten trading day period ending on April 16, 2019 or (b) $0.20 (the “Conversion Rate”). If the Notes cannot fully convert on April 17, 2019 due to the NASDAQ Cap, then no portion of the Notes will convert into Series A Preferred Stock until our stockholders have approved the transaction in accordance with the Nasdaq rules. If the Series A Preferred Stock can be issued under the NASDAQ Cap, but insufficient shares are available under the Charter, then the Convertible Notes will convert in part to the extent of the authorized shares and the remainder will convert upon approval by our stockholders of an amendment to the Charter to increase the authorized number of shares. The Convertible Notes mature on December 31, 2021 and bear interest at a rate of five percent per annum until June 30, 2019 and at a rate of ten percent thereafter.

The Series A Preferred Stock was created by the filing of a Certificate of Designation with the Secretary of State of the state of Delaware for 2,000,000 authorized shares. The Series A Preferred Stock (a) has one vote per share (voting together with holders of our common stock as a single class, except as provided by law), (b) has a preference upon liquidation equal to the Conversion Rate per share and then participates on an as-converted basis with the common stock with respect to any additional distributions, (c) shall receive any dividends declared and payable on the common stock on an as-converted basis, and (d) is convertible at the option of the holder into shares of common stock on a one-for-one basis. We also filed a Certificate of Elimination with respect to its authorized, but unissued, Series A

Participating Preferred Stock, to return such shares to the status of preferred stock available for designation as the Series A Preferred Stock.

The purchase agreement related to the Convertible Notes contains customary representations and warranties and provides for resale registration rights with respect to the shares of our common stock issuable upon conversion of the Series A Preferred Stock, as well as for the resignation of four members of the Board of Directors.

Two of the Investors, James Tu (through Fusion Park LLC) and Brilliant Start Enterprise, Inc., which invested $580 thousand and $500 thousand, respectively, were among the parties to the Schedule 13D filed with the Securities and Exchange Commission ("SEC") on November 30, 2018, as amended on February 26, 2019, reporting that the filing group (the "13D Group") held a collective 17.6 percent ownership position in the Company. On February 21, 2019, the 13D Group entered into a settlement with the Company providing for the appointment of two directors and their nomination for election at the Company's 2019 annual meeting of stockholders. Mr. Tu was appointed as a director in connection with the offering and is

expected to be appointed as Chairman, Chief Executive Officer and President and will serve as interim Chief Financial Officer effective April 2, 2019. The Company is expected to conduct a search for a permanent or alternative interim Chief Financial Officer candidate.

On December 11, 2018, we entered into a $5.0 million revolving line of credit (“Credit Facility”) with Austin Financial Services (“Austin”) as described further below. As of December 31, 2018, we had cash and cash equivalents of approximately $6.3 million and had a balance of $2.2 million under the Credit Facility. As of March 31, 2019, we estimate that our cash and cash equivalents were approximately $3.9 million and our outstanding balance was approximately $1.9 million under the Credit Facility.

The remaining proceeds from the offering and the Convertible Notes will only continue to provide funding for the near-term and our ability to draw on the Credit Facility is limited based on the amount of qualified accounts receivable, plus a portion of the net realizable value of our eligible inventory. The repayment of outstanding advances and interest under the Credit Facility may be accelerated upon an event of default including, but not limited to, failure to make timely payments or breach of any terms set forth in the loan agreement. The Credit Facility is secured by our assets and is subject to customary affirmative and negative operating covenants and defaults requiring us to maintain a minimum cash balance and restricting indebtedness, liens, corporate transactions, dividends, and affiliate transactions, among others. The lender has the ability to terminate the Credit Facility with 90-days’ notice.

Even with the Credit Facility, we may not generate sufficient cash flows from our operations, or be able to borrow sufficient funds under the Credit Facility to sustain our operations. As such, we expect to need additional external financing during 2019 and will continue to review and pursue selected external funding sources including, but not limited to, the following:

- obtaining financing from traditional or non-traditional investment capital organizations or individuals; and
- obtaining funding from the sale of our common stock or other equity or debt instruments.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional financing contains risks, including:

- additional equity financing may not be available to us on satisfactory terms and any equity we are able to issue could lead to dilution for current stockholders and have rights, preferences and privileges senior to our common stock;
- loans or other debt instruments may have terms and/or conditions, such as interest rate, restrictive covenants and control or revocation provisions, which are not acceptable to management or our Board of Directors; and
- the current environment in capital markets combined with our capital constraints may prevent us from being able to obtain adequate debt financing.

If we fail to obtain required additional financing to sustain our business before we are able to produce levels of revenue to meet our financial needs, we will need to delay, scale back or eliminate our business plan and further reduce our operating costs and headcount, each of which would have a material adverse effect on our business, future prospects, and financial condition. A lack of additional financing could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtain our operations and, as a result, investors in the Company could lose their entire investment.

Cash and cash equivalents and debt

At December 31, 2018, our cash and cash equivalents balance was $6.3 million, compared to $10.8 million at December 31, 2017. The balances at December 31, 2018 and 2017 included restricted cash of $0.3 million, which represents a letter of credit requirement under our New York office lease obligation.

The following is a summary of cash flows from operating, investing, and financing activities, as reflected in the Consolidated Statements of Cash Flows (in thousands):

	2018	2017	2016
Net cash used in operating activities	$(6,795)	$(5,874)	$(16,553)
Net cash provided by (used in) investing activities	$189	$(65)	$(1,597)
Proceeds from exercise of stock options and purchases through employee stock purchase plan	28	130	455
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(62)	(49)	(309)
Net proceeds from credit line borrowings	2,219	—	—
Net cash provided by financing activities	$2,185	$81	$146

Cash used in operating activities

Net cash used in operating activities of $6.8 million in 2018 resulted primarily from the net loss incurred of $9.1 million, adjusted for non-cash items, including: depreciation and amortization of $0.5 million and stock-based compensation, net of $0.9 million. Cash generated by a decrease in accounts receivable of $1.4 million and increases in accounts payable for inventory purchases and accrued expenses primarily for severance of $2.0 million and $0.2 million, respectively, further offset the cash impact of the net loss incurred. The cash generated by these working capital changes was partially offset by cash used for increases in inventories of $2.4 million, as we purchased inventory for anticipated demand and new product introductions, and prepaid expenses of $0.5 million, primarily for deposit advances made for future inventory purchases.

Net cash used in operating activities in 2017 of $5.9 million resulted primarily from the net loss incurred of $11.3 million, adjusted for non-cash items, including: depreciation and amortization of $0.7 million, stock-based compensation, net of $0.5 million, and fixed asset impairment and disposal losses of $0.4 million. Cash generated by decreases in inventory and accounts receivable of $5.2 million and $2.2 million, respectively, further offset the cash impact of the net loss incurred. The cash generated by these working capital changes was partially offset by cash used for decreases in trade accounts payable of $1.8 million, primarily related to the timing of inventory purchases and decreased accrued expenses of $0.6 million, primarily related to lower severance, sales commissions, product warranty, and payroll accruals.

Net cash used in operating activities in 2016 of $16.6 million resulted from the net loss incurred of $16.9 million, adjusted for non-cash items, including: an adjustment to the reserves for slow-moving and obsolete inventories of $3.3 million, stock-based compensation of $1.4 million, fixed asset impairment and disposal losses of $0.9 million, and depreciation and amortization of $0.8 million. Net cash used in operating activities in 2016 also included an increase in inventories of $5.0 million, and decreases in trade accounts payable of $4.0 million, primarily related to the timing of inventory purchases and accrued expenses of $1.4 million, primarily related to the payment of 2015 sales commissions and incentives that were paid in 2016. The cash used by these working capital changes was partially offset by cash generated by a decrease in accounts receivable of $4.3 million.

Cash provided by (used in) investing activities

Net cash provided by investing activities was $0.2 million in 2018 and resulted primarily from the proceeds we received from the sale of certain equipment previously classified as held for sale, partially offset by purchases of computer equipment, equipment to support production operations, and leasehold improvements. We do not expect significant capital expenditures in 2019.

Net cash used in investing activities was $0.1 million in 2017, and resulted primarily from the purchase of software and equipment to support our website and marketing efforts, partially offset by proceeds received from the sale of certain computer equipment and reimbursements from our landlord for certain leasehold improvements.

In 2016, net cash used in investing activities of $1.6 million resulted from the acquisition and disposal of various office and operating fixed assets implementation of new modules and capabilities for our previously purchased surface mount technology equipment and our licensed enterprise resource planning (ERP) system, as well as the purchase of tradeshow booths to support our sales and marketing initiatives.

Cash provided by financing activities

Net cash provided by financing activities for the year ended December 31, 2018 of $2.2 million primarily resulted from the proceeds we received on borrowings under our revolving credit facility, which is described below.

Net cash provided by financing activities for the years ended December 31, 2017 and 2016 of $0.1 million resulted from activity related to the Company's equity award and employee stock purchase plans.

Credit facilities

On December 11, 2018, we entered into a three-year $5.0 million Credit Facility with Austin. The total loan amount available to us under the Credit Facility from time to time is based on the amount of our (i) qualified accounts receivable, which is equal to 85 percent of our net eligible receivables, plus (ii) available inventory, which is the lesser of 50 percent of the net realizable value of eligible inventory, or $500 thousand. The Credit Facility has a minimum borrowing requirement of $1.0 million.

The Credit Facility is secured by a lien on our assets. Interest on advances under the line is due monthly at the "Prime Rate," as published by the Wall Street Journal from time to time, plus a margin of 2 percent. The borrowing rate as of December 31, 2018 was 7.75 percent. Overdrafts are subject to a 2 percent fee. Additionally, an annual facility fee of 1 percent on the entire $5.0 million amount of the Credit Facility is due at the beginning of each of the three years and a 0.50 percent collateral management fee on the average outstanding loan balance is payable monthly. We paid Austin the first year's fee when the Credit Facility was signed.

The repayment of outstanding advances and interest under the Credit Facility may be accelerated upon an event of default including, but not limited to, failure to make timely payments or breach of any terms set forth in the Credit Facility. The Credit Facility has no financial covenants, but is subject to customary affirmative and negative operating covenants and defaults, requiring a minimum cash balance of $1.0 million and restricting indebtedness, liens, corporate transactions, dividends, and affiliate transactions, among others. The Credit Facility may be terminated by us or by Austin with 90 days written notice. We have not provided such notice to Austin or received such notice from Austin. There are liquidated damages if the Credit Facility is terminated prior to December 10, 2021, as follows: 3 percent in the first year, 2 percent in the second year, and 1 percent in the third year.

Borrowings under the revolving line of credit were $2.2 million at December 31, 2018 and are recorded in the Consolidated Balance Sheets as a current liability under the caption, "Credit line borrowings." At December 31, 2018, we had borrowed the maximum available for us to borrow under this line of credit. Please refer to Note 9, "Debt," included in Item 8 for further information.

Contractual obligations

The following summarizes our contractual obligations as of December 31, 2018 (in thousands):

	Obligations Due				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years
Operating leases (1)	$3,297	$1,177	$2,104	$ 15	$ 1

Capital leases (2)	11	4	7	—	—
Purchase obligations (3)	2,776	2,776	—	—	—
Total contractual obligations	$6,084	$3,957	$2,111	$ 15	$ 1

(1) Operating lease obligations are presented net of contractually binding sublease arrangements. Operating lease obligations include the present value of restructuring liabilities, net of contractually binding sublease payments, totaling $350 thousand for our former New York, New York and Arlington, Virginia offices. Of this amount, $156 thousand is due in less than one year and $194 thousand is due in one to three years. For additional information regarding our restructuring liabilities and our operating leases, please refer to Note 3, “Restructuring” and Note 10, “Commitments and Contingencies” included in Item 8.

(2) Represents the minimum lease payments due for equipment under capital leases, including $1 thousand in interest costs. For additional information regarding our capital leases, please refer to Note 10, “Commitments and Contingencies” included in Item 8.
(3) Represents commitments under purchase orders with suppliers for inventory purchases.

Off-balance sheet arrangements

We had no off-balance sheet arrangements at December 31, 2018 or 2017.
Critical accounting policies and estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”) requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingencies, and the reported amounts of net sales and expenses in the financial statements. Material differences may result in the amount and timing of net sales and expenses if different judgments or different estimates were utilized. Critical accounting policies, judgments, and estimates that we believe have the most significant impact on our financial statements are set forth below:

- revenue recognition,
- allowances for doubtful accounts, returns and discounts,
- impairment of long-lived assets,
- valuation of inventories,
- accounting for income taxes, and
- share-based compensation.

Revenue recognition

On January 1, 2018, we adopted Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (Topic 606), as amended by subsequently issued additional guidance (together, “ASC 606”) using the modified retrospective method. The adoption of ASC 606 did not have a material impact on our consolidated financial position or results of operations, as our revenue arrangements generally consist of a single performance obligation to transfer promised goods at a fixed price.

Net sales include revenues from sales of products and shipping and handling charges, net of estimates for product returns. Revenue is measured at the amount of consideration we expect to receive in exchange for the transferred products. We recognize revenue at the point in time when we transfer the promised products to the customer and the customer obtains control over the products. Distributors’ obligations to us are not contingent upon the resale of our products. We recognize revenue for shipping and handling charges at the time the goods are shipped to the customer, and the costs of outbound freight are included in cost of sales, as we have elected the practical expedient included in ASC 606. We provide for product returns based on historical return rates. While we incur costs for sales commissions to our sales employees and outside agents, we recognize commission costs concurrent with the related revenue, as the amortization period is less than one year and we have elected the practical expedient included in ASC 606. We do not incur any other incremental costs to obtain contracts with our customers. Our product warranties are assurance-type warranties, which promise the customer that the products are as specified in the contract. therefore, the product warranties are not a separate performance obligation and are accounted for as described below. Sales taxes assessed by governmental authorities are accounted for on a net basis and are excluded from net sales.

A disaggregation of product net sales is presented in Note 13, “Product and Geographic Information.”

Accounts Receivable

Our trade accounts receivable consists of amounts billed to and currently due from customers. Credit is extended to customers based on an evaluation of the customer's financial condition and the amounts due are stated at their estimated net realizable value. We maintain an allowance for doubtful accounts receivable to provide for the estimated amount of receivables that will not be collected. The allowance is based on an assessment of customer creditworthiness and historical payment experience, the age of outstanding receivables, and performance guarantees to the extent applicable. Past due amounts are written off when our internal collection efforts have been unsuccessful. Our standard payment terms with customers are net 30 days, and we do not generally offer extended payment terms to our customers, but exceptions are made in some cases to major customers or with

particular orders. Accordingly, we do not adjust trade accounts receivable for the effects of financing, as we expect the period between the transfer of product to the customer and the receipt of payment from the customer to be in line with our standard payment terms.

Allowances for doubtful accounts, returns, and discounts

We establish allowances for doubtful accounts and returns for probable losses based on the customers' loss history with us, the financial condition of the customer, the condition of the general economy and the industry as a whole, and the contractual terms established with the customer. The specific components are as follows:

- Allowance for doubtful accounts for accounts receivable, and
- Allowance for sales returns and discounts.

In 2018 and 2017, the total allowance was $33 thousand and $42 thousand, respectively which was all related to sales returns. We review these allowance accounts periodically and adjust them accordingly for current conditions.

Long-lived assets

Property and equipment are stated at cost and include expenditures for additions and major improvements. Expenditures for repairs and maintenance are charged to operations as incurred. We use the straight-line method of depreciation over the estimated useful lives of the related assets (generally two to fifteen years) for financial reporting purposes. Accelerated methods of depreciation are used for federal income tax purposes. When assets are sold or otherwise disposed of, the cost and accumulated depreciation are removed from the accounts and any gain or loss is reflected in the Consolidated Statement of Operations. Refer to Note 6, "Property and Equipment," included in Item 8 for additional information.

Long-lived assets are reviewed for impairment whenever events or circumstances indicate the carrying amount may not be recoverable. Events or circumstances that would result in an impairment review primarily include operations reporting losses, a significant change in the use of an asset, or the planned disposal or sale of the asset. The asset would be considered impaired when the future net undiscounted cash flows generated by the asset are less than its carrying value. An impairment loss would be recognized based on the amount by which the carrying value of the asset exceeds its fair value, as determined by quoted market prices (if available) or the present value of expected future cash flows. At December 31, 2017 and 2016 we recorded a loss on the impairment of our surface mount technology equipment and software of $0.2 million and $0.9 million, respectively. Refer to Note 6, "Property and Equipment," included in Item 8 for additional information.

Valuation of inventories

We state inventories at the lower of standard cost (which approximates actual cost determined using the first-in-first-out method) or net realizable value. We establish provisions for excess and obsolete inventories after evaluation of historical sales, current economic trends, forecasted sales, product lifecycles, and current inventory levels. During 2017, we implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down in conjunction with our excess inventory reserve analysis in prior years, as required by U.S. GAAP. This initiative resulted in a net reduction of our excess inventory reserves of $1.4 million in 2017. During 2018 and 2016, due to the introduction of new products and technological advancements, we charged $17 thousand and $3.3 million, respectively, to cost of sales from continuing operations for excess and obsolete inventories. Adjustments to our estimates, such as forecasted sales and expected product lifecycles, could harm our operating results and financial position. Refer to Note 5, "Inventories," included in Item 8 for additional information.

Accounting for income taxes

As part of the process of preparing the Consolidated Financial Statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense together with assessing temporary differences resulting from differing treatment of items, such as deferred revenues, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in our Consolidated Balance Sheets. We then assess the likelihood of the deferred tax assets being recovered from future taxable income and, to the extent we believe it is more likely than not that the deferred tax assets will not be recovered, or is unknown, we establish a valuation allowance.
Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against our deferred tax assets. At December 31, 2018 and 2017, we have recorded a full

valuation allowance against our deferred tax assets in the United States due to uncertainties related to our ability to utilize our deferred tax assets, primarily consisting of certain net operating losses carried forward. The valuation allowance is based upon our estimates of taxable income by jurisdiction and the period over which our deferred tax assets will be recoverable. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2018, we had net operating loss carry-forwards of approximately $100.5 million for federal, state, and local income tax purposes. However, due to changes in our capital structure, approximately $46.0 million of this amount is available after the application of IRC Section 382 limitations. As a result of the Act, net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80 percent of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The $8.7 million in net operating losses generated in 2018 will be subject to the new limitations under the Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of $37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Please refer to Note 12, “Income Taxes,” included in Item 8 for further information.

Share-based payments

The cost of employee and director stock options and restricted stock units, as well as other share-based compensation arrangements, is reflected in the Consolidated Financial Statements based on the estimated grant date fair value method under the authoritative guidance. Management applies the Black-Scholes option pricing model to options issued to employees and directors to determine the fair value of stock options and apply judgment in estimating key assumptions that are important elements of the model in expense recognition. These elements include the expected life of the option, the expected stock-price volatility, and expected forfeiture rates. The assumptions used in calculating the fair value of share-based awards under Black-Scholes represent our best estimates, but these estimates involve inherent uncertainties and the application of management judgment. Although we believe the assumptions and estimates we have made are reasonable and appropriate, changes in assumptions could materially impact our reported financial results. Restricted stock units and stock options issued to non-employees are valued based upon the intrinsic value of the award. See Note 10, “Stockholders’ Equity,” included in Item 8 for additional information.

Recently issued accounting pronouncements

In August 2018, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2018-15, Intangibles--Goodwill and Other--Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which aligns the requirements for capitalizing implementation costs in a cloud computing service contract with the requirements for capitalizing implementation costs incurred for an internal-use software license. This standard will be effective for interim and annual periods beginning after December 15, 2019. We do not expect the adoption of this guidance to have a significant impact on our financial position, results of operations, or cash flows.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which significantly changes the accounting for credit losses on instruments within its scope. The new guidance introduces an approach based on expected losses to estimate credit losses on certain financial instruments, including trade receivables, and requires an entity to recognize an allowance based on its estimate of expected credit losses rather than incurred losses. This standard will be effective for interim and annual

periods beginning after December 15, 2019, and will generally require adoption on a modified retrospective basis. We are in the process of evaluating the impact of the standard.

In February 2016, the FASB issued ASU No. 2016-02, Leases, which supersedes the current lease accounting requirements. This standard requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. In addition, this standard requires lessees to disclose certain key information about lease transactions. Upon implementation, a company's lease payment obligations will be recognized at their estimated present value along with a corresponding right-of-use asset. Lease expense recognition will be generally consistent with current practice. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements, which simplifies adoption of the new lease accounting requirements by allowing an additional transition method that will not require restatement of prior periods and providing a new practical expedient for lessors to avoid separating lease and non-lease components within a contract if certain requirements are met. The provisions of this guidance must be elected upon adoption of the new lease accounting requirements, which will be effective for interim and annual periods beginning after December 15, 2018.

We will adopt the standard as required on January 1, 2019 and use that date as our date of initial application of the guidance. Consequently, we will not update previously reported financial information and the disclosures under the new standard will not be provided for dates and periods prior to January 1, 2019. We will elect all of the practical expedients available under the transition guidance. The new standard also provides practical expedients for ongoing accounting. We will elect the short-term lease recognition exemption for all leases that qualify. This means we will not recognize right of use assets or lease liabilities for those leases. We will also elect the practical expedient to not separate lease and non-lease components for all of our leases.

We expect that this standard will have a material impact on our financial statements. While we continue to assess all of the effects of adoption, we currently believe the most significant effects relate to the recognition of new right of use assets and lease liabilities on our balance sheet for our real estate and equipment operating leases, and the significant new required disclosures regarding our leasing activities. We do not expect a significant change in our leasing activities between now and adoption.

On adoption, we expect to recognize additional operating lease liabilities of approximately $2.2 million, with corresponding right of use assets for the same amount based on the present value of the remaining minimum rental payments under current leasing standards for existing operating leases.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

TABLE OF CONTENTS

	Page
Report of Independent Registered Public Accounting Firm	40
Consolidated Balance Sheets as of December 31, 2018 and 2017	41
Consolidated Statements of Operations for the years ended December 31, 2018, 2017, and 2016	42
Consolidated Statements of Comprehensive Loss for the years ended December 31, 2018, 2017, and 2016	43
Consolidated Statements of Stockholders’ Equity for the years ended December 31, 2018, 2017, and 2016	44
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017, and 2016	45
Notes to Consolidated Financial Statements	47

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Energy Focus, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Energy Focus, Inc. and subsidiary (collectively the “Company”) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and schedule appearing under Schedule II (collectively referred to as the “financial statements”). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Continuation as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the consolidated financial statements, the Company has suffered recurring losses from operations 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 3. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting 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.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company’s auditor since 2009.

/s/ Plante & Moran, PLLC

Cleveland, Ohio
April 1, 2019

40

ENERGY FOCUS, INC.
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31,
(amounts in thousands except share data)

	2018	2017
ASSETS		
Current assets:		
Cash and cash equivalents	$6,335	$10,761
Trade accounts receivable, less allowances of $33 and $42, respectively	2,201	3,595
Inventories, net	8,058	5,718
Prepaid and other current assets	1,094	596
Assets held for sale	—	225
Total current assets	17,688	20,895
Property and equipment, net	610	1,097
Other assets	194	159
Total assets	$18,492	$22,151
LIABILITIES		
Current liabilities:		
Accounts payable	$3,606	$1,630
Accrued liabilities	1,385	992
Deferred revenue	30	5
Credit line borrowings	2,219	—
Total current liabilities	7,240	2,627
Other liabilities	200	232
Total liabilities	7,440	2,859
STOCKHOLDERS' EQUITY		
Preferred stock, par value $0.0001 per share:		
Authorized: 2,000,000 shares in 2018 and 2017		
Issued and outstanding: no shares in 2018 and 2017	—	—
Common stock, par value $0.0001 per share:		
Authorized: 30,000,000 shares in 2018 and 2017		
Issued and outstanding: 12,090,695 at December 31, 2018 and 11,868,896 at December 31, 2017	1	1
Additional paid-in capital	128,367	127,493
Accumulated other comprehensive (loss) income	(1)	2
Accumulated deficit	(117,315)	(108,204)
Total stockholders' equity	11,052	19,292
Total liabilities and stockholders' equity	$18,492	$22,151

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

41

ENERGY FOCUS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31,
(amounts in thousands except per share data)

	2018	2017	2016
Net sales	$18,107	$19,846	$30,998
Cost of sales	14,695	15,025	23,321
Gross profit	3,412	4,821	7,677
Operating expenses:			
Product development	2,597	2,940	3,537
Selling, general, and administrative	9,789	11,315	20,113
Loss on impairment	—	185	857
Restructuring	111	1,662	—
Total operating expenses	12,497	16,102	24,507
Loss from operations	(9,085)	(11,281)	(16,830)
Other expenses:			
Interest expense	8	2	—
Other expenses	7	99	18
Loss from continuing operations before income taxes	(9,100)	(11,382)	(16,848)
Provision for (Benefit from) income taxes	11	(115)	27
Net loss from continuing operations	$(9,111)	$(11,267)	$(16,875)
Discontinued operations:			
Loss on sale of discontinued operations	—	—	(12)
Loss from discontinued operations before income taxes	—	—	(12)
Benefit from income taxes	—	—	—
Loss from discontinued operations	$—	$—	$(12)
Net loss	$(9,111)	$(11,267)	$(16,887)
Net loss per share - basic and diluted:			
Net loss from continuing operations	$(0.76)	$(0.95)	$(1.45)
Net loss from discontinued operations	—	—	—
Net loss	$(0.76)	$(0.95)	$(1.45)
Weighted average common shares outstanding:			
Basic and diluted	11,997	11,806	11,673

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

ENERGY FOCUS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31,
(amounts in thousands)

	2018	2017	2016
Net loss	$(9,111)	$(11,267)	$(16,887)
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(3)	3	(1)
Comprehensive loss	$(9,114)	$(11,264)	$(16,888)

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

43

ENERGY FOCUS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018, 2017, AND 2016
(amounts in thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total
	Shares	Amount				
Balance at December 31, 2015	11,649	$ 1	$125,369	$ —	$(80,050)	$45,320
Issuance of common stock under employee stock option and stock purchase plans	113		$455			$455
Common stock withheld to satisfy exercise price and income tax withholding on option exercises	(51)		$(309)			$(309)
Stock-based compensation			$1,360			$1,360
Foreign currency translation adjustment				$ (1)		$(1)
Net loss					$(16,887)	$(16,887)
Balance at December 31, 2016	11,711	$ 1	$126,875	$ (1)	$(96,937)	$29,938
Issuance of common stock under employee stock option and stock purchase plans	173		$130			$130
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(15)		$(49)			$(49)
Stock-based compensation			$807			$807
Stock-based compensation reversal			$(270)			$(270)
Foreign currency translation adjustment				$ 3		$3
Net loss					$(11,267)	$(11,267)
Balance at December 31, 2017	11,869	$ 1	$127,493	$ 2	$(108,204)	$19,292
Issuance of common stock under employee stock option and stock purchase plans	249		$28			$28
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(27)		$(62)			$(62)
Stock-based compensation			$908			$908
Foreign currency translation adjustment				$ (3)		$(3)
Net loss					$(9,111)	$(9,111)
Balance at December 31, 2018	12,091	$ 1	$128,367	$ (1)	$(117,315)	$11,052

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

ENERGY FOCUS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31,
(amounts in thousands)

	2018	2017	2016
Cash flows from operating activities:			
Net loss	$(9,111)	$(11,267)	$(16,887)
Loss from discontinued operations	$—	$—	$(12)
Loss from continuing operations	$(9,111)	$(11,267)	$(16,875)
Adjustments to reconcile net loss to net cash from operating activities:			
Loss on impairment	—	185	857
Depreciation	522	681	805
Stock-based compensation	908	807	1,360
Stock-based compensation reversal	—	(270)	—
Provision for doubtful accounts receivable	(9)	(194)	156
Provision for slow-moving and obsolete inventories	17	(1,400)	3,281
Provision for warranties	51	196	170
Amortization of loan origination fees	4	—	—
Loss on dispositions of property and equipment	2	203	38
Change in operating assets and liabilities:			
Accounts receivable	1,403	2,240	4,313
Inventories	(2,356)	5,151	(5,018)
Prepaid and other assets	(538)	161	(123)
Accounts payable	2,047	(1,759)	(4,035)
Accrued and other liabilities	240	(613)	(1,389)
Deferred revenue	25	5	(93)
Total adjustments	2,316	5,393	322
Net cash used in operating activities	(6,795)	(5,874)	(16,553)
Cash flows from investing activities:			
Acquisitions of property and equipment	(57)	(162)	(1,624)
Proceeds from the sale of property and equipment	246	97	27
Net cash provided by (used in) investing activities	189	(65)	(1,597)
Cash flows from financing activities:			
Proceeds from exercise of stock options and purchases through employee stock purchase plan	28	130	455
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(62)	(49)	—
Common stock withheld to satisfy exercise price and income tax withholding on option exercises	—	—	(309)
Net proceeds from credit line borrowings	2,219	—	—
Net cash provided by financing activities	2,185	81	146
Effect of exchange rate changes on cash and cash equivalents	(5)	(10)	5
Net cash used in continuing operations	(4,426)	(5,868)	(17,999)

(continued on the following page)

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

ENERGY FOCUS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEARS ENDED DECEMBER 31,
(amounts in thousands)

	2018	2017	2016
Cash flows of discontinued operations:			
Operating cash flows, net	—	—	(12)
Net cash used in discontinued operations	—	—	(12)
Net decrease in cash and cash equivalents	(4,426)	(5,868)	(18,011)
Cash and cash equivalents, beginning of year	10,761	16,629	34,640
Cash and cash equivalents, end of year	$6,335	$10,761	$16,629
Classification of cash and cash equivalents:			
Cash and cash equivalents	$5,993	$10,419	$16,287
Restricted cash held	342	342	342
Cash and cash equivalents, end of year	$6,335	$10,761	$16,629
Supplemental information:			
Cash paid in year for interest	$4	$2	$5
Cash paid in year for income taxes	$7	$14	$51

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

46

ENERGY FOCUS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. NATURE OF OPERATIONS

Energy Focus, Inc. and its subsidiary engage in the design, development, manufacturing, marketing, and sale of energy-efficient lighting systems. We operate in a single industry segment, developing and selling our energy-efficient light-emitting diode (“LED”) lighting products into the general commercial, industrial and military maritime markets. Our goal is to become a trusted leader in the LED lighting retrofit market by replacing fluorescent lamps in institutional buildings and high-intensity discharge (“HID”) lighting in low-bay and high-bay applications with our innovative, high-quality commercial and military tubular LED (“TLED”) products.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization and price erosion. We experienced this in our Navy business in late 2016 and early 2017 and in our commercial segment, where we once enjoyed significant price premiums for our flicker-free TLEDs with 10-year warranties, we now have a number of competitors offering similar capabilities at much lower prices. During the year, we reduced the costs of eight legacy product families in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at the high end of the competitive range and we expect aggressive price erosion and commoditization to continue to be a headwind until our more innovative and differentiated new products ramp in volume. These trends are not unique to Energy Focus as evidenced by the increasing number of industry peers facing challenges, exiting LED lighting, selling assets and even going out of business. In addition to continuous, scheduled cost reductions, our strategy to combat these trends it to move up the value chain, with more differentiated products and solutions, such as our smart lighting roadmap, that offer greater value to our customers.

In light of these factors, over this period we have evaluated the continued value of equipment and inventory and implemented restructuring and product development initiatives to reduce costs and streamline operations while continuing to pursue our new product pipeline and revenue growth. During 2016, the slowdown in demand from U.S. Navy resulted in a year-over-year decrease in military maritime sales of $33.9 million from 2015 to 2016. As a result, we re-evaluated the economics of manufacturing components versus purchasing them for the manufacture of our military Intellitube® product and recorded an impairment loss at year-end for the related equipment and software, and in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”), we evaluated our 2016 year-end inventory quantities for excess levels and potential obsolescence and charged $3.3 million to cost of sales from continuing operations for excess and obsolete inventories.

The restructuring initiative implemented in the first quarter of 2017 included a new management team, an organizational consolidation of management functions and a hybrid sales model, combining our existing historical direct sales model with sales agencies to expand our market presence throughout the U.S. We closed our New York, New York, Arlington, Virginia and Rochester, Minnesota offices, reduced full-time equivalent headcount by 51 percent and significantly decreased operating expenses from 2016 levels (a net reduction of $8.4 million, which includes $1.8 million in offsetting restructuring and impairment charges). As of December 31, 2018, we expanded our sales coverage to the entire U.S. through six geographic regions and now have 50 sales agencies, each of which has, on average, 10 agents representing Energy Focus products. During 2017, we also implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down, as required by U.S. GAAP. This initiative resulted in a net reduction of our excess inventory reserves of $1.4 million in 2017.

During 2018, we recorded restructuring charges totaling approximately $0.1 million, related to the revision of our initial estimates of the costs and offsetting sublease income and accretion expense for the remaining lease obligation for our former New York, New York and Arlington, Virginia offices. As a result of our continued cost control initiatives in 2018, we achieved an additional net decrease in operating expenses of $3.6 million, which includes the

$0.1 million recorded in facility restructuring charges. Please refer to Note 3, "Restructuring," for more information on our restructuring charges.

Despite progress in reducing overall costs and the costs of our products, expanding and diversifying our new product portfolio and growing sales of our new products and legacy luminaire product line, among other areas, our 2018 results reflect continued challenges due to long and unpredictable sales cycles, delays in customer retrofit budgets and project starts, continuing aggressive price competition and a lower priced legacy product portfolio that was not available until the end of 2018 and impacted the development timeline for our next generation smart lighting products. The substantial doubt about our ability to continue as a going concern continued to exist as of December 31, 2018.

Over the past several months, we have evaluated and pursed, and we expect that we will continue to assess the Company's strategic options, as we seek additional external funding sources and to achieve a profitable business model and maximize value for our stockholders. Our ongoing plans to achieve profitability include continuing to develop new technologies into sustainable product lines that allow us to effectively compete to expand our customer base, execute our marketing and sales plans, and continue to improve our supply chain and organizational structure.

ENERGY FOCUS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies of our Company, which are summarized below, are consistent with U.S. GAAP and reflect practices appropriate to the business in which we operate.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods presented. Estimates include, but are not limited to, the establishment of reserves for accounts receivable, sales returns, inventory obsolescence and warranty claims; the useful lives for property, equipment, and intangible assets; and stock-based compensation. In addition, estimates and assumptions associated with the determination of the fair value of financial instruments and evaluation of long-lived assets for impairment requires considerable judgment. Actual results could differ from those estimates and such differences could be material.

Reclassifications

Certain prior year amounts have been reclassified within the Consolidated Financial Statements and related notes thereto, to be consistent with current year presentation.

Basis of presentation

The Consolidated Financial Statements include the accounts of the Company and, until the 2013 disposition of our pool products business and the 2015 dispositions of its subsidiaries EFLS in Solon, Ohio, and CLL in the United Kingdom. All significant inter-company balances and transactions have been eliminated. Therefore, the results of operations and financial position of EFLS, CLL, and the pool products business are included in the Consolidated Financial Statements as Discontinued operations and previously reported financial information for the current and prior years have been adjusted. Unless indicated otherwise, the information in the Notes to Consolidated Financial Statements relates to our continuing operations.

Revenue recognition

On January 1, 2018, we adopted Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606), as amended by subsequently issued additional guidance (together, "ASC 606") using the modified retrospective method. The adoption of ASC 606 did not have a material impact on our consolidated financial position or results of operations, as our revenue arrangements generally consist of a single performance obligation to transfer promised goods at a fixed price.

Net sales include revenues from sales of products and shipping and handling charges, net of estimates for product returns. Revenue is measured at the amount of consideration we expect to receive in exchange for the transferred products. We recognize revenue at the point in time when we transfer the promised products to the customer and the customer obtains control over the products. Distributors' obligations to us are not contingent upon the resale of our products. We recognize revenue for shipping and handling charges at the time the goods are shipped to the customer, and the costs of outbound freight are included in cost of sales, as we have elected the practical expedient included in ASC 606. We provide for product returns based on historical return rates. While we incur costs for sales commissions to our sales employees and outside agents, we recognize commission costs concurrent with the related revenue, as the

amortization period is less than one year and we have elected the practical expedient included in ASC 606. We do not incur any other incremental costs to obtain contracts with our customers. Our product warranties are assurance-type warranties, which promise the customer that the products are as specified in the contract. therefore, the product warranties are not a separate performance obligation and are accounted for as described below. Sales taxes assessed by governmental authorities are accounted for on a net basis and are excluded from net sales.

A disaggregation of product net sales is presented in Note 13, “Product and Geographic Information.”

Cash and cash equivalents

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. At December 31, 2018 and 2017, we had $6.3 million and $10.8 million, respectively, in cash on deposit with financial institutions located in the United States. At December 31, 2018 and 2017, $0.3 million of the cash balance amount was designated as restricted cash and relates to a standby letter of credit agreement for the lease of our former New York, New York office. Please refer to Note 3, “Restructuring,” for additional information.

Inventories

We state inventories at the lower of standard cost (which approximates actual cost determined using the first-in-first-out method) or net realizable value. We establish provisions for excess and obsolete inventories after evaluation of historical sales, current economic trends, forecasted sales, product lifecycles, and current inventory levels. During 2017, we implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down in conjunction with our excess inventory reserve analysis in prior years, as required by U.S. GAAP. This initiative resulted in a net reduction of our excess inventory reserves of $1.4 million in 2017. During 2018 and 2016, due to the introduction of new products and technological advancements, we charged $17 thousand and $3.3 million, respectively, to cost of sales from continuing operations for excess and obsolete inventories. Adjustments to our estimates, such as forecasted sales and expected product lifecycles, could harm our operating results and financial position. Please refer to Note 5, “Inventories,” for additional information.

Accounts receivable

Our trade accounts receivable consists of amounts billed to and currently due from customers. Our customers are concentrated in the United States. In the normal course of business, we extend unsecured credit to our customers related to the sale of our products. Credit is extended to customers based on an evaluation of the customer’s financial condition and the amounts due are stated at their estimated net realizable value. We evaluate and monitor the creditworthiness of each customer on a case-by-case basis. We maintain allowances for sales returns and doubtful accounts receivable to provide for the estimated amount of receivables that will not be collected. The allowance is based on an assessment of customer creditworthiness and historical payment experience, the age of outstanding receivables, and performance guarantees to the extent applicable. Past due amounts are written off when our internal collection efforts have been unsuccessful and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. We do not generally require collateral from our customers.
Our standard payment terms with customers are net 30 days from the date of shipment, and we do not generally offer extended payment terms to our customers, but exceptions are made in some cases to major customers or with particular orders. Accordingly, we do not adjust trade accounts receivable for the effects of financing, as we expect the period between the transfer of product to the customer and the receipt of payment from the customer to be in line with our standard payment terms.

Income taxes

As part of the process of preparing the Consolidated Financial Statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense together with assessing temporary differences resulting from differing treatment of items, such as deferred revenues, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in our Consolidated Balance Sheet. We then assess the likelihood that these deferred tax assets will be recovered from future taxable income and, to the extent that we believe that it is more likely than not that the deferred tax assets will not be recovered, or is unknown, we establish a valuation allowance.

Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against our deferred tax assets. At December 31, 2018 and 2017, we had a full valuation allowance recorded against our deferred tax assets in the United States due to uncertainties related to our ability to utilize our deferred tax assets, primarily consisting of certain net operating losses carried forward. The valuation allowance is based upon our estimates of taxable income by jurisdiction and the period over which our

deferred tax assets will be recoverable.

At December 31, 2018, we had net operating loss carry-forwards of approximately $100.5 million for federal, state, and local income tax purposes. However, due to changes in our capital structure, approximately $46.0 million of this amount is available after the application of IRC Section 382 limitations. In 2019, we expect to have approximately $46.0 million of the net operating loss carry-forward available for use. If not utilized, $37.3 million of these carry-forwards will begin to expire in 2021 for federal purposes, and have begun to expire for state and local purposes. Please refer to Note 12, “Income Taxes,” for additional information.

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or would be paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value of financial assets and liabilities are measured on a recurring or non-recurring basis. Financial assets and liabilities measured on a recurring basis are those that are adjusted to fair value each time a financial statement is prepared. Financial assets and liabilities measured on a non-recurring basis are those that are adjusted to fair value when a significant event occurs.

We utilize valuation techniques that maximize the use of available market information and generally accepted valuation methodologies. We assess the inputs used to measure fair value using a three-tier hierarchy. The hierarchy indicates the extent to which pricing inputs used in measuring fair value are observable in the market. Level 1 inputs include unadjusted quoted prices for identical assets or liabilities and are the most observable. Level 2 inputs include unadjusted quoted prices for similar assets and liabilities that are either directly or indirectly observable, or other observable inputs such as interest rates, foreign currency exchange rates, commodity rates, and yield curves. Level 3 inputs are not observable in the market and include our own judgments about the assumptions market participants would use in pricing the asset or liability.
The carrying amounts of certain financial instruments including cash and equivalents, accounts receivable, accounts payable, and accrued liabilities approximate fair value due to their short maturities. Based on borrowing rates currently available to us for loans with similar terms, the carrying value of borrowings under our revolving credit facility also approximates fair value.

Long-lived assets

Property and equipment are stated at cost and include expenditures for additions and major improvements. Expenditures for repairs and maintenance are charged to operations as incurred. We use the straight-line method of depreciation over the estimated useful lives of the related assets (generally 2 to 15 years) for financial reporting purposes. Accelerated methods of depreciation are used for federal income tax purposes. When assets are sold or otherwise disposed of, the cost and accumulated depreciation are removed from the accounts and any gain or loss is reflected in the Consolidated Statement of Operations. Refer to Note 6, “Property and Equipment,” for additional information.

Long-lived assets are reviewed for impairment whenever events or circumstances indicate the carrying amount may not be recoverable. Events or circumstances that would result in an impairment review primarily include operations reporting losses, a significant change in the use of an asset, or the planned disposal or sale of the asset. The asset would be considered impaired when the future net undiscounted cash flows generated by the asset are less than its carrying value. An impairment loss would be recognized based on the amount by which the carrying value of the asset exceeds its fair value, as determined by quoted market prices (if available) or the present value of expected future cash flows. At December 31, 2016, we recorded an impairment loss of $0.9 million related to our surface mount technology equipment. Due to the specialized nature of this equipment we were not able to find a buyer for this equipment in 2017. As a result, we re-evaluated the carrying value of the equipment and software compared to its fair value and recorded an additional impairment loss of $0.2 million as of December 31, 2017. We completed the sale of this equipment in the first quarter of 2018. Refer to Note 6, “Property and Equipment,” for additional information.

Certain risks and concentrations

Historically our products were sold through a direct sales model, which included a combination of direct sales employees, electrical and lighting contractors, and distributors. The 2017 restructuring initiative included the transition to an agency driven sales channel strategy in order to expand our market presence throughout the U.S. We perform ongoing credit evaluations of our customers and generally do not require collateral. Although we maintain allowances for potential credit losses that we believe to be adequate, a payment default on a significant sale could materially and adversely affect our operating results and financial condition.

We have certain customers whose net sales individually represented 10 percent or more of our total net sales, or whose net trade accounts receivable balance individually represented 10 percent or more of our total net trade accounts receivable, as follows:

In 2018, one customer, a distributor to the U.S. Navy accounted for 41.9 percent, of net sales and total sales to distributors to the U.S. Navy represented 46.2 percent of net sales. In 2017, three customers accounted for 48.4 percent of net sales. In 2017, two commercial customers, a major northeastern Ohio hospital system and a large regional retrofit company located in Texas accounted for 18.3 percent, and 12.8 percent of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17.3 percent of net sales. Total sales to distributors to the U.S. Navy represented 22.0 percent of net sales in 2017.

In 2016, two customers, a distributor to the U.S. Navy and a major Northeast Ohio hospital, accounted for 36.5 percent and 10.9 percent of our net sales, respectively. Including sales pursuant to an indefinite duration, indefinite quantity ("IDIQ") supply contract we were awarded in 2011, total sales of products for the U.S. Navy accounted for 43.1 percent of net sales. This IDIQ contract expired on August 1, 2016.

At December 31, 2018, a distributor to the U.S. Navy accounted for 40.4 percent of our net trade accounts receivable. At December 31, 2017, two commercial customers, a major Northeast Ohio hospital system and a large regional retrofit company

located in Texas, accounted for 21.0 percent and 17.4 percent of our net trade accounts receivable, respectively. In addition, a distributor to the U.S. Navy accounted for 39.0 percent of our net trade accounts receivable at December 31, 2017.

We require substantial amounts of purchased materials from selected vendors. With specific materials, all of our purchases are from a single vendor. Substantially all of the materials we require are in adequate supply. However, the availability and costs of materials may be subject to change due to, among other things, new laws or regulations, suppliers' allocation to other purchasers, interruptions in production by suppliers, and changes in exchange rates and worldwide price and demand levels. Our inability to obtain adequate supplies of materials for our products at favorable prices could have a material adverse effect on our business, financial position, or results of operations by decreasing our profit margins and by hindering our ability to deliver products to our customers on a timely basis.

Product development

Product development expenses include salaries, contractor and consulting fees, supplies and materials, as well as costs related to other overhead items such as depreciation and facilities costs. Research and development costs are expensed as they are incurred.

Net loss per share

Basic loss per share is computed by dividing the net loss available to common stockholders by the weighted average number of common shares outstanding for the period, excluding the effects of any potentially dilutive securities. Diluted loss per share gives effect to all dilutive potential common shares outstanding during the period. Dilutive potential common shares consist of incremental shares upon exercise of stock options and warrants, unless the effect would be anti-dilutive.

The following table presents a reconciliation of basic and diluted loss per share computations (in thousands, except per share amounts):

	For the year ended December 31,		
	2018	2017	2016
Numerator:			
Loss from continuing operations	$(9,111)	$(11,267)	$(16,875)
Loss from discontinued operations	—	—	(12)
Net loss	$(9,111)	$(11,267)	$(16,887)
Denominator:			
Basic weighted average common shares outstanding	11,997	11,806	11,673
Potential common shares from options and warrants	—	—	—
Diluted weighted average shares	11,997	11,806	11,673

As a result of the net loss we incurred for the years ended December 31, 2018, 2017, and 2016, options, warrants and convertible securities representing approximately 59,180, 60,434, and 139,595 shares of common stock were excluded from the loss per share calculation, respectively, because their inclusion would have been anti-dilutive.

Stock-based compensation

We recognize compensation expense based on the estimated grant date fair value under the authoritative guidance. Management applies the Black-Scholes option pricing model to value stock options issued to employees and directors, and applies judgment in estimating key assumptions that are important elements of the model in expense recognition. These elements include the expected life of the option, the expected stock-price volatility, and expected forfeiture rates. Compensation expense is generally amortized on a straight-line basis over the requisite service period, which is generally the vesting period. See Note 11, “Stockholders’ Equity,” for additional information. Common stock, stock options, and warrants issued to non-employees that are not part of an equity offering are accounted for under the applicable guidance under ASC 505-50, “Equity-Based Payments to Non-Employees,” and are generally re-measured at each reporting date until the awards vest.

ENERGY FOCUS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Foreign currency translation

Our product development center in Taiwan uses local currency as its functional currency. Included within "Accumulated other comprehensive income" within the Consolidated Statements of Stockholders' Equity is the effect of foreign currency translation related to our Taiwan operations.

Advertising expenses

Advertising expenses are charged to operations in the period incurred. They consist of costs for the placement of our advertisements in various media and the costs of demos provided to potential distributors of our products. Advertising expenses from continuing operations were $0.3 million, $0.5 million, and $1.4 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Shipping and handling costs

We include shipping and handling revenues in net sales, and shipping and handling costs in cost of sales.

Product warranties

We warrant finished goods against defects in material and workmanship under normal use and service for periods generally between one and ten years. Settlement costs consist of actual amounts expensed for warranty coverage, which are largely a result of the cost of replacement products. A liability for the estimated future costs under product warranties is maintained for products outstanding under warranty and is included in "Accrued liabilities" in our Consolidated Balance Sheets. The warranty activity for the respective years is as follows (in thousands):

	At December 31,	
	2018	2017
Balance at the beginning of the year	$174	$331
Accruals for warranties issued	51	196
Adjustments to existing warranties	103	(87)
Settlements made during the year (in kind)	(70)	(266)
Accrued warranty expense	$258	$174

Recent accounting standards and pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-15, Intangibles--Goodwill and Other--Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which aligns the requirements for capitalizing implementation costs in a cloud computing service contract with the requirements for capitalizing implementation costs incurred for an internal-use software license. This standard will be effective for interim and annual periods beginning after December 15, 2019. We do not expect the adoption of this guidance to have a significant impact on our financial position, results of operations, or cash flows.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which significantly changes the accounting for credit losses on instruments

within its scope. The new guidance introduces an approach based on expected losses to estimate credit losses on certain financial instruments, including trade receivables, and requires an entity to recognize an allowance based on its estimate of expected credit losses rather than incurred losses. This standard will be effective for interim and annual periods beginning after December 15, 2019, and will generally require adoption on a modified retrospective basis. We are in the process of evaluating the impact of the standard.

In February 2016, the FASB issued ASU No. 2016-02, Leases, which supersedes the current lease accounting requirements. This standard requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. In addition, this standard requires lessees to disclose certain key information about lease transactions. Upon implementation, an entity's lease payment obligations will be recognized at their estimated present value along with a corresponding right-of-use asset. Lease expense recognition will be generally consistent with current

practice. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements, which simplifies adoption of the new lease accounting requirements by allowing an additional transition method that will not require restatement of prior periods and providing a new practical expedient for lessors to avoid separating lease and non-lease components within a contract if certain requirements are met. The provisions of this guidance must be elected upon adoption of the new lease accounting requirements, which will be effective for interim and annual periods beginning after December 15, 2018.

We will adopt the standard as required on January 1, 2019 and use that date as our date of initial application of the guidance. Consequently, we will not update previously reported financial information and the disclosures under the new standard will not be provided for dates and periods prior to January 1, 2019. We will elect all of the practical expedients available under the transition guidance. The new standard also provides practical expedients for ongoing accounting. We will elect the short-term lease recognition exemption for all leases that qualify. This means we will not recognize right of use assets or lease liabilities for those leases. We will also elect the practical expedient to not separate lease and non-lease components for all of our leases.

We expect that this standard will have a material impact on our financial statements. While we continue to assess all of the effects of adoption, we currently believe the most significant effects relate to the recognition of new right of use assets and lease liabilities on our balance sheet for our real estate and equipment operating leases, and the significant new required disclosures regarding our leasing activities. We do not expect a significant change in our leasing activities between now and adoption.

On adoption, we expect to recognize additional operating lease liabilities of approximately $2.2 million, with corresponding right of use assets for the same amount based on the present value of the remaining minimum rental payments under current leasing standards for existing operating leases.

NOTE 3. RESTRUCTURING

Due to our financial performance in 2016, 2017, and 2018, including net losses of $16.9 million, $11.3 million, and $9.1 million, respectively, and total cash used of $18.0 million, $5.9 million, and $4.4 million, respectively, we believe that substantial doubt about our ability to continue as a going concern existed at December 31, 2016, 2017, and 2018.

As a result of such determination as of December 31, 2016, we evaluated actions to mitigate the substantial doubt about our ability to continue as a going concern. Our evaluation considered both quantitative and qualitative information, including our current financial position and liquid resources, and obligations due or anticipated within the next year. With $16.6 million in cash and no debt obligations as of December 31, 2016, we focused our efforts on reducing our overall operating expenses in an effort to return to profitability. Consequently, in February 2017, we announced a corporate restructuring initiative with a goal of significantly reducing annual operating costs from 2016 levels. The initiative included an organizational consolidation of management and oversight functions in order to streamline and better align the organization into more focused, efficient, and cost-effective reporting relationships, and involved closing our offices in Rochester, Minnesota, New York, New York, and Arlington, Virginia and reducing our staff by 20 employees, primarily located in these offices. During the second quarter of 2017, we fully exited the New York and Arlington facilities and took additional actions to improve our operating efficiencies. These actions reduced our staff by an additional 17 production and administrative employees in our Solon location.

These restructuring actions resulted in a net decrease in operating expenses through December 31, 2017 of $8.4 million, including restructuring and asset impairment charges of $1.8 million, consisting of approximately $0.8 million for severance and related benefits, approximately $0.7 million related to the facility closings, approximately $0.1 million primarily related to fixed asset and prepaid expenses write-offs and approximately $0.2 million in asset impairment charges, as well as asset impairment charges of $0.9 million in 2016.

During the year ended December 31, 2018, we recorded restructuring charges totaling approximately $0.1 million, related to the revision of our initial estimates of the costs and offsetting sublease income and accretion expense for the remaining lease obligation for our former New York, New York and Arlington, Virginia offices. Our continued cost control initiatives in 2018 resulted in an additional net decrease in operating expenses of $3.6 million, which includes restructuring and asset impairment charges of $0.1 million.

Our restructuring liabilities consist of one-time termination costs for severance and benefits to former employees and estimated ongoing costs related to long-term operating lease obligations. The recorded value of the termination severance and benefits to employees approximates fair value, as the remaining obligation is based on the arrangements made with the former employees, and these obligations will be completely satisfied in less than 12 months. The recorded value of the ongoing lease obligations is based on the remaining lease term and payment amount, net of estimated sublease income, discounted to present value.

Changes in subsequent periods resulting from a revision to either the timing or the amount of estimated cash flows over the future period are measured using the credit adjusted, risk-free rate that was used to measure the restructuring liabilities initially. The current portion of the ongoing lease obligations is included within the caption, “Accrued liabilities” and the long-term portion of the ongoing lease obligations is included within the caption, “Other liabilities” in the Consolidated Balance Sheets as of December 31, 2018 and 2017.

As of December 31, 2018, we estimated that we would receive a total of approximately $0.7 million in sublease payments to offset our remaining lease obligations, which extend until June 2021, of approximately $1.1 million. We expect to incur insignificant additional costs over the remaining life of our lease obligations. The following is a reconciliation of the beginning and ending balances of our restructuring liability:

	Severance and Related Benefits	Facilities	Other	Total
Balance at January 1, 2017	$ —	$ —	$—	$—
Additions	$ 770	$ 830	$186	$1,786
Accretion of lease obligations		$ 31	$—	$31
Adjustment of lease obligations		$ (155)	$—	$(155)
Write-offs		$ 9	$(95)	$(86)
Payments	$ (708)	$ (375)	$(91)	$(1,174)
Balance at December 31, 2017	$ 62	$ 340	$—	$402
Accretion of lease obligations		$ 21	$—	$21
Adjustment of lease obligations		$ 90	$—	$90
Payments	$ (62)	$ (101)	$—	$(163)
Balance at December 31, 2018	$ —	$ 350	$—	$350

At December 31, 2018, we had $6.3 million in cash, including $2.2 million outstanding on the revolving credit facility we entered into on December 11, 2018.

As a result of the restructuring actions and initiatives described above, we have reduced our operating expenses to be more commensurate with our sales volumes, however, we continue to incur losses and have a substantial accumulated deficit, raising substantial doubt about our ability to continue as a going concern at December 31, 2018. Considering both quantitative and qualitative information, we continue to believe that the combination of our plans to obtain additional financing, restructuring actions, current financial position, liquid resources, obligations due or anticipated within the next year, executive reorganization, and implementation of our product development and sales channel strategy, if adequately executed, will provide us with an ability to finance our operations through 2019 and will mitigate the substantial doubt about our ability to continue as a going concern. Please refer to Note 16, “Subsequent Events,” for more information on the additional financing we received on March 26, 2019 to fund our near-term operations.

NOTE 4. DISCONTINUED OPERATIONS

Pool Products Business

On November 26, 2013, we announced the sale of our pool products business for a cash purchase price of $5.2 million. Under the terms of the Purchase Agreement, we sold substantially all of the assets associated with the pool products business and the buyer assumed certain related liabilities. In connection with the sale, we and the buyer entered into a transition services agreement that continued until April 30, 2014, under which we provided services to

transition the pool products business to the buyer. In addition, the Purchase Agreement contains representations, warranties and covenants of us and the buyer and prohibits us from competing with the buyer in the pool business for a period of five years following the closing. The Purchase Agreement also provided for an escrow of $500 thousand of the purchase price to secure customary indemnification obligations with respect to our representations, warranties, covenants and other obligations under the Purchase Agreement. Under the terms of the Purchase Agreement, the first of five $100 thousand scheduled escrow releases commenced on March 25, 2014, and was to continue on the 25th day of each of the next four subsequent months. As of December 31, 2015 and 2014, $200 thousand of the cash held in escrow had been released to us and $300 thousand remained in escrow subject to the resolution of outstanding buyer claims that were the subject of an arbitration claim filed by the buyer in February 2015. At December 31, 2015, we offset the full escrow amount by the expected costs to settle this claim, as we had reached an agreement in principle with the buyer.

On March 18, 2016, a settlement agreement was executed for this claim and the funds in the escrow account, plus the interest earned on the account, were released to the buyer. The legal fees incurred for the arbitration are included in the Consolidated Statements of Operations under the caption, "Loss on sale of discontinued operations." for 2016. For additional information on the status of the remaining cash in escrow, please refer to Note 14, "Legal Matters."

NOTE 5. INVENTORIES

Inventories are stated at the lower of standard cost (which approximates actual cost determined using the first-in, first-out cost method) or net realizable value and consists of the following (in thousands):

	At December 31,	
	2018	2017
Raw materials	$4,041	$3,316
Finished goods	8,229	6,598
Reserve for excess, obsolete, and slow moving inventories	(4,212)	(4,196)
Inventories, net	$8,058	$5,718

During 2018, we initiated an aggressive inventory procurement plan in order to meet increasing shipment lead times and expected demand for commercial sales. While we did not achieve this level of demand, we had already committed to inventory purchases. As a result, our gross inventory levels increased $2.4 million in 2018 as compared to 2017.

During 2017, we implemented a strategic sales initiative to sell certain excess inventory that had previously been written-down in conjunction with our excess inventory reserve analysis in prior years, as required by U.S. GAAP. This initiative resulted in a net reduction of our gross inventory levels and excess inventory reserves of $5.2 million and $1.4 million, respectively, in 2017 as compared to 2016.

NOTE 6. PROPERTY AND EQUIPMENT

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the related assets and consist of the following (in thousands):

	At December 31,	
	2018	2017
Equipment (useful life 3 - 15 years)	$1,511	$1,557
Tooling (useful life 2 - 5 years)	371	371
Vehicles (useful life 5 years)	47	47
Furniture and fixtures (useful life 5 years)	137	137
Computer software (useful life 3 years)	1,043	1,043
Leasehold improvements (the shorter of useful life or lease life)	211	201
Construction in progress	55	55
Property and equipment at cost	3,375	3,411
Less: accumulated depreciation	(2,765)	(2,314)
Property and equipment, net	$610	$1,097

Depreciation expense was $0.5 million, $0.7 million, and $0.8 million for the years ended December 31, 2018, 2017 and 2016, respectively.

During 2015 and early 2016, the Company invested in certain equipment and software to be used to increase our capabilities and reduce the cost of components used in our domestic manufacturing processes, as many of our sales opportunities were with respect to products made in the U.S. or meeting "Buy American" standards. These opportunities included our military maritime product line, as well as products for use in government-funded facilities, such as military bases, which must comply with certain domestic preference standards. As a result of the decline in 2016 sales as well as our expectation of limited sales of our military Intellitube® product going forward due to new competition for retrofit products for the U.S. Navy, coupled with the current cost of procuring components from our suppliers for such products, versus manufacturing them at a low volume, at December 31, 2016, we re-evaluated the economics of manufacturing versus purchasing such components from our suppliers. We concluded that we would no longer use the equipment and software previously purchased to conduct this manufacturing and evaluated the carrying value of the equipment and software compared to its fair value and determined that the equipment and software were impaired. Accordingly, we recorded an impairment loss of $0.9 million, to adjust the carrying value of the equipment and software to its net realizable value as of December 31, 2016. Due to the specialized nature of this equipment we were not able to find a buyer for this equipment in 2017. As a result, we re-evaluated the carrying of the equipment and software compared to its fair value and recorded an additional impairment loss of $0.2 million as of December 31, 2017. We classified the net carrying value of this equipment as "Assets held for sale" in the accompanying Consolidated Balance Sheets as of December 31, 2017.

We completed the sale of this equipment in the first quarter of 2018, recognizing net proceeds of approximately $0.2 million and a gain of approximately $15 thousand on the sale. The gain on the sale is classified on our Consolidated Statements of Operations under the caption, "Other expenses."

NOTE 7. PREPAID AND OTHER CURRENT ASSETS

Prepaid and other current assets consisted of the following (in thousands):

	At December 31,	
	2018	2017
Prepaid insurance	$100	$115
Prepaid expenses	94	91
Prepaid rent	4	4
Short-term deposits	825	386
Debt acquisition costs - short-term	71	—
Total prepaid and other current assets	$1,094	596

Short-term deposits represent down payment amounts paid to suppliers for material purchases. Certain Asian suppliers require us to pay a deposit prior to manufacturing and/or shipping products to us. The short-term debt acquisition costs consist of the balance of the annual facility fee and the short-term portion of the legal and professional fees we incurred in connection with the revolving credit facility we entered into on December 11, 2018. The annual facility fee of $50 thousand was paid on the date the credit facility was signed and is being amortized on a straight-line basis over one year. The debt acquisition costs are being amortized on a straight-line basis over three years, which is the length of the credit facility. The long-term portion of the debt acquisition costs are included in the Consolidated Balance Sheets under the caption, "Other assets." For additional information on the revolving credit facility, please refer to Note 9, "Debt."

NOTE 8. ACCRUED LIABILITIES

Accrued current liabilities consisted of the following (in thousands):

	At December 31,	
	2018	2017
Accrued payroll and related benefits	$435	$394
Accrued sales commissions and incentives	115	124
Accrued warranty expense	258	174
Accrued severance and related benefits	188	—
Accrued restructuring - short-term	156	170
Accrued legal and professional fees	160	77
Accrued other expenses	73	53
Total accrued liabilities	$1,385	$992

NOTE 9. DEBT

Credit facilities

On December 11, 2018, we entered into a three-year $5.0 million revolving line of credit (“Credit Facility”) with Austin Financial Services (“Austin”). The total loan amount available to us under the Credit Facility from time to time is based on the amount of our (i) qualified accounts receivable, which is equal to 85 percent of our net eligible receivables, plus (ii) available inventory, which is the lesser of 50 percent of the net realizable value of eligible inventory, or $500 thousand. The Credit Facility has a minimum borrowing requirement of $1.0 million.

The Credit Facility is secured by a lien on our assets. Interest on advances under the line is due monthly at the “Prime Rate,” as published by the Wall Street Journal from time to time, plus a margin of 2 percent. The borrowing rate as of December 31, 2018 was 7.75 percent. Overdrafts are subject to a 2 percent fee. Additionally, an annual facility fee of 1 percent on the entire $5.0 million amount of the Credit Facility is due at the beginning of each of the three years and a 0.50 percent collateral management fee on the average outstanding loan balance is payable monthly. We paid Austin the first year’s fee when the Credit Facility was signed.

The repayment of outstanding advances and interest under the Credit Facility may be accelerated upon an event of default including, but not limited to, failure to make timely payments or breach of any terms set forth in the Credit Facility. The Credit Facility has no financial covenants, but is subject to customary affirmative and negative operating covenants and defaults and restricting indebtedness, liens, corporate transactions, dividends, and affiliate transactions, among others. The Credit Facility may be terminated by us or by Austin with 90 days written notice. We have not provided such notice to Austin or received such notice from Austin. There are liquidated damages if the Credit Facility is terminated prior to December 10, 2021, as follows: 3 percent in the first year, 2 percent in the second year, and 1 percent in the third year.

Borrowings under the revolving line of credit were $2.2 million at December 31, 2018 and are recorded in the Consolidated Balance Sheets as a current liability under the caption, “Credit line borrowings.” At December 31, 2018, we had borrowed the maximum available for us to borrow under this line of credit.

NOTE 10. COMMITMENTS AND CONTINGENCIES

Operating Leases

We lease certain equipment, manufacturing, warehouse and office space under non-cancellable operating leases expiring through 2023 under which we are responsible for related maintenance, taxes, and insurance. Future minimum non-cancellable lease commitments are as follows (in thousands):

For the year ending December 31,	Minimum Lease Commitments	Sublease Payments (1)	Net Lease Commitments
2019	$ 1,177	$ 399	$ 778
2020	975	267	708
2021	804	134	670
2022	325	—	325
2023 & thereafter	16	—	16
Total contractual obligations	$ 3,297	$ 800	$ 2,497

(1) Represents the amount of income expected from sublease agreements executed in 2017 for our former New York, New York and Arlington, Virginia offices.

Certain leases included above contain escalation clauses and, as such, rent expense was recorded on a straight-line basis over the term of the lease. Net rent expense from continuing operations was $0.8 million, $1.2 million, and $1.2 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Capital Leases

We lease certain equipment under a capital lease expiring in 2021. The assets and liabilities under capital leases are recorded at the lower of the present value of the minimum lease payments or the fair value of the asset. The assets are depreciated over the shorter of the related lease term or their estimated useful lives. At December 31, 2018, assets recorded under capital leases were $20 thousand and accumulated depreciation related to assets recorded under capital leases was $4 thousand. Depreciation of assets under capital leases is included in depreciation expense. The current portion of the capital lease obligation is included within the caption, “Accrued liabilities” and the long-term portion of the capital lease obligations is included within the caption, “Other liabilities” in the Consolidated Balance Sheets as of December 31, 2018.

Minimum future lease payments under capital leases as of December 31, 2018 are as follows (dollars in thousands):

Year ending December 31,	Minimum Lease Commitments
2019	$ 4
2020	3
2021	3
2022	1
2023 & thereafter	—
Total minimum lease payments	11
Less: interest amount	(1)
Present value of minimum lease payments	$ 10

Purchase Commitments

As of December 31, 2018, we had approximately $2.8 million in outstanding purchase commitments for inventory, of which $1.5 million is expected to ship in the first quarter of 2019 and $0.8 million is expected to ship in the second quarter of 2019, with the remaining $0.5 million expected to ship in the second half of 2019.

NOTE 11. STOCKHOLDERS’ EQUITY

Common stock follow-on offering

On September 11, 2015, we announced the pricing of a registered underwritten follow-on offering of shares of our common stock by us and certain of our stockholders (the "Selling Stockholders"). We sold 1,500,000 shares of our common stock at a purchase price to the public of $17.00 per share and the Selling Stockholders sold an additional 1,500,000 shares of our common stock on the same terms and conditions.

The offering closed on September 16, 2015 and we received $23.6 million in net proceeds from the transaction, after giving effect to underwriting discounts and commissions and estimated expenses. We expect to use the remaining net proceeds from the offering for working capital and other general corporate purposes.

Warrants

In the past, we have issued warrants in conjunction with various equity issuances, debt financing arrangements, and sales incentives. A summary of warrant activity was as follows:

	Warrants Outstanding	Weighted Average Exercise Price During Period
Balance, December 31, 2015	14,250	4.30
Warrants cancelled/forfeited	(7,500)	4.30
Balance, December 31, 2016	6,750	$ 4.30
Warrants cancelled/forfeited	(6,750)	$ 4.30
Balance, December 31, 2017	—	$ —

Stock-based compensation

On May 6, 2014, our Board of Directors approved the Energy Focus, Inc. 2014 Stock Incentive Plan (the "2014 Plan"). The 2014 Plan was approved by the stockholders at our annual meeting on July 15, 2014, after which no further awards could be issued under the Energy Focus, Inc. 2008 Incentive Stock Plan (the "2008 Plan"). The 2014 Plan initially allowed for awards up to 600,000 shares of common stock and expires on July 15, 2024. On July 22, 2015, the stockholders approved an amendment to the 2014 Plan to increase the shares available for issuance under the 2014 Plan by an additional 600,000 shares. On June 21, 2017, the stockholders approved an amendment to the 2014 Plan to increase the shares available for issuance under the 2014 Plan by an additional 1,300,000. We have two other equity-based compensation plans under which options are currently outstanding; however, no new awards may be granted under these plans. Generally, stock options are granted at fair market value and expire ten years from the grant date. Employee grants generally vest in three or four years, while grants to non-employee directors generally vest in one year. The specific terms of each grant are determined by our Board of Directors. At December 31, 2018, 1,269,815 shares remain available to grant under the 2014 Plan.

Stock-based compensation expense is attributed to the granting of stock options, restricted stock, and restricted stock unit awards. For all stock-based awards, we recognize compensation expense using a straight-line amortization method.

The impact on our results for stock-based compensation was as follows (in thousands):

	For the year ended December 31,		
	2018	2017	2016
Cost of sales	$37	$34	$56
Product development	118	59	84
Selling, general, and administrative	753	714	1,220
Total stock-based compensation	$908	$807	$1,360

At December 31, 2018 and 2017, we had unearned stock compensation expense of $0.9 million and $0.7 million, respectively. These costs will be charged to expense and amortized on a straight-line basis in subsequent periods. The remaining weighted average period over which the unearned compensation is expected to be amortized was approximately 1.8 years as of both December 31, 2018 and 2017.

Stock options

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model. Estimates utilized in the calculation include the expected life of the option, risk-free interest rate, and expected volatility, and are further comparatively detailed as follows:

	2018	2017	2016
Fair value of options issued	$1.41	$2.66	$5.27
Exercise price	$1.97	$3.55	$7.46
Expected life of option (in years)	5.9	5.8	5.8
Risk-free interest rate	2.7 %	2.1 %	1.5 %
Expected volatility	84.2 %	91.9 %	93.7 %
Dividend yield	0.00 %	0.00 %	0.00 %

We utilize the simplified method as provided by ASC 718-10 to calculate the expected stock option life. Under ASC 718-10, the expected stock option life is based on the midpoint between the vesting date and the end of the contractual term of the stock option award. The use of this simplified method in place of using the actual historical exercise data is allowed when a stock option award meets all of the following criteria: the exercise price of the stock option equals the stock price on the date of grant; the exercisability of the stock option is only conditional upon completing the service requirement through the vesting date; employees who terminate their service prior to the vesting date forfeit their stock options; employees who terminate their service after vesting are granted a limited time period to exercise their stock options; and the stock options are nontransferable and nonhedgeable. We believe that our stock option awards meet all of these criteria. The estimated expected life of the option is calculated based on contractual life of the option, the vesting life of the option, and historical exercise patterns of vested options. The risk-free interest rate is based on U.S. treasury zero-coupon yield curve on the grant date for a maturity similar to the expected life of the option. The volatility estimates are calculated using historical volatility of our stock price calculated over a period of time representative of the expected life of the option. We have not paid dividends in the past, and do not expect to pay dividends over the corresponding expected term as of the grant date.

Options outstanding under all plans at December 31, 2018 have a contractual life of ten years, and vesting periods between one and four years. A summary of option activity under all plans was as follows:

	Number of Options	Weighted Average Exercise Price Per Share
Outstanding at December 31, 2015	602,207	8.58
Granted	167,819	7.31
Cancelled	(160,126)	12.94
Exercised	(79,166)	4.48
Outstanding at December 31, 2016	530,734	7.48
Granted	192,984	3.55
Cancelled	(377,095)	6.71
Expired	(56,111)	10.65
Exercised	(42,000)	2.30
Outstanding at December 31, 2017	248,512	$ 5.76
Granted	100,746	$ 1.97
Cancelled	(46,387)	$ 6.96
Expired	(10,000)	$ 20.00
Outstanding at December 31, 2018	292,871	$ 3.78
Vested and expected to vest at December 31, 2018	272,247	$ 3.90
Exercisable at December 31, 2018	159,007	$ 4.98

The “Expected to Vest” options are the unvested options that remain after applying the pre-vesting forfeiture rate assumption to total unvested options. No options were exercised during 2018. The total intrinsic value of options outstanding and options exercisable at December 31, 2018 was zero dollars each, which was calculated using the closing stock price at the end of the year of $0.62 per share less the option price of the in-the-money grants.

The options outstanding at December 31, 2018 have been segregated into ranges for additional disclosure as follows:

OPTIONS OUTSTANDING				OPTIONS EXERCISABLE		
Range of Exercise Prices	Number of Shares Outstanding	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Number of Shares Exercisable	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price
$1.81–$2.29	75,711	9.4	$ 1.81	—	0.0	$ —
$2.30–$3.25	76,157	6.2	2.86	47,135	4.7	2.98
$3.26–$4.00	74,165	8.2	3.43	45,323	8.2	3.43
$4.01–$15.08	66,838	5.0	7.46	66,549	5.0	7.46
	292,871	7.3	$ 3.78	159,007	5.8	$ 4.98

Restricted stock and restricted stock units

Prior to 2011, we issued restricted stock to Executive Officers and Directors in lieu of paying a portion of their cash compensation or Directors' fees.

61

In 2015, we began issuing restricted stock units to employees and non-employee Directors under the 2014 Plan with vesting periods ranging from 1 to 3 years from the grant date.

The following table shows a summary of restricted stock and restricted stock unit activity:

	Restricted Stock Units Outstanding		Weighted Average Grant Date Fair Value
At December 31, 2015	57,500		$ 7.31
Granted	290,966		6.56
Vested	(11,213	)	14.18
Forfeited	(87,138	)	6.73
At December 31, 2016	250,115		$ 6.34
Granted	375,542		$ 3.18
Vested	(115,622	)	$ 5.78
Forfeited	(203,893	)	$ 5.30
At December 31, 2017	306,142		$ 3.37
Granted	553,657		$ 2.38
Vested	(222,835	)	$ 3.11
Forfeited	(90,106	)	$ 2.99
At December 31, 2018	546,858		$ 2.54

Employee stock purchase plans

In September 2013, our stockholders approved the 2013 Employee Stock Purchase Plan (the “2013 Plan”) to replace the 1994 prior purchase plan. A total of 500,000 shares of common stock were provided for issuance under the 2013 Plan. The 2013 Plan permits eligible employees to purchase common stock through payroll deductions at a price equal to the lower of 85 percent of the fair market value of our common stock at the beginning or end of the offering period. Employees may end their participation at any time during the offering period, and participation ends automatically upon termination of employment with us. During 2018, 2017, and 2016, employees purchased 25,953, 16,004, and 22,094, respectively. At December 31, 2018, 401,484 shares remained available for purchase under the 2014 Plan.

NOTE 12. INCOME TAXES

We file income tax returns in the U.S. federal jurisdiction, as well as in various state and local jurisdictions. With few exceptions, we are no longer subject to U.S. federal, state, and local, or non-United States income tax examinations by tax authorities for years before 2015. Our practice is to recognize interest and penalties related to income tax matters in income tax expense when and if they become applicable. At December 31, 2018 and 2017, respectively, there were no accrued interest and penalties related to uncertain tax positions.

The following table shows the components of loss from continuing operations before income taxes (in thousands):

For the year ended December 31,

	2018	2017	2016
United States	$(9,100)	$(11,382)	$(16,848)
Loss from continuing operations before income taxes	$(9,100)	$(11,382)	$(16,848)

The following table shows the components of the provision for income taxes from continuing operations (in thousands):

	For the year ended December 31,		
	2018	2017	2016
Current:			
U.S. federal	$—	$—	$ 1
State	11	10	26
Total current	$11	$10	$ 27
Deferred:			
U.S. Federal	$—	$(125)	$ —
State	$—	$—	$ —
Total deferred	$—	$(125)	$ —
Provision for income taxes	$11	$(115)	$ 27

The principal items accounting for the difference between income taxes computed at the U.S. statutory rate and the provision for income taxes from continuing operations reflected in our Consolidated Statements of Operations are as follows:

	For the year ended December 31,		
	2018	2017	2016
U.S. statutory rate	21.0 %	34.0 %	34.0 %
State taxes (net of federal tax benefit)	2.5	2.3	1.7
Valuation allowance	(25.0)	17.4	(27.5)
Deferred rate change due to changes in tax laws	—	(51.7)	—
Other	1.4	(1.0)	(8.4)
	(0.1)%	1.0 %	(0.2)%

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	At December 31,		
	2018	2017	2016
Allowance for doubtful accounts	$—	$ —	$ 18
Accrued expenses and other reserves	1,964	1,749	3,138
Tax credits, deferred R&D, and other	65	197	142
Net operating loss	10,796	8,610	9,239
Valuation allowance	(12,825)	(12,556)	(12,537)
Net deferred tax assets	$—	$ —	$ —

In 2018, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the $8.7 million additional federal net operating loss we recognized for the year. In 2017, our effective tax

rate was lower than the statutory rate due to the remeasurement of our deferred tax assets resulting from the Tax Cuts and Jobs Act of 2017 (the "Act") and a decrease in the valuation allowance. In 2016, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the $10.6 million additional federal net operating loss we recognized for the year.

On December 22, 2017, the Act was signed into law making significant changes to the Internal Revenue Code ("IRC"). Changes include, but are not limited to, a corporate tax rate decrease from 35 percent to 21 percent effective for tax years beginning after December 31, 2017, repeal of the corporate Alternative Minimum Tax, elimination of certain deductions, and changes to the carryforward period and utilization of Net Operating Losses generated after December 31, 2017. We have calculated the impact of the Act in our year end income tax provision in accordance with our understanding of the Act and guidance available as of the date of this filing. As a result of the Act, we have recorded $0.1 million as additional income tax benefit in the fourth quarter of 2017, the period in which the legislation was enacted. The amount related to the release of the valuation allowance on the Alternative Minimum Tax Credit carry-forward which is expected to be fully refunded by 2021. We remeasured the deferred tax assets and liabilities, based on the rates at which they are expected to reverse in the future. The impact of the remeasurement was $5.9 million of additional tax expense which was offset by a $5.9 million reduction of the valuation allowance resulting in a net zero impact to the financial statements. The U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies could interpret or issue guidance on how provisions of the Act will be applied or otherwise administered that is different from our interpretation. We may make adjustments to amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are made.

Since we believe it is more likely than not that the benefit from net operating loss carry-forwards will not be realized, we have provided a full valuation allowance against our deferred tax assets at December 31, 2018 and 2017, respectively. We had no net deferred tax liabilities at December 31, 2018 or 2017, respectively. In 2018, we recognized various states tax expense as a result of the adjustment from the 2017 provision to the actual tax on the 2017 returns that were filed in 2018. In 2017, we recognized U.S. federal and various states income tax benefit of $0.1 million as a result of the reduction of the valuation allowance on the portion of Alternative Minimum Tax Credits that are expected to be refunded. In 2016, we recognized U.S. federal and various states income tax expense as a result of the adjustment from the 2015 provision to the actual tax on the 2015 returns that were filed in 2016.

Deferred income tax assets are reduced by a valuation allowance when it is more likely than not that some portion of the deferred income tax assets will not be realized. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We will continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2018, we had net operating loss carry-forwards of approximately $100.5 million for U.S. federal, state, and local income tax purposes. However, due to changes in our capital structure, approximately $46.0 million of this amount is available to offset future taxable income after the application of the limitations found under Section 382 of the IRC. As a result of this limitation, in 2019, we expect to have approximately $46.0 million of the net operating loss carry-forward available for use. As a result of the Act, net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80 percent of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The $8.7 million in net operating losses generated in 2018 will be subject to the new limitations under the Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of $37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Additionally, the changes to our capital structure have subjected, and will continue to subject our net operating loss carry-forward to an annual limitation as discussed further below. This limitation will significantly restrict our ability to utilize the carry-forward to offset taxable income in future periods.

The IRC imposes restrictions on the utilization of various carry-forward tax attributes in the event of a change in ownership, as defined by IRC Section 382. During 2015, we completed an IRC Section 382 review and the results of this review indicate ownership changes have occurred which would cause a limitation on the utilization of

carry-forward attributes. Our net operating loss carry-forwards and research and development credits are all subject to limitation. Under these tax provisions, the limitation is applied first to any capital losses, next to any net operating losses, and then to any general business credits. The Section 382 limitation is currently estimated to result in the expiration of $54.2 million of net operating loss carry-forwards and $0.3 million of research and development credits. A valuation allowance has been established to reserve for the potential benefits of the remaining net operating loss carry-forwards in the consolidated financial statements to reflect the uncertainty of future taxable income required to utilize available tax loss carry-forwards.

NOTE 13. PRODUCT AND GEOGRAPHIC INFORMATION

During 2013, we sold our pool products business. During 2014, we shifted our focus away from the turnkey solutions business to align our resources with developing and selling our LED products and completed our exit of that business in September 2015. With the exit from EFLS and sale of CLL, we have aligned our resources and focused our efforts on the sale of LED

lighting products, in particular our military and commercial tubular LED ("TLED") lines of products, into targeted vertical markets. Our products are sold primarily in the United States through a combination of direct sales employees, independent sales representatives and distributors. We currently operate in a single industry segment, developing and selling our energy-efficient light-emitting diode ("LED") lighting products into the military maritime and commercial markets.

The following table provides a breakdown of product net sales from continuing operations for the years indicated (in thousands):

	Year ended December 31,		
	2018	2017	2016
Commercial	$8,662	$15,217	$14,809
Military maritime	9,445	4,629	16,189
Total net sales	$18,107	$19,846	$30,998

A geographic summary of net sales from continuing operations is as follows (in thousands):

	For the year ended December 31,		
	2018	2017	2016
United States	$17,736	$19,446	$29,840
International	371	400	1,158
Total net sales	$18,107	$19,846	$30,998

At December 31, 2018 and 2017, approximately 98 percent of our long-lived assets, which consist of property and equipment, were located in the United States.

NOTE 14. RELATED PARTY TRANSACTIONS

On December 12, 2012, our Board of Directors appointed James Tu to serve as our non-executive Chairman. On April 30, 2013, Mr. Tu became the Executive Chairman assuming the duties of the Principal Executive Officer. On October 30, 2013 Mr. Tu was appointed Executive Chairman and Chief Executive Officer by the Board of Directors. On May 9, 2016, Mr. Tu also assumed the role of President. On August 11, 2016, our Board of Directors appointed a separate Executive Chairman of the Board, and Mr. Tu continued to serve in the role of Chief Executive Officer and President, until February 19, 2017.

Mr. Tu is also the Founder, Chief Executive Officer and Chief Investment Officer of 5 Elements Global Advisors, an investment advisory and management company managing the holdings of 5 Elements Global Fund LP, which was a beneficial owner of more than 5 percent of our common stock prior to the August 2014 registered offering. As of December 31, 2018, 5 Elements Global Fund LP holds approximately 2.5 percent of our common stock. 5 Elements Global Advisors focuses on investing in clean energy companies with breakthrough, commercialized technologies, and near-term profitability potential. Mr. Tu is also Co-Founder of Communal International Ltd. ("Communal"), a British Virgin Islands company dedicated to assisting clean energy, solutions-based companies, maximizing technology and product potential and gaining them access to global marketing, distribution licensing, manufacturing and financing resources. Communal has a 50 percent ownership interest in 5 Elements Energy Efficiencies (BVI) Ltd.,

a beneficial owner of approximately 2.4 percent of our common stock. Yeh-Mei Cheng controls 5 Elements Energy Efficiencies (BVI) Ltd. and owns the other 50 percent. She is Co-Founder of Communal International Ltd. with Mr. Tu and the mother of Simon Cheng, a member of our Board of Directors through February 19, 2017 and an employee of the Company through June 30, 2018.

Please refer to Note 16, "Subsequent Events," for more information on our related party transactions.

NOTE 15. LEGAL MATTERS

We may be the subject of threatened or pending legal actions and contingencies in the normal course of conducting our business. We provide for costs related to these matters when a loss is probable and the amount can be reasonably estimated. The effect of the outcome of these matters on our future results of operations and liquidity cannot be predicted because any such effect depends on future results of operations and the amount or timing of the resolution of such matters. While it is not possible to predict the future outcome of such matters, we believe that the ultimate resolution of such individual or aggregated matters will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows. For certain types of claims, we maintain insurance coverage for personal injury and property damage, product liability and other liability coverages in amounts and with deductibles that we believe are prudent, but there can be no assurance that these coverages will be applicable or adequate to cover adverse outcomes of claims or legal proceedings against us.

On November 26, 2013, we announced the sale of our pool products business for a cash purchase price of $5.2 million. Under the terms of the Purchase Agreement, we sold substantially all of the assets associated with the pool products business and the buyer assumed certain related liabilities. The Purchase Agreement provided for an escrow of $500 thousand of the purchase price to secure customary indemnification obligations with respect to our representations, warranties, covenants and other obligations under the Purchase Agreement. Under the terms of the Purchase Agreement, the first of five $100 thousand scheduled escrow releases commenced on March 25, 2014, and was to continue on the 25th day of each of the next four subsequent months. As of December 31, 2015 and 2014, $200 thousand of the cash held in escrow had been released to us and $300 thousand remained in escrow subject to the resolution of outstanding buyer claims. The Purchase Agreement provides that all disputes related to the sale must be resolved through binding arbitration. On February 18, 2015, the buyer filed a claim with the American Arbitration Association (“AAA”) asserting claims for damages of $780 thousand under the Purchase Agreement and relating to product development, which was amended on September 1, 2015 to assert damages of $1.6 million. We believed the claims were without merit and asserted a counterclaim in the arbitration for the $300 thousand that remained in escrow. On March 18, 2016, a settlement agreement was executed for this claim and the funds in the escrow account, plus the interest earned on the account, were released to the buyer.

NOTE 16. SUBSEQUENT EVENTS

On March 29, 2019, we raised approximately $1.7 million from the issuance of subordinated convertible promissory notes to certain investors (the “Convertible Notes”). The Convertible Notes will automatically convert into shares of our Series A Convertible Preferred Stock (the “Series A Preferred Stock”) on April 17, 2019 to the extent permitted without receiving stockholder approval under the equity issuance rules of the NASDAQ Capital Market (the “NASDAQ Cap”) and to the extent sufficient shares of Series A Preferred Stock are authorized under our certificate of incorporation (the “Charter”), based on a conversion price equal to the greater of (a) the volume-weighted average price of our common stock measured over the ten trading day period ending on April 16, 2019 or (b) $0.20 (the “Conversion Rate”). If the Notes cannot fully convert on April 17, 2019 due to the NASDAQ Cap, then no portion of the Notes will convert into Series A Preferred Stock until our stockholders have approved the transaction in accordance with the Nasdaq rules. If the Series A Preferred Stock can be issued under the NASDAQ Cap, but insufficient shares are available under the Charter, then the Convertible Notes will convert in part to the extent of the authorized shares and the remainder will convert upon approval by our stockholders of an amendment to the Charter to increase the authorized number of shares. The Convertible Notes mature on December 31, 2021 and bear interest at a rate of five percent per annum until June 30, 2019 and at a rate of ten percent thereafter.

The Series A Preferred Stock was created by the filing of a Certificate of Designation with the Secretary of State of the state of Delaware for 2,000,000 authorized shares. The Series A Preferred Stock (a) has one vote per share (voting together with holders of our common stock as a single class, except as provided by law), (b) has a preference upon liquidation equal to the Conversion Rate per share and then participates on an as-converted basis with the common stock with respect to any additional distributions, (c) shall receive any dividends declared and payable on the common

stock on an as-converted basis, and (d) is convertible at the option of the holder into shares of common stock on a one-for-one basis. We also filed a Certificate of Elimination with respect to its authorized, but unissued, Series A Participating Preferred Stock, to return such shares to the status of preferred stock available for designation as the Series A Preferred Stock.

The purchase agreement related to the Convertible Notes contains customary representations and warranties and provides for resale registration rights with respect to the shares of our common stock issuable upon conversion of the Series A Preferred Stock, as well as for the resignation of four members of the Board of Directors.

Two of the Investors, James Tu (through Fusion Park LLC) and Brilliant Start Enterprise, Inc., which invested $580 thousand and $500 thousand, respectively, were among the parties to the Schedule 13D filed with the Securities and Exchange Commission (“SEC”) on November 30, 2018, as amended on February 26, 2019, reporting that the filing group (the “13D Group”) held a collective 17.6 percent ownership position in the Company. On February 21, 2019, the 13D Group entered into a settlement with the Company providing for the appointment of two directors and their nomination for election at the

Company's 2019 annual meeting of stockholders. Mr. Tu was appointed as a director in connection with the offering and is expected to be appointed as Chairman, Chief Executive Officer and President and will serve as interim Chief Financial Officer effective April 2, 2019. The Company is expected to conduct a search for a permanent or alternative interim Chief Financial Officer candidate.

SUPPLEMENTARY FINANCIAL INFORMATION TO ITEM 8.

The following table sets forth our selected unaudited financial information for the four quarters in the periods ended December 31, 2018 and 2017, respectively. This information has been prepared on the same basis as the audited financial statements and, in the opinion of management, contains all adjustments necessary for a fair presentation thereof.

QUARTERLY FINANCIAL DATA (UNAUDITED)
(amounts in thousands, except per share amounts)

2018	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net sales	$3,118	$5,158	$5,172	$4,659
Gross profit	19	1,281	1,296	816
Net loss	(3,000)	(1,920)	(1,801)	(2,390)
Net loss per share (basic and diluted)	$(0.25)	$(0.16)	$(0.15)	$(0.20)

2017	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net sales	$4,727	$5,002	$6,011	$4,106
Gross profit	1,622	1,137	1,501	561
Net loss	(1,858)	(1,773)	(3,114)	(4,522)
Net loss per share (basic and diluted)	$(0.16)	$(0.15)	$(0.26)	$(0.39)

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNT AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

We maintain "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed to meet reasonable assurance standards. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. Any design of disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Report on Form 10-K, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2018.

Management's report on internal controls over financial reporting

The management of Energy Focus, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of internal control over financial reporting based upon criteria established in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO Framework").

An effective internal control system, no matter how well designed, has inherent limitations, including the possibility of human error and circumvention or overriding of controls; therefore, it can provide only reasonable assurance with respect to reliable financial reporting. Furthermore, effectiveness of an internal control system in future periods cannot be guaranteed, because the design of any system of internal controls is based in part upon assumptions about the likelihood of future events. There can be no assurance that any control design will succeed in achieving its stated goals under all potential future conditions. Over time, certain controls may become inadequate because of changes in business conditions, or the degree of compliance with policies and procedures may deteriorate. As such, misstatements due to error or fraud may occur and not be detected.

Based upon our evaluation under the COSO framework as of December 31, 2018, management concluded that its internal control over financial reporting was effective as of December 31, 2018.

Changes in internal control over financial reporting

During the fourth quarter of 2018, there were no material changes in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Attestation Report of Independent Registered Public Accounting Firm

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management’s report was not subject to attestation by our independent public accounting firm pursuant to the rules of the Securities and Exchange Commission that permit us to provide only management’s report.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

Directors

The information regarding our directors will be set forth under the caption “Election of Directors” in our Proxy Statement for our 2019 Annual Meeting of Stockholders (the “Proxy Statement”) and is incorporated herein by reference.

Executive officers

The information regarding our executive officers is set forth under the caption entitled “Executive Officers of the Registrant” following Item 4, in Part I, of this report and is incorporated herein by reference.

Section 16(a) beneficial ownership reporting compliance

The information regarding compliance with Section 16 of the Securities Exchange Act of 1934 will be set forth under the caption entitled “Section 16(a) Beneficial Ownership Reporting Compliance” in our Proxy Statement and is incorporated herein by reference.

Audit committee

The information regarding the Audit Committee of our Board of Directors and the information regarding “Audit Committee Financial Experts” will be set forth under the caption entitled “Audit and Finance Committee” in our Proxy Statement and is incorporated herein by reference.

Code of ethics

We have adopted a Code of Ethics and Business Conduct, which applies to all of our directors, officers, and employees. Our Code of Ethics and Business Conduct can be found on our website at www.energyfocus.com. Any person may receive a copy free of charge by writing to us at Energy Focus, Inc., 32000 Aurora Road, Suite B, Solon, Ohio 44139, Attention: Secretary.

We intend to disclose on our website any amendment to, or waiver from, a provision of our Code of Ethics and Business Conduct that applies to our directors and executive officers, including our principal executive officer, principal financial officer, principal accounting officer or controller, or any persons performing similar functions, and that is required to be publicly disclosed pursuant to the rules of the Securities and Exchange Commission.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference from the information provided in the section captioned “Executive Compensation and Other Information” to be included in our Proxy Statement.

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

The information about security ownership of certain beneficial owners and management and related stockholder matters required by this item is incorporated herein by reference from the information to be provided in the section captioned “Security Ownership of Principal Shareholders and Management” in our Proxy Statement. Information regarding our equity compensation plans is set forth under Item 5 of this Annual Report under “Shares authorized for issuance under equity compensation plans.”

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information regarding certain relationships and related transactions and director independence required by this item is incorporated herein by reference to the information to be provided in our Proxy Statement under the captions “Certain Relationships and Related Transactions” and “Director Independence.”

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information regarding principal accountant fees and services and the pre-approval policies and procedures required by this item is incorporated herein by reference from the information to be contained in our Proxy Statement under the captions “Principal Accountant Fees and Services” and “Pre-Approval Policies and Procedures.”

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial statements
The financial statements required by this Item 15(a)(1) are set forth in Item 8.

(2) Financial statement schedules

Schedule II—Valuation and Qualifying Accounts is set forth below. All other schedules are omitted either because they are not applicable or the required information is shown in the financial statements or the notes.

SCHEDULE II
ENERGY FOCUS, INC.
SCHEDULE OF VALUATION AND QUALIFYING ACCOUNTS
(amounts in thousands)

Description	Beginning Balance	Charges to Revenue/ Expense	Deductions	Ending Balance
Year ended December 31, 2018				
Allowance for doubtful accounts and returns	$ 42	$ 20	$ 29	$ 33
Inventory reserves	4,196	1,085	1,069	4,212
Valuation allowance for deferred tax assets	10,556	2,187	—	12,743
Year ended December 31, 2017				
Allowance for doubtful accounts and returns	$ 236	$ 23	$ 217	$ 42
Inventory reserves	5,596	1,139	2,539	4,196
Valuation allowance for deferred tax assets	12,537	3,883	5,864	10,556
Year ended December 31, 2016				
Allowance for doubtful accounts and returns	$ 155	$ 156	$ 75	$ 236
Inventory reserves	2,315	6,110	2,829	5,596
Valuation allowance for deferred tax assets	7,768	4,769	—	12,537

(3) Exhibits required by Item 601 of Regulation S-K

The information required by this Item is set forth on the Exhibit Index that follows the signature page of this report.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

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, thereto duly authorized.

ENERGY FOCUS, INC.

By: /s/ Theodore L. Tewksbury III
Theodore L. Tewksbury III
Chairman, Chief Executive Officer and President
Date: April 1, 2019

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 indicated and on the date indicated:

Signature	Title
/s/ Theodore L. Tewksbury III	Chairman, Chief Executive Officer, President and Director
Theodore L. Tewksbury III	(Principal Executive Officer)
/s/ Jerry Turin	Chief Financial Officer
Jerry Turin	(Principal Financial and Accounting Officer)
*Ronald D. Black	Director
*Jennifer Y. Cheng	Director
*Marc J. Eisenberg	Director
*Geraldine F. McManus	Director

*Michael R. Ramelot	Director
*Satish Rishi	Director
*By:	/s/ Theodore L. Tewksbury III Theodore L. Tewksbury III (Attorney-in-fact) Date: April 1, 2019

71

EXHIBIT INDEX

Exhibit Number	Description of Documents
3.1	Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 13, 2013).
3.2	Amendment to Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
3.3	Amendment to Certificate of Incorporation of the Registration (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 27, 2015).
3.4	Certificate of Designation of Series A Participating Preferred Stock of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on November 27, 2006).
3.5	Bylaws of the Registrant (incorporated by reference to Exhibit 3.5 to the Registrant's Annual Report on Form 10-K filed on March 10, 2016).
3.6	Certificate of Ownership and Merger, Merging Energy Focus, Inc., a Delaware corporation, into Fiberstars, Inc., a Delaware corporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 10, 2007).
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the Registrant's Annual Report on Form 10-K filed on March 27, 2014).
10.1*	2013 Employee Stock Purchase Plan (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement on Form DEF14A filed on August 16, 2013).
10.2*	2004 Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8 (Commission File No. 333-122-686) filed on February 10, 2005).
10.3*	2008 Incentive Stock Plan, as amended (incorporated by reference from Appendix B to the Registrant's Preliminary Proxy Statement on Form PRER14A filed on June 8, 2012).
10.4*	2014 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 10.4 to the Registrant's Annual Report on Form 10-K filed on February 22, 2018).
10.5*	Form of Nonqualified Stock Option Grant Agreement to Non-Employee Directors (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
10.6*	Form of Nonqualified Stock Option Grant Agreement to Employees (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
10.7*	Form of Restricted Stock Unit Grant Agreement to Employees (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
10.8*	Form of Restricted Stock Unit Grant Agreement to Non-Employee Directors (incorporated by reference to Exhibit 10.8 to the Registrant's Annual Report on Form 10-K filed on February 22, 2018).
10.9*	Form of Incentive Stock Option Grant Agreement to Employees (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
10.10*	Separation Agreement and Release dated February 18, 2017 between James Tu and Energy Focus, Inc. (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed February 21, 2017).
10.11*	Chairman, Chief Executive Officer and President Offer Letter and Change in Control Participation Agreement dated February 19, 2017 between Theodore L. Tewksbury III and Energy Focus, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed February 21, 2017).
10.12*	Change in Control Benefit Plan Participation Agreement dated March 21, 2017 between Michael H. Port and Energy Focus, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2017).
10.13*	Energy Focus, Inc. Executive Bonus Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 17, 2017).
10.14*	

	Change in Control Plan and Form of Participation Agreement (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed February 21, 2017).
10.15*	Chief Financial Officer Offer Letter dated May 18, 2018 between Jerry Turin and Energy Focus, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on August 8, 2018).
10.16*	Separation Agreement and Release dated May 22, 2018 between Michael H. Port and Energy Focus, Inc. (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on August 8, 2018).

10.17*	Form of Notice of Stock Option Grant for 2008 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on November 13, 2013).
10.18*	Form of Notice of Stock Option Grant for 2008 Stock Incentive Plan (incorporated by reference to Exhibit 99.2 to the Registrant's Registration Statement on Form S-8 filed on September 8, 2010).
10.19	Lease agreement by and between Aurora Development Center LLC and Energy Focus, Inc. dated April 19, 2016 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 11, 2016).
10.20	Loan and Security Agreement dated December 11, 2018 by and between the Company and Austin Financial Services, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K/A filed on December 14, 2018).
21.1	Subsidiaries of the Registrant (filed with this Report).
23.1	Consent of Plante & Moran, PLLC, Independent Registered Public Accounting Firm (filed with this Report).
24.1	Powers of Attorney (filed with this Report).
31.1	Rule 13a-14(a) Certification by Chief Executive Officer (filed with this Report).
31.2	Rule 13a-14(a) Certification by Chief Financial Officer (filed with this Report).
32.1	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer (filed with this Report).
101	The following financial information from Energy Focus, Inc. Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Shareholders' Equity, (v) Consolidated Statements of Cash Flows, (vi) the Notes to Consolidated Financial Statements.

* Management contract or compensatory plan or arrangement.