

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, 2019

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

**94-3021850**  
(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:

<u>Title of each class</u>	<u>Trading symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common stock, par value \$0.0001 per share	EFOI	NASDAQ

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

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 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 Data 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 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 of "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

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

The aggregate market value of the Company's common stock held by non-affiliates of the Company was approximately \$5.0 million as of June 28, 2019, the last day of the Company's most recently completed second fiscal quarter, when the last reported sales price was \$0.41 per share.

Number of the registrant's shares of common stock outstanding as of March 12, 2020: 15,892,526

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## PART I

### **Forward-looking statements**

Unless the context otherwise requires, all references to “Energy Focus,” “we,” “us,” “our,” “our company,” or “the Company” refer to Energy Focus, Inc., a Delaware corporation and its predecessor entity 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 “would” or, in each case, 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 of this Annual Report 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 liquidity and refinancing demands;
- our ability to obtain refinancing or extend maturing debt;
- 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 sales by adding new customers to reduce the reliance of our sales on a smaller group of customers, and the long sales-cycle that our product requires;
- 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 our high-quality LED lighting technologies and products;
- 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 and timing of government funding available to such customers, as well as the funding resources of our other customers in the public sector and commercial markets;

- *business interruptions resulting from health epidemics or pandemics or other contagious outbreaks, such as the recent corona-virus outbreak or geopolitical actions, including war and terrorism, natural disasters, including earthquakes, typhoons, floods and fires;*
- *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 remediate a significant deficiency, 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, except as required by law. 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](http://www.energyfocus.com). Information on our website is not part of this Annual Report.

Energy Focus, Inc. engages in the design, development, manufacturing, marketing and sale of energy-efficient lighting systems and controls. We develop, market and sell high quality energy-efficient light-emitting diode (“LED”) lighting products and controls in the commercial and military maritime markets (“MMM”). Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and wellness through advanced LED retrofit solutions. Our goal is to be the retrofit technology and market leader for the most demanding applications where performance, quality and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge (“HID”) lighting and other types of lamps in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military tubular LED (“TLED”) and other LED products and controls.

In 2019, we were a company that was going through significant transition and transformation in order to stabilize and regrow our business. This transition is exemplified by the following key and significant changes that occurred during 2019:

- Executive management changes - James Tu returned to the Company as our Chairman and Chief Executive Officer and Tod A. Nestor was named our new President and Chief Financial Officer. These management changes set the stage to start the stabilization and relaunch necessary to ensure Energy Focus is revitalized to become a viable, trusted and sustainable manufacturer in the LED market.

- EnFocus™ lighting platform development - During 2019, we refocused our R&D efforts to define the most acute and significant customer needs and believe that providing affordable and user-friendly lighting controls for existing buildings represents a large market for us in the US and globally. We ultimately invented and developed a dimming and color tuning lighting control platform, EnFocus™, that is adaptable to all possible lighting environments and can be implemented. By leveraging on the existing power lines, to facilitate lighting controls, buildings do not have to install new communication wires or wireless communication paths that incur cybersecurity risks.
- RedCap™ - We repositioned this patented emergency backup battery integrated technology in order to make it more readily available and simple to understand by customers. Our activities included items such as supply chain consolidation for cost and pricing reductions and eliminating the need to do a “bundled purchase” in order to buy this highly differentiated and value-added product.
- Enhanced focus on direct selling efforts - The company experienced significant decrease in sales and profit in part by relying on an agency-based sales model before the 2019 management change. We returned to a direct sales model approach that the Company successfully executed in winning marque customers prior to 2017. While we still work with select lighting agencies, we only work with agencies that understand and embrace our value propositions and can properly and actively support our products and provide sales. We also have been expanding our internal sales team and channel partnerships to complement our regional sales force.
- Other key tactical transitions included:
  - Securing a \$3 million “Key Customer” healthcare contract;
  - Reengineering and redesign efforts to lower cost on numerous products in our US Navy product line; and
  - Winning an award of a \$2.5 million contract for our small globe fixtures, typically found on the exterior of US Navy vessels.

During 2019, we also streamlined our operations including consolidating our R&D operations by closing offices in Taiwan and San Jose, California and establishing a lean organizational structure by further reducing headcount, significantly reducing executive compensation, closely managing all spending done throughout the Company, significantly reducing inventory purchases through more order driven methods, negotiating meaningful cost reductions for our products, while reinvesting in primarily sales driven initiatives and efforts.

As a result of these efforts, we were able to stabilize the company, significantly reduce operating losses even when sales were still low in the third quarter of 2019, reposition the company with a customer centric culture and operation, and began to experience a reversal of momentum in the fourth quarter by achieving a 21.1% increase in quarter-over-quarter growth in sales. Although the short-term business impact of the corona-virus outbreak is still difficult to predict, we remain optimistic that these stabilization and relaunch efforts will provide benefits in the future for Energy Focus.

## **Our Industry**

We develop advanced LED retrofit technologies and product solutions that enable our customers to run their facilities with greater energy efficiency, productivity and employee wellness. We aim to be a LED lighting technology leader by providing high-quality, energy-efficient, “flicker-free”, long-lived, and mercury-free TLED products, other LED lamps and fixture products, and lighting controls to replace existing linear fluorescent, incandescent and HID lamps in mostly indoor lighting applications.

We believe these applications represent a significant portion of the LED lighting market and energy savings potential for our targeted commercial, industrial and MMM.

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 for us. 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 over 50% by replacing fluorescent tubes with LED tubes and by another 20-30% (70% to over 80% in 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. Our new product research and development investments since April 2019 have been focusing on advanced and smart lighting technologies to capitalize on these trends, and EnFocus™ represents such a control platform that we aim to expand in terms of functionalities, applications and intelligence, going forward.

There is also a growing awareness in the industry of the profound influence lighting can have on human health and well-being. 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 as a leading LED manufacturer 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 correlated color temperature (“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. The interference of blue light with human circadian rhythms is well known. This can be alleviated by smart lighting techniques that change the CCT of the LEDs depending on the time of day in order to emulate natural light. 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, controls and fixtures are ideal vehicles to retrofit these capabilities into existing buildings. According to Market and Research, the global smart lighting market is estimated to grow from \$13.4 billion in 2020 and to \$30.6 billion by 2025, at a CAGR of 18.0%.

From the customer feedback we have been receiving, there is a great and growing interest in implementing technologies that assist with color-shift and various IoT applications and we believe that the overall smart lighting market is still severely underdeveloped due to the cost and difficulty of installations of related technologies today in the marketplace, representing significant potential for solutions that could meet customer needs and that could also be affordable, easy to install and secure. We believe our upcoming EnFocus™ lighting platform could effectively address the unmet needs for smart lighting, particularly for existing buildings that have limited economical options to implement lighting controls.

While the LED lighting and smart lighting market is large, growing and underpenetrated, it has also been characterized in recent years by intensifying competition, market leadership changes and aggressive pricing tactics on commoditized products. Our strategy to overcome these challenges is to develop customer-centric technologies and products, and to focus more on a direct sales force approach to ensure and enrich our effective and frequent communication with customers in order to better understand and serve their needs. By understanding the voice of the customer and by incorporating rapidly evolving technologies surrounding LED and smart lighting, be it hardware, software or sensor-to-cloud technologies, we believe that we will continue to be able to develop solutions that better address the customer’s needs with unique and novel product offerings, such as EnFocus™, our upcoming dimmable and tunable lighting and control platform, that deliver substantial value to our customers and accelerate LED and smart lighting adoptions.

## **Our Products**

We design, develop, manufacture and market a wide variety of LED lighting technologies, products and solutions to serve our primary end user 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;
- RedCap™ emergency battery backup TLEDs;
- EnFocus™ lighting platform;
- LED fixtures for fluorescent replacement or HID replacement in low-bay, high-bay and office applications;
- LED downlights;

- LED dock lights;
- LED vapor tight lighting fixtures; and
- LED retrofit kits.

MMM 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;
- Military fixtures; and
- EnFocus™ lighting platform.

Our LED products are more energy-efficient than traditional lighting products, such as fluorescent, incandescent and HID lamps, and we believe they can improve the overall sustainability profile of our customers by providing financial, environmental and human benefits, including achieving significant long-term energy and maintenance cost savings, reducing carbon emission and enhancing the health of building occupants.

The key features of our products are as follows:

- Many of our products make use of proprietary or patented 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, with the majority of our TLED sales providing 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 5% or less. Our 500D series TLED products were the first in the lighting industry to be certified by Underwriters Laboratories (“UL®”) as “low optical flicker, less than 1%”.
- Most of our products meet the lighting efficiency standards mandated by the Energy Independence and Security Act of 2007.
- Most of our products qualify for federal and state tax and rebate incentives for commercial consumers available in certain states.

Our product development capabilities, 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;
- Strong and growing team of experienced engineers in electrical, electronics, optical, thermal, mechanical, communications and software technologies;
- Concentration on developing and providing high-quality, price competitive TLED lamps and the surrounding technologies 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 MMM, government and commercial building markets.

As we seek to develop new connected lighting LED solutions, we have invested and expect to continue to expand our investments in smart, connected lighting research and development activities and partnerships. Lighting controls, including dimming, sensor and daylighting technologies, can yield significant energy savings. We believe that the controllability of LED technology and our ability and plan to integrate more occupancy sensing, data processing and network interface hardware and software into our existing products will allow us to further differentiate our LED solutions and provide greater non-energy benefits (“NEBs”) to our customers.

#### **Sales and marketing**

Due to our belief that technologies and performance associated with LED lighting are not well understood due to the nature of LED’s rapid evolution, we are mainly focusing on a direct sales model that aims to better educate end-users and contracting

partners regarding the benefits and unique value propositions of our products. Our primary target customers are enterprise end-users, as well as contractors or energy service companies that could incorporate our products into their projects. In a more limited way, we also sell through lighting agencies that represent our products in territories in which we do not have a direct sales presence. As of December 31, 2019, we have seven in-house sales personnel and eighteen sales agencies, each of which has, on average, approximately ten agents representing Energy Focus products. We aim to continue to expand our in-house sales team, which now covers regions in the Midwest, Northeast, South and West, to eventually cover all geographic regions across the United States.

We focus on industry verticals where the economic and NEBs, as well as technical specifications of our high-quality lighting product offerings are most compelling. Our LED lighting products fall into two broad market categories, commercial markets, which tend to focus on quality, efficacy, total cost of ownership and return on investment, and MMM which require higher, more rigorous military specifications for durability and dependability.

With the introduction of our military Intellitube<sup>®</sup> product in 2011, which replaced two-foot fluorescent lamps on U.S. Navy ships, military sales had represented the majority of our overall sales. Since 2016 when the competitive landscape changed due to the entrance of new competitors into the MMM, a drastic decline in pricing and limited remaining opportunities, the military sector, while still important, has made up a smaller percentage of our total sales. However, since our management change in April 2019, we have been focusing on improving the design of our MMM products to significantly reduce product cost, and we believe that these efforts will enhance our competitiveness in the MMM allowing us to carefully grow this portion of our business.

We launched our first commercial LED lighting products in 2010. Since then, we have been aggressively building and expanding our commercial and industrial market presence where the economic and non-energy benefits, and technical specifications of our high-quality lighting product offerings are compelling, particularly for mission-critical facilities in the enterprise verticals such as healthcare, education and industrial. For example:

- Given the 24/7 lighting requirements of hospital systems we believe that our LED solutions offer the proven 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 primary LED lighting supplier and 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 expand into more hospital systems across the country.
- 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 school districts, colleges and universities. Our LED lighting products are now installed in over 100 school districts across the country and increasing number of 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 with fluorescent or metal halide light sources. In the industrial market in particular, due to the usage of metal halide lighting, the energy and maintenance 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.

In addition to our direct and indirect sales force, we have also started launching more outbound telephonic and email campaigns that will help us contact a much larger number of potential new customers. In addition, we believe that our renewed and continuing focus on technology innovation and product engineering designs to lower product costs will continue to enhance the overall competitiveness of our LED lighting products and provide us with the strategic flexibility to expand our distribution channels.

### **Concentration of sales**

In 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales. In 2018, one customer, a distributor to the U.S. Navy, accounted for 42% 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% and 13% of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17% of net sales. Total sales to distributors to the U.S. Navy represented 22% 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 United States, as well as TLED manufacturers mostly based in Asia, whose financial resources may substantially exceed ours and whose 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, Osram Sylvania and GE Lighting, as well as smaller manufacturers or distributors such as LED Smart, Revolution Lighting Technologies, Orion Energy Systems, Green Creative and Keystone Technologies. 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, Malaysia, 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, 2019, 2018 and 2017 were \$1.3 million, \$2.6 million and \$2.9 million, respectively. We believe that our now customer centric product development efforts represent a better leverage on our R&D investments and aim to continue to focus on developmental projects that could produce more timely and impactful products and solutions for faster customer adoptions.

## **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 U.S. 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 April 2037. 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, 2019, we had 42 full-time employees, all of whom were located in the United States. We also had four temporary contract employees at December 31, 2019. 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 MMM lighting products and controls. Please refer to Note 13, "Product and Geographic Information," included in Item 8 of this Annual Report, for additional information.

## **Available information**

We maintain a website at [www.energyfocus.com](http://www.energyfocus.com). We are providing the address to our website solely for the information of investors. The information on our website is not a part of, nor is it incorporated by reference into this Annual Report. Through our website, we make available, free of charge, our annual proxy statement, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish them to, the Securities and Exchange Commission, or the SEC. The SEC maintains a website that contains these reports at [www.sec.gov](http://www.sec.gov).

## ITEM 1A. RISK FACTORS

### Risks associated with our business

*The recent corona virus outbreak could have an adverse effect on our business.*

Concerns are rapidly growing about the global outbreak of a novel strain of corona-virus (COVID-19). The virus has spread rapidly across the globe, including the U.S. The pandemic is having an unprecedented impact on the U.S. economy as federal, state and local governments react to this public health crisis, which has created significant uncertainties. These uncertainties include, but are not limited to, the potential adverse effect of the pandemic on the economy, our supply chain partners, transportation and logistics providers, our employees and customers. As the pandemic continues to grow, fear about becoming ill with the virus and recommendations and/or mandates from federal, state and local authorities to avoid large gatherings of people or self-quarantine may continue to increase, which has already affected, and may continue to affect our supply chain as well as our customer base. Continued impacts of the pandemic could materially adversely affect our near-term and long-term revenues, earnings, liquidity and cash flows, and may require significant actions in response, including but not limited to, employee furloughs, plant and operational shut-downs in Ohio and Nevada (third-party warehouse), expense reductions or discounting of pricing of our products, all in an effort to mitigate such impacts. The extent of the impact of the pandemic on our business and financial results will depend largely on future developments, including the duration of the spread of the outbreak within the U.S., the impact on capital and financial markets and the related impact on consumer confidence and spending, all of which are highly uncertain and cannot be predicted. This situation is changing rapidly, and additional impacts may arise that we are not aware of currently.

*We rely on equity and debt 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, 2019, we reported a net loss of \$7.4 million and are dependent upon the availability of financing in order to continue our business.

As of December 31, 2019, we had cash of approximately \$0.4 million and had a balance of \$0.7 million under our \$5.0 million revolving line of credit (the "Credit Facility") with Austin Financial Services ("Austin"). As of March 5, 2020, our cash was approximately \$2.6 million and our outstanding balance under the Credit Facility was approximately \$0.8 million. 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. Austin has the ability to terminate the Credit Facility with 90-days' notice. The maturity date of the Credit Facility is December 11, 2021.

On November 25, 2019, we entered into a Note Purchase Agreement (the "Iliad Note Purchase Agreement") with Iliad Research and Trading, L.P. ("Iliad") pursuant to which the Company sold and issued to Iliad a promissory note in the principal amount of \$1,257,000 (the "Iliad Note"). The Iliad Note has a maturity date of November 24, 2021 and accrues interest at 8% per annum, compounded daily, on the outstanding balance. The Company may prepay the amounts outstanding under the Iliad Note at a premium, which is 15% during the first year and 10% during the second year. Beginning in May 2020, Iliad may require the Company to redeem up to \$150,000 of the Iliad Note in any calendar month, subject to certain limited deferral rights. For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and capital resources-Iliad Note."

Even with the Credit Facility, we may not generate sufficient cash flows from our operations or be able to borrow sufficient funds to sustain our operations. As such, we will likely need additional external financing during 2020 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;
- obtaining funding from the sale of our common stock or other equity or debt instruments; and
- obtaining debt financing with lending terms that more closely match our business model and capital needs.

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, as well as global health risks, 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 curtail 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, 2019, 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, 2019 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, 2019 includes disclosure 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 generate enough cash or obtain additional 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 could 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 are 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 operations of \$7.4 million, \$9.1 million and \$11.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019, we had an accumulated deficit of \$124.9 million and cash of approximately \$0.4 million.

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 and smart LED lighting and control products. There is a risk that our strategy to return to profitability may not be as successful as we envision. We might 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 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales. In 2018, one customer, a distributor for the U.S. Navy, accounted for 42% 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% and 13% of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17% of net sales. Total sales to distributors to the U.S. Navy represented 22% 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 customers 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 and reduce the dependence on one or a few customers, through the addition of our direct to customer sales strategy but we cannot provide any assurance that our efforts 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.

Historically, we have experienced long sales-cycles, as well as slow ramp-up by new customers to purchase large amounts of LED products from us. Given the fiercely competitive lighting market in which we operate, we are constantly trying to balance pricing with the quality-premium our products command both in brand reputation and performance. As a result, adding new customers could generally be a slow process, and getting their sales increased to more significant levels usually takes a long period of time. As we continue to develop more customer-centric new products such as EnFocus™, we hope to both add new customers more quickly and have our customers scale their purchasing levels more quickly. However this is no guarantee of faster customer acceptance or performance of this new product or any other that has been or is being developed.

*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 and related controls 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 and sales team;
- add experienced senior level managers;
- attract, retain and adequately compensate 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, 2018 and 2019, 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 may 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 or there are unanticipated interruptions in our supply chain from such possibilities as the corona-virus outbreak, 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 markets (“MMM”) 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 Philips, Osram Sylvania, LED Smart, Revolution Lighting Technologies, Orion Energy Systems, Green Creative and Keystone Technologies. 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 work with independent agents and sales representatives for a portion of our net sales, and the failure to incentivize, retain and manage our relationships with these third parties, or the termination of these relationships, could cause our net sales to decline and harm our business.*

In the past, we pursued an agency driven sales channel strategy in order to expand our market presence throughout the United States. As a result, at that time we had 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. During 2019 we significantly reduced our reliance on agencies for a substantial portion of our sales, and instead paired down our agency relationships to focus only on those relationships that were both mutually beneficial and strategically important. Meanwhile, during 2019 we began to rely much

more significantly on a direct sales go-to-market strategy using internal sales personnel and select channel partners to drive a substantial portion of our sales. However, we remain reliant on independent agents and sales representatives for a portion of our sales.

Furthermore, our agency 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 an 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, and in turn protecting those breakthroughs through intellectual property;
- 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 and commercialized, 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 are highly dependent on our senior management and other key personnel due to our very lean organizational structure. Our future success will depend on our ability to attract, retain, develop and motivate 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, retain and adequately compensate 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 also do not maintain “key person” insurance policies on any of our officers or our other employees.

*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, intellectual property, 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, cyclicalities 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;
- macroeconomic, geopolitical and health concerns, including the corona-virus outbreak;
- 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 causes 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 significant 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, Malaysia, 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. We are monitoring the potential impact of the corona-virus outbreak. This includes evaluating the impact on our customers, suppliers, and logistics providers as well as evaluating governmental actions being taken to curtail the spread of the virus. The significance of the impact on us is yet uncertain; however, a material adverse effect on our customers, suppliers, or logistics providers could significantly impact our operating results. 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 and tariffs 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, tariffs, 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 and brand 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 generally 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.

From time to time, we have been and may in the future be subject to claims or allegations that we infringe upon or have misappropriated the intellectual property of third parties. Defending against such claims is costly and intellectual property litigation often involves complex questions of fact and law, with unpredictable results. We may be forced to acquire rights to such third-party intellectual property on unfavorable terms (if rights are made available at all), pay damages, modify accused products to be non-infringing, or stop selling the applicable product altogether.

*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 significant 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 MMM 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 Malaysia, 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 MMM products as well as a limited number of foreign geographic markets which we expect to expand over time.

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, restrictions or disruptions;
- potentially adverse tax consequences;
- health epidemics or pandemics or other contagious outbreaks, such as the recent corona-virus outbreak;
- the burdens of compliance with the U.S. Foreign Corrupt Practices Act, similar anti-bribery laws in other countries, and a wide variety of other 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.

*Our net sales might be adversely impacted if our lighting systems do not meet certain certification and compliance standards.*

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 various 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 subject to complex 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, 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.

*We have identified a significant deficiency, and have in the past experienced a material weakness, in our internal controls over financial reporting, and if we fail to remediate this significant deficiency or experience additional material weaknesses in the future or to otherwise maintain effective financial reporting systems and processes, we may be unable to accurately and timely report our financial results or comply with the requirements of being a public company, which could cause the price of our common stock to decline and harm our business.*

As a public company reporting to the SEC, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, 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.

We identified a significant deficiency in our internal control over financial reporting as of December 31, 2019, which has not been remediated. The significant deficiency was primarily due to the sufficiency of supervision and review by employees for non-routine accounting and related financial reporting matters. This significant deficiency relates to the same subject of the material weakness we had during the first three quarters of 2019. We continue implementing our remediation plan for this significant deficiency. We cannot assure you that the measures we have taken to date, and are continuing to implement, will be sufficient to avoid potential future material weaknesses or significant deficiencies. Moreover, we cannot be certain that we will not in the future have additional significant deficiencies or material weaknesses in our internal control over financial reporting, or that we will successfully remediate any that we find. In addition, the processes and systems we have developed to date may not be adequate. Accordingly, there could continue to be a reasonable possibility that the significant deficiency we have identified or other material weaknesses or deficiencies could result in a misstatement of our accounts or disclosures that would result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis, or cause us to fail to meet our obligations to file periodic financial reports on a timely basis. Any of these failures could result in adverse consequences that could materially and adversely affect our business, including an adverse impact on the market price of our common stock, potential action by the SEC against us, possible defaults under our debt agreements, shareholder lawsuits, delisting of our stock, general damage to our reputation 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”) and customer relationship management (“CRM”) 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, as well as lead generation, customer tracking, customer sourcing, etc.

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 the beginning of 2019, our market price has ranged from a low of \$0.38 to a high of \$1.32 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;
- geopolitical changes, global health concerns and macroeconomic changes;
- 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 or preferred stock without stockholder approval, which may adversely affect the market price of our common stock.*

We are authorized to issue 50,000,000 shares of common stock of which 15,892,526 shares were issued and outstanding as of March 12, 2020 and 5,000,000 shares of preferred stock, of which 2,709,018 were issued and outstanding as of March 12, 2020. Our board of directors has the authority, without action or vote of our stockholders, to issue authorized but unissued shares of common and preferred stock subject to the rules of the NASDAQ Stock Market ("NASDAQ"). In addition, in order to raise additional capital or acquire businesses in the future, we may need to issue securities that are convertible or exchangeable for shares of our common or preferred stock. 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.

*Our failure to comply with the continued listing requirements of NASDAQ 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. 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. In May 2019, we received another 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 the Bid Price Rule. We did not regain compliance within the initial 180-day compliance period and were granted an extension to regain compliance for another 180 calendar days, or until May 11, 2020 (the "Second Compliance Period"). We are currently evaluating options (including, in the discretion of our board of directors, a reverse stock split of our common stock at a ratio of at least 1-for-2 and up to 1-for-20, which discretionary stock split has been approved by our

stockholders) to regain compliance but there can be no assurance that we will regain compliance with the Bid Price Rule. If we fail to regain compliance during the Second Compliance Period, or we do not remain compliant with the other continued listing requirements, then we could be delisted from NASDAQ. If we were delisted, it would likely have a negative impact on our stock price and liquidity. For example, in the event our common stock is delisted from NASDAQ, the amount outstanding under the Iliad Note will automatically increase by 15% as of the date of such delisting. 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, a capital structure strategy 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.

*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 is currently one analyst covering us, which could increase the influence of this particular analyst or their reports. If this analyst 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.

#### **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 15, “Legal Matters,” included in Item 8 of this Annual Report.

## **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

## **PART II**

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

### **Market Information**

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

### **Stockholders**

There were approximately 40 holders of record of our common stock as of March 12, 2020, 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.



**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 Annual Report and the Consolidated Financial Statements and related notes found in Item 8 of this Annual Report.

**SELECTED FINANCIAL DATA**

(amounts in thousands, except per share data)

	2019	2018	2017	2016	2015
<b>OPERATING SUMMARY</b>					
Net sales	\$ 12,705	\$ 18,107	\$ 19,846	\$ 30,998	\$ 64,403
Gross profit	1,974	3,412	4,821	7,677	29,292
Loss on impairment	—	—	185	857	—
Restructuring	196	111	1,662	—	—
Net (loss) income from continuing operations	(7,373)	(9,111)	(11,267)	(16,875)	9,471
Loss from discontinued operations	—	—	—	(12)	(691)
<b>Net (loss) income</b>	<b>(7,373)</b>	<b>(9,111)</b>	<b>(11,267)</b>	<b>(16,887)</b>	<b>8,780</b>
<b>Net (loss) income per share - basic:</b>					
From continuing operations	\$ (0.60)	\$ (0.76)	\$ (0.95)	\$ (1.45)	\$ 0.91
From discontinued operations	—	—	—	—	(0.07)
<b>Total</b>	<b>(0.60)</b>	<b>(0.76)</b>	<b>(0.95)</b>	<b>(1.45)</b>	<b>0.84</b>
<b>Net (loss) income per share - diluted:</b>					
From continuing operations	\$ (0.60)	\$ (0.76)	\$ (0.95)	\$ (1.45)	\$ 0.88
From discontinued operations	—	—	—	—	(0.06)
<b>Total</b>	<b>(0.60)</b>	<b>(0.76)</b>	<b>(0.95)</b>	<b>(1.45)</b>	<b>0.82</b>
<b>Shares used in net (loss) income per share calculation:</b>					
Basic	12,309	11,997	11,806	11,673	10,413
Diluted	12,309	11,997	11,806	11,673	10,752
<b>FINANCIAL POSITION SUMMARY</b>					
<b>Total assets</b>	<b>\$ 11,739</b>	<b>\$ 18,492</b>	<b>\$ 22,151</b>	<b>\$ 34,978</b>	<b>\$ 55,702</b>
Cash and cash equivalents	350	6,335	10,761	16,629	34,640
Credit line borrowings	715	2,219	—	—	—
Current maturities of long-term debt	2,585	—	—	—	—
Long-term debt, net of current maturities	109	—	—	—	—
Stockholders' equity	3,996	11,052	19,292	29,938	45,320
Common shares outstanding	12,428	12,091	11,869	11,711	11,649

## 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. engages in the design, development, manufacturing, marketing and sale of energy-efficient lighting systems and controls. We develop, market and sell high quality energy-efficient light-emitting diode (“LED”) lighting products and controls in the commercial and military maritime markets (“MMM”). Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and wellness through advanced LED retrofit solutions. Our goal is to be the retrofit technology and market leader for the most demanding applications where performance, quality and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge (“HID”) lighting and other types of lamps in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military tubular LED (“TLED”) and other LED products and controls.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization, competition and price erosion. We have been experiencing these industry forces in both our military business since 2016 and in our commercial segment, where we once commanded significant price premiums for our flicker-free TLEDs with primarily 10-year warranties. Since April 2019, we have focused on redesigning our products for lower costs and consolidating our supply chain for stronger purchasing power where appropriate in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at a premium to the competitive range and we expect aggressive pricing actions and commoditization to continue to be a headwind until our more 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 is to move up the value chain, with more innovative and differentiated products and solutions that offer greater, distinct value to our customers. Two specific examples of these products we have recently developed include the RedCap™, our emergency backup battery integrated TLED, and EnFocus™, our new dimmable/tunable lighting and control platform that we are launching in 2020. We do believe our revamped go-to-market strategy that focuses more on direct-sales and listens to the voice of the customer has led to better and more impactful product development efforts and will eventually translate into larger addressable market and greater sales growth for us.

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 United States. We closed our New York, New York, Arlington, Virginia and Rochester, Minnesota offices, reduced full-time equivalent headcount by 51% 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, 2017, we expanded our sales coverage to the entire United States through six geographic regions and at the time had 50 sales agencies, each of which had, 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 the fourth quarter of 2017, have gained traction, with sales of new products introduced in the past two years growing from less than 1% of total revenue in the fourth quarter of 2017 to 17% 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% from 2017 to 2018 and we saw some return of our military Intellitube® sales as we achieved more competitive pricing through our cost reductions.

Since April 2019 we have experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company significant additional restructuring efforts were undertaken. The Company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the Company was purchasing, dramatically changed the composition of our

board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July 2019. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including certain elements of supply chain and marketing. In connection with these actions, we recorded severance and related benefits charges of \$0.1 million during the three months ended March 31, 2019 and \$0.1 million during the second quarter of 2019. These additional restructuring charges primarily related to severance and related benefits charges as a result of eliminating three positions during the first quarter of 2019 and nine positions during the second quarter of 2019, as well as costs associated with closing our offices in San Jose, California and Taipei, Taiwan in the second quarter of 2019. With quarterly sales for the Company leveling off at its low point in the third quarter of 2019 at \$2.9 million, we began to see the impact for our relaunch efforts and restructuring of our sales organization in the fourth quarter achieving sales of \$3.5 million, or a quarter-over-quarter growth rate of 21.1%. In addition, losses were mitigated through the better cost management and a sharp focus on better managing pricing and inventory decisions for the last half of 2019.

Despite progress in these areas in the last three quarters of 2019, the Company's results reflect continued challenges due to long and unpredictable sales cycles, unexpected delays in customer retrofit budgets and project starts, continuing aggressive price competition, the challenge of reducing losses in the near term, and an intensely competitive industry going through constant change. The substantial doubt about our ability to continue as a going concern continued to exist as of December 31, 2019.

During the beginning of 2020 we continued to see continued benefits from the relaunch efforts undertaken in the last three quarters of 2019. It is our belief that the continued momentum of the efforts undertaken in 2019, along with the launch of new and innovative products will continue to result in improved sales and bottom-line performance for the Company, barring significant economic and business impacts from the corona-virus outbreak. Meanwhile, the Company continues to seek additional external funding alternatives and sources and has not yet achieved but continues to strive to achieve profitability. We plan to achieve profitability through growing our sales by continuing to execute on our direct sales strategy, complemented by our marketing outreach campaigns, channel partnerships, and new sales from an e-commerce platform, which we plan to launch in the first half of 2020, as well as continuing to apply rigorous and economical discipline in our organization, business processes and policies, supply chain and organizational structure.

We are monitoring the potential impact of the corona-virus outbreak. This includes evaluating the impact on our customers, suppliers, and logistics providers as well as evaluating governmental actions being taken to curtail the spread of the virus. The significance of the impact on us is yet uncertain; however, a material adverse effect on our customers, suppliers, or logistics providers could significantly impact our operating results. We also plan to continue to actively follow, assess and analyze the development of the corona-virus outbreak spread and stand ready to adjust our organizational structure, strategies, plans and processes to respond to the impacts from the virus spread in the timeliest manner.

## 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:

	2019	2018	2017
<b>Net sales</b>	100.0 %	100.0 %	100.0 %
Cost of sales	84.5	81.2	75.7
<b>Gross profit</b>	15.5	18.8	24.3
<b>Operating expenses:</b>			
Product development	10.1	14.3	14.8
Selling, general, and administrative	58.6	54.1	57.0
Loss on impairment	—	—	0.9
Restructuring	1.6	0.6	8.4
<b>Total operating expenses</b>	70.3	69.0	81.1
<b>Operating loss</b>	(54.7)	(50.2)	(56.8)
<b>Other expenses:</b>			
Interest expense	2.5	—	—
Other expenses, net	0.7	—	0.4
<b>Net loss before income taxes</b>	(57.9)	(50.2)	(57.3)
Provision for (benefit from) income taxes	0.1	0.1	(0.5)
<b>Net loss</b>	(58.0)	(50.3)	(56.8)
<b>Net loss</b>	(58.0)%	(50.3)%	(56.8)%

## Net sales

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

	2019	2018	2017
Commercial products	\$ 7,877	\$ 8,662	\$ 15,217
MMM products	4,828	9,445	4,629
<b>Total net sales</b>	\$ 12,705	\$ 18,107	\$ 19,846

Our net sales of \$12.7 million in 2019 decreased 29.8% compared to 2018 mainly driven by a decrease of 48.9% in MMM sales. This is primarily due to two of our products pending evaluation by Defense Logistics Agency (“DLA”), during which time the US Navy is not allowed to purchase these two products and also due to federal government funding restrictions. Net sales of our commercial products decreased 9.1% in 2019 as compared to 2018, reflecting fluctuations in the timing, pace, and size of commercial projects.

Net sales of \$18.1 million in 2018 decreased 8.8% in comparison to \$19.8 million in 2017. MMM product sales increased by 104.0% 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% 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.

## International sales

We do not generate significant sales from customers outside the United States. International net sales accounted for approximately 1% of net sales in 2019, and approximately 2% of net sales in 2018 and 2017. Changes in currency exchange rates did not have an impact on net sales in 2019, 2018 or 2017, as our sales, including international sales, are denominated in U.S. dollars.

## Gross profit

Gross profit was \$2.0 million in 2019, compared to \$3.4 million in 2018. The decline in gross profit was primarily driven by a decline in MMM sales, due to two of our products pending evaluation by DLA, during which time the U.S. Navy was not allowed to purchase and also due to federal government funding restrictions. Our 2019 gross profit as a percent of net sales of 15.5% decreased from our 2018 gross profit as a percent of net sales of 18.8%, particularly due to increases in purchase prices, customs duty and Chinese tariffs, which were partly offset by a benefit of cost of warranty and repair, whereby other cost of sales elements remained relatively flat as compared to 2018.

Gross profit was \$3.4 million in 2018, compared to \$5 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% decreased from our 2017 gross profit as a percent of net sales of 24.3%. 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.

## 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,		
	2019	2018	2017
Total gross product development expenses	\$ 1,284	\$ 2,597	\$ 2,940

Gross product development expenses were \$1.3 million in 2019, a decrease of 50.6%, compared to \$2.6 million in 2018. The decrease primarily resulted from lower salaries and related benefits of \$0.9 million, lower outside testing fees of \$0.3 million, as well as lower travel costs of \$0.1 million. Gross product development expenses were \$2.6 million in 2018, a decrease of \$0.3 million or 11.7% 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.

### Selling, general, and administrative

Selling, general, and administrative expenses were \$7.4 million, or 58.6%, of net sales in 2019, compared to \$9.8 million, or 54.1%, of net sales in 2018. Of the year-over-year \$2.4 million decrease, approximately \$1.4 million is attributable to our restructuring initiative, resulting in reduced salaries, including stock-based compensation and related benefits, \$0.3 million to decrease in severance and benefits, \$0.2 million decrease each to commissions and depreciation expense, \$0.1 million decrease each to accounting fees, network costs and trade show costs. Savings were offset by increased consultant costs of \$0.3 million.

Selling, general, and administrative expenses in 2018 decreased by \$1.5 million, or 13.5%, from \$11.3 million in 2017. Of the 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 resignation of Jerry Turin, our prior Chief Financial Officer.

### *Loss on impairment*

As a result of the decline in the level of expected future sales of our MMM 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 of this Annual Report for further information.

### *Restructuring*

In the first quarter of 2017, we announced a restructuring initiative including 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 eliminated an additional 17 production and administrative positions 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 \$0.2 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.

During 2019, we recorded restructuring charges totaling approximately \$0.2 million for the accretion expense for the remaining lease obligation for our former New York, New York and Arlington, Virginia offices. The lease on our Arlington, Virginia office ended September 30, 2019.

As of December 31, 2019, we estimated that we would receive a total of approximately \$0.4 million in sublease payments to offset our remaining lease obligations of \$0.5 million, which extend until June 2021. 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 of this Annual Report for further information.

## **Other expenses**

### *Interest expense*

We incurred \$317 thousand in interest expense in 2019, primarily related to interest on borrowings and non-cash amortization of fees related to the revolving credit facility we entered into during December 2018 and under the Iliad Note Purchase Agreement we entered into during November 2019. We incurred \$8 thousand in interest expense in 2018, primarily related to borrowings under the revolving credit facility. We incurred \$2 thousand in interest expense in 2017 related to an insurance premium financing agreement.

### *Other expenses, net*

We recognized other expenses, net of \$91 thousand in 2019, compared to other expenses, net of \$7 thousand in 2018 and other expenses, net of \$99 thousand in 2017. Other expenses, net in 2019 primarily consisted of \$80 thousand of collateral management fees related to the revolving credit facility we entered into during December 2018 and a net loss on the sale and disposal of fixed assets of \$24 thousand, partially offset by various refunds of \$12 thousand. Other expenses, net in 2018 primarily consisted of the non-cash amortization of fees related to the revolving credit facility of \$9 thousand and a net loss on the sale and disposal of fixed assets of \$2 thousand, partially offset by a net gain on foreign exchange of \$4 thousand. Other expenses in 2017 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, 2019, 2018 and 2017, our effective tax rate was (0.1)%, (0.1)%, and 1.0%, respectively.

In 2019, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the \$8.3 million additional federal net operating loss we recognized for the year. 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.

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% to 21% 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, 2019 and 2018, respectively. We had no net deferred liabilities at December 31, 2019 or 2018. We will continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2019, we had net operating loss carry-forwards of approximately \$108.8 million for federal income tax purposes (\$64.5 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$54.5 million of the \$108.8 million 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% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$8.3 million and \$8.7 million in net operating losses generated in 2019 and 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 of this Annual Report for further information.

## **Net loss**

Despite a \$5.4 million, or 29.8 percent, decline in net sales, our net loss from operations improved to \$7.4 million in 2019 compared to \$9.1 million in 2018. The improvement in our loss 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 previously.

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.

The improvement in our loss from operations in 2018 as compared to 2017 was directly attributable to our restructuring initiatives, which resulted in a \$3.6 million year-over-year operating expense reduction, including \$0.1 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.

## Liquidity and capital resources

### General

We generated a net loss of \$7.4 million in 2019, compared to net loss of \$9.1 million in 2018. We have incurred substantial losses in the past, and as of December 31, 2019, we had an accumulated deficit of \$124.9 million.

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 products required for long-term competitiveness and revenue growth, continue our efforts to reduce product cost, and drive further operating efficiencies. There is a risk that our strategy to return to profitability may not be as successful as we envision. We will likely require additional financing to achieve our strategic plan 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.

Considering both quantitative and qualitative information, we continue to believe that the combination of our plans to obtain additional external financing, obtain appropriate funding facilities, restructuring actions, current financial position, liquid resources, obligations due or anticipated within the next year, executive and sales 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 2020 and will mitigate the substantial doubt about our ability to continue as a going concern.

### Credit Facility

On December 11, 2018, we entered into a \$5.0 million revolving line of Credit Facility with Austin Financial Services (“Austin”) as described further below. As of December 31, 2019, our cash was approximately \$0.4 million and our outstanding balance was approximately \$0.7 million under the Credit Facility. As of December 31, 2019, our availability under the Credit Facility was \$1.6 million.

### Convertible Notes

On March 29, 2019, we raised \$1.7 million (before transaction expenses) from the issuance of \$1.7 million in principal amount of subordinated convertible promissory notes to certain investors (the “Convertible Notes”). The Convertible Notes had a maturity date of December 31, 2021 and bore interest at a rate of 5% per annum until June 30, 2019 and at a rate of 10% thereafter. Pursuant to their terms, on January 16, 2020, following approval by our stockholders of certain amendments to our certificate of incorporation, the principal amount of all of the Convertible Notes and the accumulated interest thereon in the amount of \$1,815,041 converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of the Company’s Series A Convertible Preferred Stock, par value \$0.0001 per share (“Series A Preferred Stock”), which is convertible on a one-for-one basis into shares of our common stock.

### Iliad Note

On November 25, 2019, the Company entered into the Iliad Note Purchase Agreement with Iliad pursuant to which the Company sold and issued to Iliad the Iliad Note in the principal amount of \$1.3 million. The Iliad Note was issued with an original issue discount of \$142 thousand and Iliad paid a purchase price of \$1.1 million for the issuance of the Iliad Note, after deduction of \$15 thousand of Iliad’s transaction expenses.

The Iliad Note has a maturity date of November 24, 2021 and accrues interest at 8% per annum, compounded daily, on the outstanding balance. The Company may prepay the amounts outstanding under the Iliad Note at a premium, which is 15% during the first year and 10% during the second year. Beginning in May 2020, Iliad may require the Company to redeem up to \$150 thousand of the Iliad Note in any calendar month. The Company has the right on three occasions to defer all redemptions that Iliad could otherwise require the Company to make during any calendar month. Each exercise of this deferral right by the Company will increase the amount outstanding under the Note by 1.5%.

In the event our common stock is delisted from NASDAQ, the amount outstanding under the Iliad Note will automatically increase by 15% as of the date of such delisting.

Pursuant to the Iliad Note Purchase Agreement and the Iliad Note, we have, among other things, agreed that, until the Iliad Note is repaid:



- 10% of gross proceeds the Company receives from the sale of our common stock or other equity must be paid to Iliad and will be applied to reduce the outstanding balance of the Iliad Note (the failure to make such a prepayment is not an event of default under the Iliad Note, but will increase the amount then outstanding under the Note by 10%); and
- unless agreed to by Iliad, we will not engage in certain financings that involve the issuance of securities that include a conversion rights in which the number of shares of common stock that may be issued pursuant to such conversion right varies with the market price of our common stock (a “Restricted Issuance”); provided, however, if Iliad does not agree to a Restricted Issuance, the Company may on up to three occasions make the Restricted Issuance anyway, but the outstanding balance of the Iliad Note will increase 3% on each occasion the Company exercises its right to make the Restricted Issuance without Iliad’s agreement.

Upon the occurrence of an event of default under the Iliad Note, Iliad may accelerate the date for the repayment of the amount outstanding under the Iliad Note and increase the amount outstanding by an amount ranging from 5% to 15%, depending on the nature of the default. Certain insolvency and bankruptcy related events of default will result in the automatic acceleration of the amount outstanding under the Iliad Note and the outstanding amount due will be automatically increased by 5%. After the occurrence of an event of default, Iliad may elect to have interest accrue on the Iliad Note at a rate per annum of 22%, or such lesser rate as permitted under applicable law.

#### *January 2020 Equity Offering*

In January of 2020, we retained H.C. Wainwright & Co., LLC to act as our exclusive placement agent in connection with the offer and sale of 3,441,803 shares of our common stock to certain institutional investors, at a purchase price of \$0.674 per share, in a registered direct offering. We also sold to the same institutional investors unregistered warrants to purchase up to 3,441,803 shares of common stock at an exercise price of \$0.674 per share in a concurrent private placement for a purchase price of \$0.125 per warrant. We paid the placement agent commissions of \$193 thousand plus \$50 thousand in expenses in connection with the registered direct offering and the concurrent private placement, and we also paid clearing fees of \$13 thousand. Proceeds to us, before expenses, from the sale of common stock and warrants (the “January 2020 Equity Offering”) were approximately \$2.5 million. In accordance with the terms of the Iliad Note, 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) were used to make payments on the Iliad Note, a large portion of which was the outstanding principal amount.

#### *Need for Additional Financing*

The proceeds from the Convertible Notes, the Note Purchase Agreement and the January 2020 Equity Offering 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. 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 and grow our business. As such, we expect to need additional external financing during 2020 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;
- obtaining funding from the sale of our common stock or other equity or debt instruments; and
- obtaining debt financing with lending terms that more closely match our business model and capital needs.

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 curtail our operations and, as a result, investors in the Company could lose their entire investment.

See Note 9. “Debt” and Note 16 “Subsequent Events” in Item 8 of this Annual Report for more information.

#### Cash and debt

At December 31, 2019, our cash balance was \$0.4 million, compared to \$6.3 million at December 31, 2018.

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):

	2019	2018	2017
<b>Net cash used in operating activities</b>	<b>\$ (6,624)</b>	<b>\$ (6,795)</b>	<b>\$ (5,874)</b>
<b>Net cash (used in) provided by investing activities</b>	<b>\$ (129)</b>	<b>\$ 189</b>	<b>\$ (65)</b>
Proceeds from exercise of stock options and purchases through employee stock purchase plan	—	28	130
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(110)	(62)	(49)
Loan origination fees	(208)	—	—
Principal payments under finance lease obligations	(3)	—	—
Proceeds from the Iliad Note	1,115	—	—
Proceeds from convertible notes	1,700	—	—
Net (payments on) proceeds from credit line borrowings	(1,400)	2,219	—
<b>Net cash provided by financing activities</b>	<b>\$ 1,094</b>	<b>\$ 2,185</b>	<b>\$ 81</b>

#### Cash used in operating activities

Net cash used in operating activities of \$6.6 million in 2019 resulted primarily from the net loss incurred of \$7.4 million, adjusted for non-cash items, including: depreciation and amortization of \$0.3 million and stock-based compensation, net of \$0.6 million. Cash used by an increase in accounts receivable of \$0.1 million and a decrease in accounts payable mainly for inventory due to the timing of inventory receipts of \$2.2 million and a decrease in accrued expenses primarily for accrued payroll and benefits, severance and commissions of \$0.5 million further attributed to the cash impact of the net loss incurred. The cash used by these working capital changes was partially offset by cash generated by a net decrease in inventories of \$1.9 million as we sold existing inventory and reduced inventory purchasing and prepaid expenses of \$0.6 million, as the inventory for which we paid deposits to our contract manufacturers in prior quarters was received in the first quarter of 2019.

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.

#### Cash (used in) provided by investing activities

Net cash used by investing activities was \$0.1 million in 2019 and resulted primarily from the addition of property and equipment tooling to support production operations.

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.

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.

#### *Cash provided by financing activities*

Net cash provided by financing activities for the year ended December 31, 2019 of \$1.1 million primarily resulted from net proceeds from the Convertible Notes of \$1.7 million and the Iliad note of \$1.1 million offset by payments to the revolving credit facility of \$1.4 million.

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.

Net cash provided by financing activities for the year ended December 31, 2017 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 the lesser of 85% of our net eligible receivables, or \$4.5 million, plus (ii) available inventory, which is the lesser of 20% of the net realizable value of eligible inventory, or \$500 thousand. The Credit Facility charges interest deeming a minimum borrowing requirement of \$1.0 million. As of December 31, 2019, our availability under the Credit Facility was \$1.6 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%. The borrowing rate as of December 31, 2019 was 6.75%. Overdrafts are subject to a 2% fee. Additionally, an annual facility fee of 1% on the entire \$5.0 million amount of the Credit Facility is due at the beginning of each of the three years and a 0.5% 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 and the second year's fee in December of 2019.

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 charges interest deeming a minimum cash balance of \$1.0 million 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 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% in the first twelve-months, 2% in the second twelve-months, and 1% in the third twelve-months after closing.

Borrowings under the revolving line of credit were \$0.7 million and \$2.2 million at December 31, 2019 and 2018, respectively, and are recorded in the Consolidated Balance Sheets as a current liability under the caption, "Credit line borrowings." Please refer to Note 9, "Debt," included in Item 8 of this Annual Report for further information.

#### **Off-balance sheet arrangements**

We had no off-balance sheet arrangements at December 31, 2019 or 2018.

#### **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,
- share-based compensation, and
- leases.

### **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. 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. 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. 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. During the first eleven months of 2019 we evaluated and monitored the creditworthiness of each customer on a case-by-case basis. However, during December 2019 we transitioned to an account receivable insurance program with a very high credit worthy insurance company where we have the large majority of the accounts receivable insured with a portion of self-retention. This third party also provides credit-worthiness ratings and metrics that significantly assists us in evaluating the credit worthiness of both existing and new customers. We maintain allowances for sales returns and doubtful accounts receivable to provide for the estimated number of account 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.

### **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 2019 and 2018, the total allowance was \$28 thousand and \$33 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 of this Annual Report 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," included in Item 8 of this Annual Report 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, due to the introduction of new products and technological advancements, we charged \$17 thousand to cost of sales for excess and obsolete inventories. During 2019, due to efforts to sell excess and obsolete inventory and better management of inventory orders, we realized a net reduction of our excess inventory reserves of \$567 thousand. 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 of this Annual Report 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, 2019 and 2018, 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, 2019, we had net operating loss carry-forwards of approximately \$108.8 million for federal income tax purposes (\$64.5 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$54.5 million of the \$108.8 million 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% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$8.3 million and \$8.7 million in federal net operating losses generated in 2019 and 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 of this Annual Report 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 11, "Stockholders' Equity," included in Item 8 of this Annual Report for additional information.

### Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes the current lease accounting requirements. Additionally, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*, which simplifies adoption of Topic 842 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 criteria are met (provisions of which must be elected upon adoption of Topic 842). The new 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. It also 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.

The Company adopted this guidance as of January 1, 2019 using the required modified retrospective method with the non-comparative transition option. The Company applied the transitional package of practical expedients allowed by the standard to not reassess the identification, classification and initial direct costs of leases commencing before this ASU's effective date. The Company also applied the lease term and impairment hindsight transitional practical expedients. The Company has chosen to apply the following accounting policy practical expedients: to not separate lease and non-lease components to new leases as well as existing leases through transition; and the election to not apply recognition requirements of the guidance to short-term leases.

The results for reporting periods beginning on or after January 1, 2019 are presented under Topic 842, while prior period amounts are not adjusted and continue to be reported in accordance with legacy generally accepted accounting principles.

On adoption, we recognized additional operating lease liabilities of approximately \$2.9 million as of January 1, 2019, with corresponding right-of-use assets based on the present value of the remaining minimum rental payments for our existing operating leases. The operating lease right-of-use assets recorded upon adoption were offset by the carrying value of liabilities previously recorded under Accounting Standards Codification ("ASC") Topic 420, *Exit or Disposal Cost Obligations* ("Topic

420”) and impairment charges totaling \$0.3 million and \$0.2 million, respectively. Refer to Note 4, “Leases,” included in Item 8 of this Annual Report for additional disclosures relating to the Company’s leasing arrangements.

#### **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 is 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.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors  
Energy Focus, Inc.  
Solon, Ohio

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of Energy Focus, Inc. (the “Company”) as of December 31, 2019, the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for the year ended December 31, 2019, and the related notes and Schedule II (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019, and the results of its operations and its cash flows for the year ended December 31, 2019, 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 and negative cash flows 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 consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### Change in Accounting Method Related to Leases

As discussed in Notes 2 and 4 to the consolidated financial statements, the Company has changed its method for accounting for leases as of January 1, 2019 due to the adoption of ASU No. 2016-02, *Leases*, as amended.

### Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. 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 audit 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 consolidated 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 audit 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 audit included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ GBQ Partners, LLC

We have served as the Company's auditor since 2019.

Columbus, Ohio  
March 24, 2020

## 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 balance sheet of Energy Focus, Inc. and subsidiaries (the "Company") as of December 31, 2018, the related statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the two-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 the results of its operations and its cash flows for each of the years in the two-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 served as the Company's auditor from 2009 to 2019.

/s/ Plante & Moran, PLLC

Cleveland, Ohio  
April 1, 2019

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

	2019	2018
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash	\$ 350	\$ 6,335
Trade accounts receivable, less allowances of \$28 and \$33, respectively	2,337	2,201
Inventories, net	6,168	8,058
Prepaid and other current assets	479	1,094
<b>Total current assets</b>	<b>9,334</b>	<b>17,688</b>
Property and equipment, net	389	610
Operating lease, right-of-use asset	1,289	—
Restructured lease, right-of-use asset	322	—
Other assets	405	194
<b>Total assets</b>	<b>\$ 11,739</b>	<b>\$ 18,492</b>
<b>LIABILITIES</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 1,340	\$ 3,606
Accrued liabilities	179	73
Accrued legal and professional fees	215	160
Accrued payroll and related benefits	360	435
Accrued sales commissions	32	115
Accrued severance	7	188
Accrued restructuring	24	156
Accrued warranty reserve	195	258
Deferred revenue	18	30
Operating lease liabilities	550	—
Restructured lease liabilities	319	—
Finance lease liabilities, net of current portion	3	—
Credit line borrowings	715	2,219
Convertible notes	1,700	—
Iliad note, net of discount and loan origination fees	885	—
<b>Total current liabilities</b>	<b>6,542</b>	<b>7,240</b>
Other liabilities	14	200
Operating lease liabilities, net of current portion	906	—
Restructured lease liabilities, net of current portion	168	—
Finance lease liabilities	4	—
Iliad note, net of current maturities	109	—
<b>Total liabilities</b>	<b>7,743</b>	<b>7,440</b>
<b>STOCKHOLDERS' EQUITY</b>		
<i>Preferred stock, par value \$0.0001 per share:</i>		
Authorized: 2,000,000 shares in 2019 and 2018		
Issued and outstanding: no shares in 2019 and 2018	—	—
<i>Common stock, par value \$0.0001 per share:</i>		
Authorized: 30,000,000 shares in 2019 and 2018		

Issued and outstanding: 12,428,418 at December 31, 2019 and 12,090,695 at December 31, 2018	1	1
Additional paid-in capital	128,872	128,367
Accumulated other comprehensive loss	(3)	(1)
Accumulated deficit	(124,874)	(117,315)
<b>Total stockholders' equity</b>	<u>3,996</u>	<u>11,052</u>
<b>Total liabilities and stockholders' equity</b>	<u>\$ 11,739</u>	<u>\$ 18,492</u>

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

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

	2019	2018	2017
<b>Net sales</b>	\$ 12,705	\$ 18,107	\$ 19,846
Cost of sales	10,731	14,695	15,025
<b>Gross profit</b>	1,974	3,412	4,821
<b>Operating expenses:</b>			
Product development	1,284	2,597	2,940
Selling, general, and administrative	7,449	9,789	11,315
Loss on impairment	—	—	185
Restructuring	196	111	1,662
<b>Total operating expenses</b>	8,929	12,497	16,102
<b>Loss from operations</b>	(6,955)	(9,085)	(11,281)
<b>Other expenses:</b>			
Interest expense	317	8	2
Other expenses	91	7	99
<b>Loss from operations before income taxes</b>	(7,363)	(9,100)	(11,382)
Provision for (benefit from) income taxes	10	11	(115)
<b>Net loss</b>	<u>\$ (7,373)</u>	<u>\$ (9,111)</u>	<u>\$ (11,267)</u>
<b>Net loss per share - basic and diluted:</b>			
<b>Net loss</b>	<u>\$ (0.60)</u>	<u>\$ (0.76)</u>	<u>\$ (0.95)</u>
<b>Weighted average common shares outstanding:</b>			
Basic and diluted	12,309	11,997	11,806

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)*

	<b>2019</b>	<b>2018</b>	<b>2017</b>
<b>Net loss</b>	\$ (7,373)	\$ (9,111)	\$ (11,267)
<b>Other comprehensive (loss) income:</b>			
Foreign currency translation adjustments	(2)	(3)	3
<b>Comprehensive loss</b>	<u>\$ (7,375)</u>	<u>\$ (9,114)</u>	<u>\$ (11,264)</u>

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

**ENERGY FOCUS, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017**  
*(amounts in thousands)*

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total
	Shares	Amount				
<b>Balance at December 31, 2016</b>	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)
<b>Balance at December 31, 2017</b>	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)
<b>Balance at December 31, 2018</b>	12,091	\$ 1	\$ 128,367	\$ (1)	\$ (117,315)	\$ 11,052
Adjustment to beginning accumulated deficit upon adoption of Topic 842	—	—	—	—	(186)	(186)
Issuance of common stock under employee stock option and stock purchase plans	387	—	5	—	—	5
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(50)	—	(116)	—	—	(116)
Stock-based compensation	—	—	616	—	—	616
Foreign currency translation adjustment	—	—	—	(2)	—	(2)
Net loss	—	—	—	—	(7,373)	(7,373)
<b>Balance at December 31, 2019</b>	12,428	\$ 1	\$ 128,872	\$ (3)	\$ (124,874)	\$ 3,996

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)*

	2019	2018	2017
<b>Cash flows from operating activities:</b>			
Net loss	\$ (7,373)	\$ (9,111)	\$ (11,267)
<b>Adjustments to reconcile net loss to net cash used in operating activities:</b>			
Loss on impairment	—	—	185
Depreciation	326	522	681
Stock-based compensation	616	908	807
Stock-based compensation reversal	—	—	(270)
Provision for doubtful accounts receivable	(5)	(9)	(194)
Provision for slow-moving and obsolete inventories	14	17	(1,400)
Provision for warranties	78	51	196
Amortization of discounts on the Iliad Note	6	—	—
Amortization of loan origination fees	102	4	—
Loss on dispositions of property and equipment	24	2	203
<b>Change in operating assets and liabilities:</b>			
Accounts receivable	(131)	1,403	2,240
Inventories	1,876	(2,356)	5,151
Prepaid and other assets	611	(538)	161
Accounts payable	(2,214)	2,047	(1,759)
Accrued and other liabilities	(542)	240	(613)
Deferred revenue	(12)	25	5
Total adjustments	749	2,316	5,393
<b>Net cash used in operating activities</b>	<b>(6,624)</b>	<b>(6,795)</b>	<b>(5,874)</b>
<b>Cash flows from investing activities:</b>			
Acquisitions of property and equipment	(132)	(57)	(162)
Proceeds from the sale of property and equipment	3	246	97
<b>Net cash (used in) provided by investing activities</b>	<b>(129)</b>	<b>189</b>	<b>(65)</b>
<b>Cash flows from financing activities:</b>			
Proceeds from exercise of stock options and purchases through employee stock purchase plan	—	28	130
Principal payments under finance lease obligations	(3)	—	—
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(110)	(62)	(49)
Loan origination fees	(208)	—	—
Proceeds from the Iliad Note	1,115	—	—
Proceeds from convertible notes	1,700	—	—
Net (payments on) proceeds from credit line borrowings	(1,400)	2,219	—
<b>Net cash provided by financing activities</b>	<b>1,094</b>	<b>2,185</b>	<b>81</b>
Effect of exchange rate changes on cash	16	(5)	(10)

(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)*

	<b>2019</b>	<b>2018</b>	<b>2017</b>
Net decrease in cash and restricted cash	(5,643)	(4,426)	(5,868)
Cash and restricted cash, beginning of year	6,335	10,761	16,629
Cash and restricted cash, end of year	<u>\$ 692</u>	<u>\$ 6,335</u>	<u>\$ 10,761</u>
<b>Classification of cash and restricted cash:</b>			
Cash	\$ 350	\$ 6,335	\$ 10,761
Restricted cash held in other assets	342	—	—
<b>Cash and restricted cash</b>	<u>\$ 692</u>	<u>\$ 6,335</u>	<u>\$ 10,761</u>
<b>Supplemental information:</b>			
Cash paid in year for interest	\$ 215	\$ 4	\$ 2
Cash paid in year for income taxes	\$ 15	\$ 7	\$ 14

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

**NOTE 1. NATURE OF OPERATIONS**

Energy Focus, Inc. engages in the design, development, manufacturing, marketing and sale of energy-efficient lighting systems and controls. We develop, market and sell high quality energy-efficient light-emitting diode (“LED”) lighting products and controls in the commercial and military maritime markets (“MMM”). Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and wellness through advanced LED retrofit solutions. Our goal is to be the retrofit technology and market leader for the most demanding applications where performance, quality and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge (“HID”) lighting and other types of lamps in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military tubular LED (“TLED”) and other LED products and controls.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization, competition and price erosion. We have been experiencing these industry forces in both our military business since 2016 and in our commercial segment, where we once commanded significant price premiums for our flicker-free TLEDs with primarily 10-year warranties. Since April 2019, we have focused on redesigning our products for lower costs and consolidating our supply chain for stronger purchasing power where appropriate in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at a premium to the competitive range and we expect aggressive pricing actions and commoditization to continue to be a headwind until our more 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 is to move up the value chain, with more innovative and differentiated products and solutions that offer greater, distinct value to our customers. Two specific examples of these more innovated and differentiated products we have recently developed include the RedCap™, our emergency backup battery integrated TLED, and EnFocus™, our new dimmable/tunable lighting and control platform that we are launching in 2020. We do believe our revamped go-to-market strategy that focuses more on direct-sales and listens to the voice of the customer has led to better and more impactful product development efforts and will eventually translate into larger addressable market and greater sales growth for us.

Since April 2019 we experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company, significant additional restructuring efforts were undertaken. The Company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the company was purchasing, dramatically changed the composition of our board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including certain elements of supply chain and marketing. In connection with these actions, we recorded severance and related benefits charges of \$0.1 million during the three months ended March 31, 2019 and \$0.1 million during the second quarter of 2019. These additional restructuring charges primarily related to severance and related benefits charges as a result of eliminating three positions during the first quarter of 2019 and nine positions during the second quarter of 2019, as well as costs associated with closing our offices in San Jose, California and Taipei, Taiwan in the second quarter of 2019. With quarterly sales for the Company leveling off at its low point in the third quarter of 2019 at \$2.9 million, we began to see the impact for our relaunch efforts and restructuring of our sales organization in the fourth quarter achieving sales of \$3.5 million, or a quarter-over-quarter growth rate of 21.1%. In addition, losses were mitigated through the better cost management and a sharp focus on better managing pricing and inventory decisions for the last half of 2019.

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 United States. We closed our New York, New York, Arlington, Virginia and Rochester, Minnesota offices, reduced full-time equivalent headcount by 51% 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, 2017, we expanded our sales coverage to the entire United States through six geographic regions and at the time had 50 sales agencies, each of which had, 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.

**ENERGY FOCUS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

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 the fourth quarter of 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 the fourth quarter of 2017 to 17% 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% from 2017 to 2018 and we saw some return of our military Intellitube® sales as we achieved more competitive pricing through our cost reductions.

## **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 excess and obsolescence reserve and warranty claims, the useful lives for property and equipment 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.

### **Basis of presentation**

The Consolidated Financial Statements include the accounts of the Company. All significant inter-company balances and transactions have been eliminated. Unless indicated otherwise, the information in the Notes to Consolidated Financial Statements relates to our operations.

### **Revenue recognition**

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. 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. 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 restricted cash**

At December 31, 2019 and 2018, we had cash and restricted cash of \$0.7 million and \$6.3 million, respectively, on deposit with financial institutions located in the United States. The \$0.7 million of cash includes restricted cash of \$0.3 million which is presented within Other assets in the accompanying Consolidated Balance Sheets at December 31, 2019. 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,

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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, due to the introduction of new products and technological advancements, we charged \$17 thousand to cost of sales for excess and obsolete inventories. During 2019, due to efforts to sell excess and obsolete inventory and better management of inventory orders, we realized a net reduction of \$567 thousand of our excess and obsolete reserves. 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. During the first eleven months of 2019 we evaluated and monitored the creditworthiness of each customer on a case-by-case basis. However, during December 2019 we transitioned to an account receivables insurance program with a very high credit worthy insurance company where we have the large majority of the accounts receivable insured with a portion of self-retention. This third party also provides credit-worthiness ratings and metrics that significantly assists us in evaluating the credit worthiness of both existing and new customers. We maintain allowances for sales returns and doubtful accounts receivable to provide for the estimated amount of account 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 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, 2019 and 2018, we have recorded a full valuation allowance against our net 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, 2019, we had net operating loss carry-forwards of approximately \$108.8 million for U.S. federal tax purposes (\$64.5 million for state, and local income tax purposes). However, due to changes in our capital structure, approximately \$54.5 million of the \$108.8 million 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 \$54.5 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% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$8.3 million and \$8.7 million in net operating losses generated in 2019 and 2018, respectively, will be subject to the new limitations under the Act. If not utilized, the carry-forwards

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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.

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 \$54.5 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.

#### **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, 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 and convertible note also approximates fair value. Due to the proximity of issuance to December 31, 2019 the fair value of the Iliad Note approximates carrying 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. 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. Up until December of 2019, we performed ongoing credit evaluations of our customers, but in December 2019 converted to the use of a third-party accounts receivable insurance and credit assessment company. 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, although we have mitigated this risk somewhat through the accounts receivable insurance program we now have.

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

- In 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales. In 2018, one customer, a distributor to the U.S. Navy, accounted for 42% 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% and 13% of net sales, respectively, while sales to a distributor to the U.S. Navy accounted for 17% of net sales. Total sales to distributors to the U.S. Navy represented 22% of net sales in 2017.
- At December 31, 2019, a distributor to the U.S. Navy accounted for 9.8% of our net trade accounts receivable and a large regional retrofit company located in Texas accounted for 41.0% of our net trade accounts receivable. At December 31, 2018, a distributor to the U.S. Navy accounted for 40.4% of our net trade accounts receivable.

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, global health issues such as the corona-virus outbreak, 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):

	<b>For the years ended December 31,</b>		
	<b>2019</b>	<b>2018</b>	<b>2017</b>
<b>Numerator:</b>			
Net loss	\$ (7,373)	\$ (9,111)	\$ (11,267)
<b>Denominator:</b>			
Basic and diluted weighted average common shares outstanding	12,309	11,997	11,806

As a result of the net loss we incurred for the years ended December 31, 2019, 2018 and 2017, options, warrants and convertible securities representing 27,883, 59,180 and 60,434 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,

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“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 Accounting Standards Codification 505-50, “Equity-Based Payments to Non-Employees,” and are generally re-measured at each reporting date until the awards vest.

**Foreign currency translation**

Our product development center in Taiwan uses local currency as its functional currency. Included within “Accumulated other comprehensive loss” within the Consolidated Statements of Stockholders’ Equity is the effect of foreign currency translation related to our Taiwan operations. This operation was shut down in 2019, the effect of which was not material to the Consolidated Financial Statements.

**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 were \$0.2 million, \$0.3 million and \$0.5 million for the years ended December 31, 2019, 2018 and 2017, respectively.

**Product warranties**

Through March 31, 2016, we warranted finished goods against defects in material and workmanship under normal use and service for periods generally between one and five years. Beginning April 1, 2016, we warrant our commercial LEDFL Tubular LED Lamps (excluding Battery Backup TLED), the troffer luminaires, and certain Globe Lights for a period of ten years and all other LED Products for five years. Beginning in October 2019, LEDFL Tubular LED Lamps (excluding RedCap™) are warranted for ten years and the warranty for all of our other products is five years. Warranty settlement costs consist of actual amounts expensed for warranty, which are largely a result of the cost of replacement products provided to our customers. A liability for the estimated future costs under product warranties is maintained for products under warranty based on the actual claims incurred to date and the estimated nature, frequency, and costs of future claims. These estimates are inherently uncertain and changes to our historical or projected experience may cause material changes to our warranty reserves in the future. We continuously review the assumptions related to the adequacy of our warranty reserve, including product failure rates, and make adjustments to the existing warranty liability when there are changes to these estimates or the underlying replacement product costs, or the warranty period expires. The following table summarizes warranty activity for the periods presented (in thousands):

	At December 31,	
	2019	2018
Balance at the beginning of the year	\$ 258	\$ 174
Accruals for warranties issued	78	51
Adjustments to existing warranties	(91)	103
Settlements made during the year (in kind)	(50)	(70)
<b>Accrued warranty expense</b>	<b>\$ 195</b>	<b>\$ 258</b>

**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 starting 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

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rather than incurred losses. This standard will be effective for interim and annual periods starting after December 15, 2022 and will generally require adoption on a modified retrospective basis. We are in the process of evaluating the impact of the standard.

### **Adoption of recent accounting pronouncements**

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes the current lease accounting requirements. Additionally, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*, which simplifies adoption of Topic 842 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 criteria are met (provisions of which must be elected upon adoption of Topic 842). The new 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. It also 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.

The Company adopted this guidance as of January 1, 2019 using the required modified retrospective method with the non-comparative transition option. The Company applied the transitional package of practical expedients allowed by the standard to not reassess the identification, classification and initial direct costs of leases commencing before this ASU's effective date. The Company also applied the lease term and impairment hindsight transitional practical expedients. The Company has chosen to apply the following accounting policy practical expedients: to not separate lease and non-lease components to new leases as well as existing leases through transition; and the election to not apply recognition requirements of the guidance to short-term leases.

The results for reporting periods beginning on or after January 1, 2019 are presented under Topic 842, while prior period amounts are not adjusted and continue to be reported in accordance with legacy generally accepted accounting principles.

On adoption, we recognized additional operating lease liabilities of approximately \$2.9 million on January 1, 2019, with corresponding right-of-use assets based on the present value of the remaining minimum rental payments for our existing operating leases. The operating lease right-of-use assets recorded upon adoption were offset by the carrying value of liabilities previously recorded under ASC Topic 420, *Exit or Disposal Cost Obligations* ("Topic 420") and impairment charges totaling \$0.3 million and \$0.2 million, respectively. Refer to Note 4, "Leases" below for additional disclosures relating to the Company's leasing arrangements.

### **NOTE 3. RESTRUCTURING**

Due to our financial performance in 2017, 2018, and 2019, including net losses of \$11.3 million, \$9.1 million, and \$7.4 million, respectively, and total cash used of \$5.9 million, \$4.4 million, and \$5.6 million, respectively, we believe that substantial doubt about our ability to continue as a going concern existed at December 31, 2019.

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.

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



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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.

Since April 2019 we experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company significant additional restructuring efforts were undertaken. The company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the company was purchasing, dramatically changed the composition of our board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including certain elements of supply chain and marketing. In connection with these actions, we recorded severance and related benefits charges of \$0.1 million during the three months ended March 31, 2019 and \$0.1 million during the second quarter of 2019. These additional restructuring charges primarily related to severance and related benefits charges as a result of eliminating three positions during the first quarter of 2019 and nine positions during the second quarter of 2019, as well as costs associated with closing our offices in San Jose, California and Taipei, Taiwan in the second quarter of 2019. With quarterly sales for the Company leveling off at its low point in the third quarter of 2019 at \$2.9 million, we began to see the impact for our relaunch efforts and restructuring of our sales organization in the fourth quarter achieving sales of \$3.5 million, or a quarter-over-quarter growth rate of 21.1%. In addition, losses were mitigated through the better cost management and a sharp focus on better managing pricing and inventory decisions for the last half of 2019.

Our restructuring liabilities consist of estimated ongoing costs related to long-term operating lease obligations, which the Company has exited. The recorded value of the ongoing lease obligations is based on the remaining lease term and payment amount, 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. Please also refer to Note 4, "Leases" as certain amounts formerly included below in the restructuring reserve as of December 31, 2018, have been reclassified on the balance sheet to be shown netted against the restructured lease, right-of-use asset in accordance with Topic 842.

The following is a reconciliation of the beginning and ending balances of our restructuring liability as it relates to the 2017 restructuring plan (in thousands):

	<b>Restructuring Liability</b>
<b>Balance at December 31, 2017</b>	\$ 402
Accretion of lease obligations	21
Adjustment of lease obligations	90
Payments	(163)
<b>Balance at December 31, 2018</b>	<u>350</u>
Accretion of lease obligations	4
Reclassification upon adoption of Topic 842	(273)
Payments	(43)
<b>Balance at December 31, 2019</b>	<u>\$ 38</u>

The following is a reconciliation of the ending balance of our restructuring liability at December 31, 2019 to the balance sheet:

	<b>Restructuring Liability</b>
<b>Balance at December 31, 2019</b>	\$ 38
Less, short-term restructuring liability	24
Long-term restructuring liability, included in other liabilities	<u>\$ 14</u>

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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, and substantial doubt about our ability to continue as a going concern continues to exist at December 31, 2019.

Since the executive transition on April 1, 2019, we have continued to evaluate and assess strategic options as we seek to achieve profitability. We plan to achieve profitability through growing our sales by continuing to execute on our direct sales strategy, complemented by our marketing outreach campaigns, channel partnerships, and new sales from an e-commerce platform, which we plan to launch in the first half of 2020, as well as continuing to apply rigorous and economical discipline in our organization, business processes and policies, supply chain and organizational structure. The restructuring and cost cutting initiatives implemented during 2019 were designed to allow us to effectively execute these strategies; however, our efforts may not occur as quickly as we envision or be successful, due to the long sales cycle in our industry, the corresponding time required to ramp up sales from new products and markets into this sales cycle, the timing of introductions of additional new products, significant competition, and potential volatility given our customer concentration, among other factors. As a result, we will continue to review and pursue selected external funding sources to ensure adequate financial resources to execute across the timelines required to achieve these objectives including, but not limited to, the following:

- obtaining financing from traditional or non-traditional investment capital organizations or individuals;
- obtaining funding from the sale of our common stock or other equity or debt instruments; and
- obtaining debt financing with lending terms that more closely match our business model and capital needs.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional funding 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, conversion features, refinancing demands, 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 the 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 funding could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtail our operations and, as a result, investors in the Company could lose their entire investment.

Considering both quantitative and qualitative information, 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, development and implementation of an excess inventory plan, and implementation of our product development and sales channel/go-to-market strategy, if adequately executed, will provide us with an ability to finance our operations through 2020 and will mitigate the substantial doubt about our ability to continue as a going concern.

On May 15, 2019, we received a letter from the NASDAQ Stock Market ("NASDAQ") advising us that for 30 consecutive trading days preceding the date of the letter, the bid price of our common stock had closed below the \$1.00 per share minimum required for continued listing on NASDAQ pursuant to listing rules. Therefore, we could be subject to delisting if we did not regain compliance within the compliance period or extend the compliance period by filing for an extension. On October 15, 2019, the Company formally requested a 180-day extension beginning November 12, 2019 and is evaluating options to regain compliance.

#### **NOTE 4. LEASES**

The Company leases certain equipment, manufacturing, warehouse and office space under non-cancellable operating leases expiring through 2024 under which it is responsible for related maintenance, taxes and insurance. The Company has one finance lease containing a bargain purchase option upon expiration of lease in 2022. The lease term consists of the non-cancellable period of the lease, periods covered by options to extend the lease if the Company is reasonably certain to exercise

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the option, and periods covered by an option to terminate the lease if the Company is reasonably certain not to exercise the option. The present value of the remaining lease obligation for these leases was calculated using an incremental borrowing rate (“IBR”) of 7.25%, which was the Company’s borrowing rate on the revolving credit agreement signed on December 11, 2018. The weighted average remaining lease term for operating, restructured and finance leases is 2.6 years, 1.5 years, and 2.3 years, respectively.

The Company had two restructured leases with sub-lease components for the New York, New York and Arlington, Virginia offices that were closed in 2017. The New York, New York lease expires in 2021 and the Arlington, Virginia lease expired in September 2019. At the “cease use” date in 2017, the Company recorded the present value of the future minimum payments under the leases and costs that continue to be incurred with no economic benefit to the Company in accordance with Topic 420. The Company entered into sub-leases for both offices and included the estimated sub-lease payments as an offset to the remaining lease obligations, as required by Topic 420 at that time. In adopting Topic 842, the carrying value of the aforementioned net liabilities has been reclassified as a reduction of the restructured lease, right-of-use asset, which totaled \$0.3 million as of January 1, 2019. As part of the lease agreement for the New York, New York office, there is \$0.3 million in restricted cash in other long-term assets on the accompanying Consolidated Balance Sheets as of December 31, 2019 which represents collateral against the related Letter of Credit issued as part of this agreement. As of December 31, 2018, the \$0.3 million in restricted cash is included in cash on the Consolidated Balance Sheet.

The restructured leases and sub-leases were not scoped out of the requirements of Topic 842 and were evaluated for impairment in accordance with the asset impairment provisions of ASC 360, *Property, Plant and Equipment* (“Topic 360”). The Company concluded its net right-of-use assets were not impaired and the carrying amount approximates expected sublease income in future years as of December 31, 2019. The Company continues to carry certain immaterial operating expenses associated with these leases as restructuring liabilities and will continue to accrete those liabilities in accordance with Topic 420, as has been done since the cease use date in 2017.

Due to the continued net losses, going concern, and 2019 restructuring actions discussed in Note 3, “Restructuring,” the Company also evaluated its Solon, Ohio operating lease right-of-use asset for potential impairment under Topic 360. As a result of this evaluation, the Company determined that the operating lease right-of-use asset for the Solon, Ohio operating lease was impaired upon the adoption of Topic 842. Therefore, the Company recorded an impairment of this right-of-use asset of approximately \$0.2 million, with a corresponding offset to accumulated deficit as of January 1, 2019.

Components of the operating, restructured and finance lease costs recognized in net loss during the year ended December 31, 2019, were as follows (in thousands):

	<b>For the year ended December 31, 2019</b>
<b>Operating lease cost (income)</b>	
Sublease income	\$ (100)
Lease cost	628
Operating lease cost, net	528
<b>Restructured lease cost (income)</b>	
Sublease income	(403)
Lease cost	385
Restructured lease income, net	(18)
<b>Finance lease cost</b>	
Interest on lease liabilities	1
Finance lease cost, net	1
<b>Total lease cost, net</b>	\$ 511

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Supplemental Consolidated Balance Sheet information related to the Company's operating and finance leases as of December 31, 2019 are as follows (in thousands):

	<b>December 31, 2019</b>
<b>Operating Leases</b>	
Operating lease right-of-use assets	\$ 1,289
Restructured lease right-of-use assets	322
Operating lease right-of-use assets, total	1,611
Operating lease liabilities	1,480
Restructured lease liabilities	488
Operating lease liabilities, total	1,968
<b>Finance Leases</b>	
Property and equipment	13
Allowances for depreciation	(5)
Finance lease assets, net	8
Finance lease liabilities	6
Total finance lease liabilities	\$ 6

Future minimum lease payments required under operating, restructured and finance leases for each of the years 2020 through 2024 are as follows (in thousands):

	<b>Operating Leases</b>	<b>Restructured Leases</b>	<b>Restructured Leases Sublease Payments</b>	<b>Finance Lease</b>
2020	\$ 636	\$ 342	\$ (273)	\$ 3
2021	636	171	(136)	3
2022	328	—	—	—
2023	15	—	—	—
2024	1	—	—	—
Total future undiscounted lease payments	1,616	513	(409)	6
Less imputed interest	(136)	(25)	20	—
Total lease obligations	\$ 1,480	\$ 488	\$ (389)	\$ 6

Supplemental cash flow information related to leases for the year ended December 31, 2019, was as follows (in thousands):

	<b>Year ended December 31, 2019</b>
<b>Supplemental cash flow information</b>	
Cash paid, net, for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 536
Operating cash flows from restructured leases	\$ 87
Financing cash flows from finance leases	\$ 3

**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,	
	2019	2018
Raw materials	\$ 4,064	\$ 4,041
Finished goods	5,749	8,229
Reserve for excess, obsolete, and slow-moving inventories	(3,645)	(4,212)
<b>Inventories, net</b>	<b>\$ 6,168</b>	<b>\$ 8,058</b>

During 2019, management implemented a purchasing freeze and cost-cutting measures resulting in lower procurement in the first half of 2019, with only selective and necessary purchases done in the second half of 2019. During the second half of 2019, management negotiated cost reduction terms with suppliers on certain products. This initiative, in conjunction with, a price adjustment strategy on products we have in excess inventory, resulted in a net reduction of our gross inventory levels and excess inventory reserves of \$1.9 million compared to 2018.

**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,	
	2019	2018
Equipment (useful life 3 - 15 years)	\$ 1,297	\$ 1,511
Tooling (useful life 2 - 5 years)	203	371
Vehicles (useful life 5 years)	47	47
Furniture and fixtures (useful life 5 years)	137	137
Computer software (useful life 3 years)	1,028	1,043
Leasehold improvements (the shorter of useful life or lease life)	211	211
Finance lease right-of-use asset	13	—
Construction in progress	48	55
<b>Property and equipment at cost</b>	<b>2,984</b>	<b>3,375</b>
Less: accumulated depreciation	(2,595)	(2,765)
<b>Property and equipment, net</b>	<b>\$ 389</b>	<b>\$ 610</b>

Depreciation expense was \$0.3 million, \$0.5 million, and \$0.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Due to the specialized nature of the equipment and software previously used to manufacture MMM products prior to 2017 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 during 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."

In 2019, the Company ceased operations of the Taiwan affiliate and closed the Taiwan office. The net carrying value of the property and equipment of the office was immaterial. There were no impairment charges for property and equipment during 2019 and 2018.

**NOTE 7. PREPAID AND OTHER CURRENT ASSETS**

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

	At December 31,	
	2019	2018
Prepaid insurance	\$ 140	\$ 100
Prepaid expenses	133	94
Prepaid rent	70	4
Short-term deposits	126	825
Other	10	71
<b>Total prepaid and other current assets</b>	<b>\$ 479</b>	<b>1,094</b>

Short-term deposits represent down payment amounts paid to suppliers for material purchases. Certain Asian suppliers require us to pay a deposit equal to a certain percentage of the product ordered prior to manufacturing and/or shipping products to us. The short-term debt acquisition costs for 2019 have been netted with Debt.

**NOTE 8. ACCRUED LIABILITIES**

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

	At December 31,	
	2019	2018
Accrued legal and professional fees	\$ 215	\$ 160
Accrued payroll and related benefits	360	435
Accrued sales commissions	32	115
Accrued severance	7	188
Accrued restructuring	24	156
Accrued warranty reserve	195	258
Accrued liabilities	179	73
<b>Total accrued liabilities</b>	<b>\$ 1,012</b>	<b>\$ 1,385</b>

**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. 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 the lesser of 85% of our net eligible receivables of, or \$4.5 million, plus (ii) available inventory, which is the lesser of 20% of the net realizable value of eligible inventory of, or \$500 thousand. The Credit Facility charges interest deeming 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%. The borrowing rate as of December 31, 2019 and 2018 was 6.75% and 7.75%, respectively. Overdrafts are subject to a 2% fee. Additionally, an annual facility fee of 1% on the entire \$5.0 million amount of the Credit Facility is due at the beginning of each of the three years and a 0.5% 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 and the second year's fee in December of 2019.

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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% in the first year, 2% in the second year, and 1% in the third year.

Borrowings under the revolving line of credit were \$0.7 million and \$2.2 million at December 31, 2019 and 2018, respectively, are recorded in the Consolidated Balance Sheets as a current liability under the caption, "Credit line borrowings." Outstanding balances include unamortized net issuance costs totaling \$0.1 million at December 31, 2019. The balance at December 31, 2018 did not include unamortized net issuance costs.

### **Convertible Notes**

On March 29, 2019, we raised \$1.7 million (before transaction expenses) from the issuance of \$1.7 million in principal amount of subordinated convertible promissory notes to certain investors (the "Convertible Notes"). The Convertible Notes had a maturity date of December 31, 2021 and bore interest at a rate of 5% per annum until June 30, 2019 and at a rate of 10% thereafter. Accrued unpaid interest totaled \$0.1 million at December 31, 2019 and is included within accrued liabilities in the accompanying Consolidated Balance Sheets. Pursuant to their terms, on January 16, 2020 following approval by our stockholders of certain amendments to our certificate of incorporation, the principal amount of all of the Convertible Notes and the accumulated interest thereon in the amount of \$1,815,041 converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of the Company's Series A Convertible Preferred Stock, par value \$0.0001 per share ("Series A Preferred Stock"), which is convertible on a one-for-one basis into shares of our common stock.

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 on March 29, 2019, which authorized 2,000,000 shares of Series A Preferred Stock ("Original Series A Certificate of Designation"). The Original Series A Certificate of Designation was amended on January 15, 2020 following Stockholder Approval to increase the number of authorized shares of Series A Preferred to 3,300,000 (the Original Series A Certificate of Designation as so amended, the "Series A Certificate of Designation").

Pursuant to the Series A Certificate of Designation, each holder of outstanding shares of Series A Preferred Stock is entitled to vote with holders of outstanding shares of common stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration, except as provided by law. In any such vote, each share of Series A Preferred Stock shall be entitled to a number of votes equal to 55.37% of the number of shares of common stock into which such share of Series A Preferred Stock is convertible.

The Series A Preferred Stock (a) has a preference upon liquidation equal to \$0.67 per share and then participates on an as-converted basis with the common stock with respect to any additional distributions, (b) shall receive any dividends declared and payable on our common stock on an as-converted basis, and (c) is convertible at the option of the holder into shares of our 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 contain customary representations and warranties and provide for resale registration rights with respect to the shares of our common stock issuable upon conversion of the Series A Preferred Stock.

### **Iliad Note**

On November 25, 2019, we entered into the Iliad Note Purchase Agreement with Iliad pursuant to which the Company sold and issued the Iliad Note in the principal amount of \$1.3 million. The Iliad Note was issued with an original issue discount of \$142 thousand and Iliad paid a purchase price of \$1.1 million for the issuance of the Iliad Note, after deduction of \$15 thousand of Iliad transaction expenses.

The Iliad Note has a maturity date of November 24, 2021 and accrues interest at 8% per annum, compounded daily, on the outstanding balance. The Company may prepay the amounts outstanding under the Iliad Note at a premium, which is 15% during the first year and 10% during the second year. Beginning in May 2020, Iliad may require the Company to redeem up to

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\$150 thousand of the Iliad Note in any calendar month. The Company has the right on three occasions to defer all redemptions that Iliad could otherwise require the Company to make during any calendar month. Each exercise of this deferral right by the Company will increase the amount outstanding under the Iliad Note by 1.5%.

In the event our common stock is delisted from NASDAQ, the amount outstanding under the Iliad Note will automatically increase by 15% as of the date of such delisting.

Pursuant to the Iliad Note Purchase Agreement and the Iliad Note, we have, among other things, agreed that, until the Iliad Note is repaid:

- 10% of gross proceeds the Company receives from the sale of our common stock or other equity must be paid to Iliad and will be applied to reduce the outstanding balance of the Iliad Note (the failure to make such a prepayment is not an event of default under the Iliad Note, but will increase the amount then outstanding under the Iliad Note by 10%); and
- unless agreed to by Iliad, we will not engage in certain financings that involve the issuance of securities that include a conversion rights in which the number of shares of common stock that may be issued pursuant to such conversion right varies with the market price of our common stock (a “Restricted Issuance”); provided, however, if Iliad does not agree to a Restricted Issuance, the Company may on up to three occasions make the Restricted Issuance anyway, but the outstanding balance of the Iliad Note will increase 3% on each occasion the Company exercises its right to make the Restricted Issuance without Iliad’s agreement.

Upon the occurrence of an event of default under the Iliad Note, Iliad may accelerate the date for the repayment of the amount outstanding under the Iliad Note and increase the amount outstanding by an amount ranging from 5% to 15%, depending on the nature of the default. Certain insolvency and bankruptcy related events of default will result in the automatic acceleration of the amount outstanding under the Iliad Note and the outstanding amount due will be automatically increased by 5%. After the occurrence of an event of default, Iliad may elect to have interest accrue on the Iliad Note at a rate per annum of 22%, or such lesser rate as permitted under applicable law.

The total liability for the Note Purchase Agreement, excluding financing fees, were \$1.3 million at December 31, 2019. Unamortized loan discount and debt issuance costs were \$0.2 million at December 31, 2019.

#### **NOTE 10. COMMITMENTS AND CONTINGENCIES**

##### **Purchase Commitments**

As of December 31, 2019, we had approximately \$0.7 million in outstanding purchase commitments for inventory, of which \$0.5 million is expected to ship in the first quarter of 2020 and \$0.2 million is expected to ship in the second quarter of 2020.

#### **NOTE 11. STOCKHOLDERS’ EQUITY**

##### **Warrants**

In the past, we have issued warrants in conjunction with various equity issuances, debt financing arrangements and sales incentives. During 2017 all outstanding warrants totaling 6,750 were canceled or otherwise forfeited. Accordingly, there were no warrants issued and outstanding at December 31, 2019 and 2018.

In January of 2020, we offered and sold 3,441,803 shares of our common stock to certain institutional investors, at a purchase price of \$0.674 per share in a registered direct offering. We also sold to the same institutional investors unregistered warrants to purchase up to 3,441,803 shares of our common stock at an exercise price of \$0.674 per share in a concurrent private placement for a purchase price of \$0.125 per warrant. Refer to Note 16 “Subsequent Events” for further information.

##### **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,



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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, 2019, 851,160 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,		
	2019	2018	2017
Cost of sales	\$ 9	\$ 37	\$ 34
Product development	26	118	59
Selling, general, and administrative	581	753	714
<b>Total stock-based compensation</b>	<b>\$ 616</b>	<b>\$ 908</b>	<b>\$ 807</b>

At December 31, 2019 and 2018, we had unearned stock compensation expense of \$0.6 million and \$0.9 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 2.6 years as of December 31, 2019 and 1.8 years as of December 31, 2018.

#### 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:

	2019	2018	2017
Fair value of options issued	\$ 0.29	\$ 1.41	\$ 2.66
Exercise price	\$ 0.44	\$ 1.97	\$ 3.55
Expected life of option (in years)	4.8	5.9	5.8
Risk-free interest rate	1.8%	2.7%	2.1%
Expected volatility	90.0%	84.2%	91.9%
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 non-hedgeable. 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.

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Options outstanding under all plans at December 31, 2019 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
<b>Outstanding at December 31, 2016</b>	530,734	\$ 7.48
Granted	192,984	3.55
Cancelled	(377,095)	6.71
Expired	(56,111)	10.65
Exercised	(42,000)	2.30
<b>Outstanding at December 31, 2017</b>	248,512	5.76
Granted	100,746	1.97
Cancelled	(46,387)	6.96
Expired	(10,000)	20.00
<b>Outstanding at December 31, 2018</b>	292,871	3.78
Granted	689,300	0.44
Cancelled	(177,493)	2.55
Expired	(27,525)	5.33
<b>Outstanding at December 31, 2019</b>	777,153	\$ 1.04
Vested and expected to vest at December 31, 2019	578,486	\$ 1.25
Exercisable at December 31, 2019	111,595	\$ 4.61

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 2019. The total intrinsic value of options outstanding and options exercisable at December 31, 2019 was zero dollars each, which was calculated using the closing stock price at the end of the year of \$0.46 per share less the option price of the in-the-money grants.

The options outstanding at December 31, 2019 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
\$0.42	—	\$0.45	450,000	9.5	\$ 0.42	—	—	—	—
\$0.46	—	\$1.81	213,800	1.9	0.48	—	—	—	—
\$1.82	—	\$3.76	72,603	7.2	3.34	70,845	7.2	3.35	3.35
\$3.77	—	\$10.70	40,750	4.1	6.80	40,750	4.1	6.80	6.80
			777,153	6.9	\$ 1.04	111,595	6.0	\$ 4.61	4.61

**Restricted stock and restricted stock units**

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.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

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

	Restricted Stock Units Outstanding	Weighted Average Grant Date Fair Value
<b>At December 31, 2016</b>	250,115	\$ 6.34
Granted	375,542	3.18
Vested	(115,622)	5.78
Forfeited	(203,893)	5.30
<b>At December 31, 2017</b>	306,142	3.37
Granted	553,657	2.38
Vested	(222,835)	3.11
Forfeited	(90,106)	2.99
<b>At December 31, 2018</b>	546,858	2.54
Granted	85,575	0.62
Vested	(436,282)	2.23
Forfeited	(163,100)	2.33
<b>At December 31, 2019</b>	33,051	\$ 2.63

#### 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 2019, 2018, and 2017, employees purchased 15,706, 25,953 and 16,004 shares, respectively. At December 31, 2019, 385,778 shares remained available for purchase under the 2013 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-U.S. income tax examinations by tax authorities for years before 2016. 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, 2019 and 2018, respectively, there were no accrued interest and penalties related to uncertain tax positions.

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

	For the year ended December 31,		
	2019	2018	2017
<b>Current:</b>			
State	\$ 10	\$ 11	\$ 10
<b>Deferred:</b>			
U.S. Federal	—	—	(125)
<b>Provision for (benefit from) income taxes</b>	<b>\$ 10</b>	<b>\$ 11</b>	<b>\$ (115)</b>

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

	For the year ended December 31,		
	2019	2018	2017
U.S. statutory rate	21.0 %	21.0 %	34.0 %
State taxes (net of federal tax benefit)	2.0	2.5	2.3
Valuation allowance	(20.7)	(25.0)	17.4
Deferred rate change due to changes in tax laws	—	—	(51.7)
Other	(2.4)	1.4	(1.0)
	<u>(0.1)%</u>	<u>(0.1)%</u>	<u>1.0 %</u>

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,		
	2019	2018	2017
Accrued expenses and other reserves	\$ 1,505	\$ 1,964	\$ 1,749
Right-of-use-asset	(378)	—	—
Lease liabilities	461	—	—
Tax credits, deferred R&D, and other	44	65	197
Net operating loss	12,758	10,793	8,610
Valuation allowance	(14,390)	(12,822)	(10,556)
<b>Net deferred tax assets</b>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

In 2019, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the \$8.3 million additional federal net operating loss we recognized for the year. In 2018, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance 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 decrease in the valuation allowance.

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% to 21% 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.

At December 31, 2019, we had net operating loss carry-forwards of approximately \$108.8 million for federal income tax purposes (\$64.5 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$54.5 million of the \$108.8 million 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% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$8.3 million and \$8.7 million in net operating losses generated in 2019 and 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.

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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, 2019 and 2018, respectively. We had no net deferred tax liabilities at December 31, 2019 or 2018, respectively. In 2019, we recognized various states tax expense as a result of the adjustment from the 2018 provision to the actual tax on the 2018 returns that were filed in 2019. 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 in the valuation allowance on the portion of Alternative Minimum Tax Credits that are expected to be refunded.

**NOTE 13. PRODUCT AND GEOGRAPHIC INFORMATION**

We focus our efforts on the sale of LED lighting products, in particular our MMM and commercial tubular TLED lines of products and controls, into targeted vertical markets. Our products are sold primarily in the United States through a combination of direct sales employees, lighting agents, independent sales representatives and distributors. We currently operate in a single industry segment, developing and selling our LED lighting products and controls into the MMM and commercial markets.

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

	Year ended December 31,		
	2019	2018	2017
Commercial products	\$ 7,877	\$ 8,662	\$ 15,217
MMM products	4,828	9,445	4,629
<b>Total net sales</b>	<b>\$ 12,705</b>	<b>\$ 18,107</b>	<b>\$ 19,846</b>

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

	For the year ended December 31,		
	2019	2018	2017
United States	\$ 12,599	\$ 17,736	\$ 19,446
International	106	371	400
<b>Total net sales</b>	<b>\$ 12,705</b>	<b>\$ 18,107</b>	<b>\$ 19,846</b>

At December 31, 2019 and 2018, approximately 100% and 98%, respectively, 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 our 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.

On November 30, 2018, each of Gina Huang, Brilliant Start Enterprise, Inc. (“Brilliant Start”), Jag International Ltd., Jiangang Luo, Cleantech Global Ltd., James Tu, 5 Elements Global Fund L.P., Yeh-Mei Hui Cheng, Communal International, Ltd., and 5 Elements Energy Efficiency Limited (the “Former Schedule 13D Parties”) filed a Schedule 13D with the SEC, indicating that they may have been deemed to be a “group” under Section 13(d)(3) of the Exchange Act of 1934, as amended, and Rule 13d-5 promulgated thereunder, and that such group beneficially owned 17.6% of our common stock. The Schedule 13D was amended on February 26, 2019 and April 3, 2019.

On February 21, 2019, the Former Schedule 13D Parties entered into a settlement with the Company providing for the appointment of two directors (Geraldine McManus and Jennifer Cheng) and the nomination of those two director for election at the Company’s 2019 annual meeting of stockholders.

On March 29, 2019, the Company entered into a note purchase agreement (the “Note Purchase Agreement”) with certain investors, including Fusion Park LLC (of which James Tu is the sole member) (“Fusion Park”) and Brilliant Start (which is

controlled by Gina Huang, a current member of our board of directors), for the purchase of an aggregate of \$1.7 million of Convertible Notes. Pursuant to the Note Purchase Agreement, Fusion Park and Brilliant Start purchased \$580 thousand and \$500 thousand, respectively, in principal amount of Convertible Notes. In connection with the sale of Convertible Notes, Mr. Tu was appointed as a member of our board of directors on April 1, 2019 and Chief Executive Officer, President and interim Chief Financial Officer on April 2, 2019.

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 5.0% of our common stock prior to the August 2014 registered offering. As of December 31, 2019, 5 Elements Global Fund LP beneficially owns approximately 2.5% 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 50.0% ownership interest in 5 Elements Energy Efficiencies (BVI) Ltd., a beneficial owner of approximately 2.4% of our common stock. Yeh-Mei Cheng controls 5 Elements Energy Efficiencies (BVI) Ltd. and owns the other 50.0%. She is Co-Founder of Communal International Ltd. with Mr. Tu and the mother of Simon Cheng. Mr. Cheng was a member of our board of directors through February 19, 2017 and an employee of the Company through June 30, 2018 and rejoined the Company on August 5, 2019. Yeh-Mei Cheng is also the mother of Jennifer Cheng, a current member of our board of directors.

#### **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.

#### **NOTE 16. SUBSEQUENT EVENTS**

##### **January 2020 Equity Offering**

In January 2020, we retained H.C. Wainwright & Co., LLC to act as our exclusive placement agent in connection with the sale of 3,441,803 shares of the Company’s common stock to certain institutional investors, at a purchase price of \$0.674 per share, in a registered direct offering. We also sold the same institutional investors unregistered warrants to purchase up to 3,441,803 shares of common stock at an exercise price of \$0.674 per share in a concurrent private placement for a purchase price of \$0.125 per warrant. We paid the placement agent commissions of \$193 thousand plus \$50 thousand in expenses in connection with the registered direct offering and the concurrent private placement, and we also paid clearing fees of \$13 thousand. Proceeds to us, before expenses, from the sale of common stock and warrants (the “January 2020 Equity Offering”) were approximately \$2.5 million. In accordance with the terms of the Iliad Note, 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) was primarily used to reduce the outstanding principal amount of the Iliad Note.

##### **Conversion of Convertible Notes into Series A Preferred Stock**

Pursuant to their terms, on January 16, 2020, following approval of certain amendments to our certificate of incorporation by our stockholders, the principal amount of all of the Convertible Notes and the accumulated interest thereon in the amount of \$1.8 million converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of Series A Preferred Stock, which is convertible on a one-for-one basis into shares of our common stock.

##### **Recent Global Developments**

In December 2019, a novel strain of corona-virus began to impact the population of Wuhan, China, where several of our suppliers are located. We rely upon these facilities to support our business in China, as well as to export components for use in products in other parts of the world. While the closures and limitations on movement in the region are expected to be

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temporary, the duration of the production and supply chain disruption, and related financial impact, cannot be estimated at this time. Should the production and distribution closures continue for an extended period of time, the impact on our supply chain in China and globally could have a material adverse effect on our results of operations and cash flows.

**SUPPLEMENTARY FINANCIAL INFORMATION TO ITEM 8.**

The following table sets forth our selected unaudited financial information for the four quarters in the years ended December 31, 2019 and 2018, 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)*

	<b>2019</b>	<b>Fourth Quarter</b>	<b>Third Quarter</b>	<b>Second Quarter</b>	<b>First Quarter</b>			
Net sales	\$	3,531	\$	2,915	\$	3,082	\$	3,177
Gross profit		957		1,028		(109)		98
Net loss		(1,308)		(946)		(2,254)		(2,865)
Net loss per share (basic and diluted)	\$	(0.11)	\$	(0.08)	\$	(0.18)	\$	(0.24)
	<b>2018</b>	<b>Fourth Quarter</b>	<b>Third Quarter</b>	<b>Second Quarter</b>	<b>First Quarter</b>			
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)

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

None.

## **ITEM 9A. CONTROLS AND PROCEDURES**

### **Evaluation of disclosure controls and procedures**

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

Pursuant to Rule 13a-15(b) under the Exchange Act, our management must evaluate, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures, as of December 31, 2019, the end of the period covered by this report. Management, with the participation of our current Chief Executive Officer and Chief Financial Officer, did evaluate the effectiveness of our disclosure controls and procedures as of the end of period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2019.

### **Management’s report on internal controls over financial reporting**

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 as of December 31, 2019 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, 2019, management concluded that its internal control over financial reporting was effective as of December 31, 2019.

### **Changes in internal control over financial reporting**

During the quarter ended December 31, 2019, following steps to remediate our previously disclosed material weakness through various process improvements, including the hiring of additional associates to allow for segregated levels of review, we concluded the material weakness to be remediated. There were no other changes in our internal control over financial reporting that 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 SEC 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

Biographical information concerning each of the Company's directors as of February 29, 2020 is set forth below. Each director's term of office expires at the 2020 Annual Meeting of Stockholders, which is currently expected to occur during June 2020.

Name	Age	Director Since	Background
Jennifer Cheng	52	2019	<p>Ms. Cheng has served as a member of our board of directors since February 2019. She is the co-founder and has served as director on the board of Social Energy Partners LLC, which develops sustainability and smart building/smart city projects in the United States, Caribbean, Southeast Asia and the Middle East, since September 2017. Ms. Cheng also served as an independent director within the meaning of the NASDAQ Marketplace Rules ("Independent Director") of the Company from 2012 to 2015. From 1997 to 2006, Ms. Cheng was the co-founder and chairwoman of The X/Y Group, a marketing enterprise that markets and distributes global consumer brand products, including JanSport and Skechers in the greater China region. From 1995 to 1998, Ms. Cheng was a marketing director for Molten Metal Technology, a Boston-based clean energy company that developed patented technologies and offered solutions for advanced treatment and energy recycling for hazardous radioactive waste.</p> <p>Ms. Cheng received a Master's degree in Business Administration from Fairleigh Dickinson University and a Bachelor's degree in Economics and International Business from Rutgers University.</p> <p>Our board of directors believes that Ms. Cheng's qualifications to serve as a board member include her familiarity with the Company due to her prior service as a director and her experience with and insight into businesses focused on energy efficiency. Ms.Cheng has served as a member of the Nominating and Corporate Governance Committee since February 2019.</p>
Gina Huang (Mei Yun Huang)	57	2019	<p>Ms. Huang has served as a member of our board of directors since January 2020. She is the Founder and since January 1994, has been Honorary Chairwoman of Ti Town Technology Limited, an advanced industrial and mechanical equipment manufacturer based in Taiwan that specializes in the design, production, marketing and sales of corrosion-resistant pumps and motors, advanced filters and specialty alloys for semiconductor, electronic and chemical manufacturing industries, with offices across Asia and sales across the world. Since February 1996. Ms. Huang has also been the Founder and Chairwoman of Da Fa Industrial Limited, an investment company focusing on the global mining sector, Ms. Huang has founded each of Brilliant Start Limited and Jag International Limited, both investment companies focusing on technologies and special situations. Brilliant Start Limited and Jag International Limited were both founded in 2012, and Ms. Huang has served as Chairwoman of each since they were founded. Ms. Huang is a significant stockholder in the Company.</p> <p>Ms. Huang received a B.A. degree in Textile Design from Vanung University in Taiwan.</p> <p>Our board of directors believes Ms. Huang's experience in manufacturing and her contacts with manufacturers in Asia as well as her significant investment in the Company qualify her to serve as a board member.</p>

Geraldine McManus	62	2019	<p>Ms. McManus has served as a member of our board of directors since February 2019. She has been a Managing Member of Granger Management, an independent investment business, since May 2014. Previously, she was a Managing Director in the Investment Management Division at Goldman Sachs, where she worked from February 1998 until February 2014 and helped build its Private Wealth Management business, including structuring its business model and key functions focused on ultra-high net worth individuals and family groups. Prior to joining Goldman Sachs, Ms. McManus spent six years at Merrill Lynch as a Managing Director heading the Yankee Debt Capital Markets Group, advising sovereigns, supranational and international corporations on global debt issuance and liability management. Before working at Merrill Lynch, Ms. McManus spent six years at Salomon Brothers, two years as an associate in Corporate Finance and four years as a Product Specialist in the Hedge Management/Derivatives Group.</p> <p>Ms. McManus received a B.S. from Cornell University and an M.B.A. from Wharton. She serves on the Board of Trustees for The Delbarton School in Morristown, New Jersey, The Caron Foundation in Wernersville, Pennsylvania and The Jane Goodall Institute.</p> <p>Our board of directors believes that Ms. McManus’s qualifications to serve as a board member include her experience in evaluating businesses for investment, her achievements in building organizational structures and her non-profit board service.</p> <p>Ms. McManus serves as member of the Audit and Finance Committee and chair of the Nominating and Corporate Governance Committee.</p>
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Philip Politziner	79	2019	<p>Mr. Politziner has served as a member of our board of directors since August 2019. He was a founder, president and a member of the board of directors of Amper Politziner and Mattia. Amper Politziner and Mattia is one of two predecessor firms to Eisner Amper LLC, a full service advisory and accounting firm. Mr. Politziner retired from Eisner Amper in 2015, last serving as Chairman Emeritus. Mr. Politziner was appointed as a member of the Board of Directors of Jensyn Acquisition Corporation (NASDAQ: JSYN) in 2016, where he had been the chair of the audit committee until June 2019 when it consummated its merger with Peck Electric Co. He had served on the board of directors of Baker Tilly International North America, the Board of Directors of New Jersey Technology Council and the Board of Directors of Middlesex County Regional Chamber of Commerce. He has served on the Advisory Board of Jump Start New Jersey Angel Fund. He was awarded the Chamber of Commerce “Community Leader of Distinction” and was inducted into NJBiz Hall of Fame for businesspeople in New Jersey. He also appears in Who’s Who in Corporate Finance.</p> <p>Mr. Politziner received his B.S. in accounting from New York University and is currently licensed as a CPA in New Jersey. He is a member of the American Institute of Certified Public Accountants (AICPA) and the New Jersey Society of Certified Public Accountants (NJSCPA).</p> <p>Our board of directors believes that Mr. Politziner’s qualifications to serve as a board member include his considerable experience with financial and accounting matters and SEC compliance matters as the chair of the audit committee of a public company.</p> <p>Mr. Politziner serves as chair of the Audit and Finance Committee.</p>
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Stephen Socolof	59	2019	<p>Mr. Socolof has served as a member of our board of directors since May 2019. Mr. Socolof has been Managing Partner of Tech Council Ventures, an early-stage venture capital firm, since 2017 and remains a Managing Partner of New Venture Partners, a venture capital firm that he co-founded in 2001. Previously, Mr. Socolof worked at Lucent Technologies, Inc. from 1996 to 2001 where he established Lucent’s New Ventures Group. Before joining Lucent, Mr. Socolof spent eight years with Booz, Allen &amp; Hamilton Inc., where he was a leader of the firm’s innovation consulting practice. Mr. Socolof is currently a director or observer on the boards of Stratis IoT, SunRay Scientific, Vydia Inc., and Everspin Technologies Inc., which is a semiconductor and electronics technology company listed on the NASDAQ Global Market. He was a director of Gainspan Corporation before its acquisition by Telit Communications, Silicon Hive, until its acquisition by Intel Corporation, SyChip, Inc. before its acquisition by Murata, and a board observer of Flarion Technologies, Inc., until its acquisition by Qualcomm Inc.</p> <p>Mr. Socolof holds a Bachelor of Arts degree in economics and a Bachelor of Science degree in mathematical sciences from Stanford University and received his M.B.A. from the Amos Tuck School at Dartmouth College, where he was a Tuck Scholar. He currently serves on the Board of Advisors of the Center for the Study of Private Equity at the Tuck School.</p> <p>Our board of directors believes that Mr. Socolof’s qualifications to serve as a board member include his long history of investing in technology growth companies, his significant leadership experience in the corporate venture community and his experience as a public company board member, as well as his financial, business and investment expertise. Mr. Socolof currently serves on the Audit and Finance Committee and as chair of the Compensation Committee.</p>
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James Tu	50	2019	<p>Mr. Tu has served as our Chairman and Chief Executive officer since April 2019. He is also the founder and Chief Executive Officer of Social Energy Partners LLC, which develops energy efficiency and smart building projects, and founder and Chief Investment Officer of 5 Elements Global Advisors LLC, which focuses on investing in the cleantech sector and is a significant stockholder in the Company. Mr. Tu served as the Executive Chairman and Chief Executive Officer of the Company from May 2013 to February 2017, and as the non-Executive Chairman of the board of directors from December 2012 to April 2013. Previously, he served as the Director of Investment Management of Gerstein Fisher &amp; Associates, and an equity analyst at Dolphin Asset Management Corp.</p> <p>Mr. Tu received an MBA in finance from Baruch College and a B.S. in electrical engineering from Tsinghua University. A Chartered Financial Analyst (CFA) since 1997, he received an “E&amp;Y Entrepreneur of the Year” award in the Technology category in 2016.</p> <p>Our board of directors believes that Mr. Tu’s qualifications to serve as a board member include his role as the Company’s Chief Executive Officer, as well as his experience advising clean energy companies.</p>
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**Executive Officers**

The following table sets forth certain information about the executive officers and certain significant employees. There are no family relationships among any of our directors and executive officers. For biographical information regarding our executive officers, see the discussion under “Biographical Information” below.

Name	Age	Position
James Tu	50	Chairman and Chief Executive Officer
Tod Nestor	56	President, Chief Financial Officer and Secretary

*Biographical Information*

**James Tu**

See the discussion under “Directors” above.

### ***Tod Nestor***

From 2017 to 2018, Mr. Nestor served as Executive Vice President and Chief Financial Officer of Alumni Ventures Group, a Manchester, New Hampshire based venture capital firm with the most active global transaction volume in 2018 according to PitchBook. Between 2013 and 2016, Mr. Nestor served as the Chief Financial Officer of Merchants Automotive Group, Inc., a privately held, \$300 million in revenue in 2016 fleet management, short-term rental, automobile retail and consumer financing company. Previously, Mr. Nestor also served as Senior Vice President and Chief Financial Officer of The Penn Traffic Company, a \$1.5 billion in revenue in 2009 publicly traded grocery distribution company, and Chief Financial Officer for Fairway Holdings Corp., a privately held, \$750 million in revenue in 2011 grocery store chain based in the greater New York City region. Earlier in his career, Mr. Nestor held other senior leadership roles across a wide array of functions in large organizations such as American Eagle Outfitters, HJ Heinz, and WR Grace. Mr. Nestor received a Bachelor of Business Administration degree in Accounting from the University of Notre Dame and an MBA in Finance and Entrepreneurial Management from The Wharton School of the University of Pennsylvania. He is also a licensed Certified Public Accountant (CPA), Certified Management Account (CMA), Certified Financial Manager (CFM), and Chartered Financial Analyst (CFA).

### **Senior Management**

#### ***John Davenport***

John Davenport currently serves as Chief Scientist for Energy Focus. Mr. Davenport joined Energy Focus in November 1999 as Vice President and Chief Technology Officer and served as Chief Operating Officer from July 2005 until May 2008 and President from May 2008 until July 2012. Prior to joining Energy Focus, Mr. Davenport served as President of Unison Fiber Optic Lighting Systems, LLC from 1998 to 1999. Mr. Davenport began his career at GE Lighting in 1972 as a research physicist and thereafter served 25 years in various capacities, including GE Lighting's research and development manager and as development manager for high performance LED projects. He is a recognized global expert in light sources, lighting systems and lighting applications, with special emphasis in low wattage discharge lamps, electronic ballast technology and distributed lighting systems. Mr. Davenport developed numerous advanced lighting products for GE Lighting, including the blue Xenon headlamp currently used in automobiles. During his tenure with Energy Focus, Mr. Davenport led the development of a range of LED lighting products, including Intellitube®, Energy Focus' unique tubular LED retrofit lamp. He is the author of more than 125 patents.

Mr. Davenport received a Master's degree in Physics and a Bachelor of Science degree in Physics from John Carroll University.

### **Audit and Finance Committee**

The Company's Audit and Finance Committee acts as the standing audit committee of our board of directors. The Audit and Finance Committee, which currently consists of Mr. Politziner, as chair, Mr. Socolof and Ms. McManus, held six meetings in 2019. Each of the members of the Audit and Finance Committee is an Independent Director and is also independent under the criteria established by the SEC and NASDAQ for audit committee membership. Our board of directors has determined that Mr. Politziner is an "audit committee financial expert," as defined under the rules of the SEC. Our board has approved a charter for the Audit and Finance Committee. A copy of this charter can be found on the Company's website at <http://www.energyfocus.com>.

The Audit and Finance Committee's primary functions are to assist our board of directors in its oversight of the integrity of the Company's financial statements and other financial information, the Company's compliance with legal and regulatory requirements, the qualifications, independence and performance of the Company's independent registered public accounting firm. More specifically, the Audit Committee:

- appoints, compensates, evaluates and, when appropriate, replaces the Company's independent registered public accounting firm;
- reviews and pre-approves audit and permissible non-audit services;
- reviews the scope of the annual audit;
- monitors the independent registered public accounting firm's relationship with the Company; and
- meets with the independent registered public accounting firm and management to discuss and review the Company's financial statements, internal controls, and auditing, accounting and financial reporting processes.

**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](http://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 SEC.

**Delinquent Section 16(a) Reports**

Section 16(a) of the Exchange Act requires our officers, directors and persons owning more than 10% of a registered class of our equity securities, who collectively we generally refer to as insiders, to file certain reports regarding ownership of, and transactions in, our securities with the SEC. Such insiders are also required by SEC rules to furnish us with copies of all Section 16(a) reports they file.

Based solely on our review of such reports filed with the SEC and written representations from the reporting persons, we believe that all of our insiders filed the required reports on a timely basis under Section 16(a) for fiscal year 2019, except (i) Ms. Cheng inadvertently filed two late Form 4s with respect to two transactions; (ii) Ms. McManus inadvertently filed two late Form 4s with respect to two transactions; (iii) the Former Schedule 13D Parties inadvertently filed one late Form 4 with respect to two transactions; (iv) Mr. Socolof inadvertently filed one late Form 3 after being appointed a director and two late Form 4s with respect to two transactions; (v) Mr. Nestor inadvertently filed one late Form 3 after being appointed President, Chief Financial Officer and Secretary; (vi) Mr. Politziner inadvertently filed one late Form 4 with respect to one transaction.

**ITEM 11. EXECUTIVE COMPENSATION****Summary Compensation Table**

The following table sets forth information about compensation of our current and former Chief Executive Officer; and our current and former Chief Financial Officer (our "Named Executive Officers") for the years indicated:

Name and Principal Position	Year	Salary (\$ (1))	Bonus (\$)	Stock Awards (\$ (2))	Option Awards (\$ (2))	Non-Equity Incentive Plan Compensation (3)	All Other Compensation (\$ (4))	Total (\$)
James Tu (5)	2019	170,766	—	—	87,000	120,000	—	377,766
Theodore L. Tewksbury, III	2019	351,825	—	—	—	—	—	351,825
Former Chairman, Chief Executive Officer and President (6)	2018	459,249	—	409,944	—	—	2,652	871,845
Tod Nestor (7)	2019	108,173	—	—	43,500	50,000	—	201,673
Jerry Turin	2019	169,677	—	—	—	—	—	169,677
Former Chief Financial Officer and Secretary (8)	2018	172,686	75,000	91,358	98,424	—	2,549	440,017

- (1) Amounts paid in 2018 and 2019 reflect adjustments to implement salary increases and the timing of payroll dates.
- (2) Under SEC rules, the values reported reflect the aggregate grant date fair values computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (“FASB ASC Topic 718”), to each of the Named Executive Officers in the years shown. We calculate the grant date fair value of stock option grants using the Black-Scholes option pricing model. We calculate the fair value of RSU grants based on the closing stock price on the grant date. A discussion of the assumptions used in calculating the fair value is set forth in Note 11 to the Consolidated Financial Statements contained in Item 8 of the 10-K Filing.
- (3) The amounts set forth in this column are amounts paid under the Company’s cash incentive program, which is described below under “Cash incentive plan.”
- (4) The amounts set forth in this column include Company-paid contributions for life insurance and supplemental disability policies
- (5) Mr. Tu joined the Company as an executive officer on April 2, 2019. Amounts reported reflect amounts earned for the portion of 2019 Mr. Tu was an employee.
- (6) Dr. Tewksbury served as the Chairman, Chief Executive Officer and President until the 10-K Filing on April 1, 2019.
- (7) Mr. Nestor joined the Company as an executive officer on July 1, 2019. Amounts reported reflect amounts earned for the portion of 2019 Mr. Nestor was an employee.
  
- (8) Mr. Turin was appointed as Chief Financial Officer and Secretary on May 29, 2018 and served until the 10-K Filing on April 1, 2019.

### **Narrative Disclosure to Summary Compensation Table**

The Compensation Committee (the “Committee”) of our board of directors generally has the responsibility of administering our executive compensation program or making recommendations to the full board with respect to such program. The Committee reviews and, as appropriate, makes recommendations to the full Board regarding the base salaries and annual cash bonuses for executive officers, and administers our stock incentive plans, including the grants of stock options.

#### *Compensation Philosophy and Objectives*

Our principal executive compensation policy is to provide a compensation program that will attract, motivate and retain persons of high quality and provide incentives that align the interests of our employees and directors with those of our stockholders. In administering the executive compensation program, the Committee is mindful of the following principles and guidelines, which are supported by the full Board:

- Base salaries for executive officers should be competitive.
- A sufficient portion of annual compensation should be at risk in order to align the interests of executives with those of our stockholders.
- The variable part of annual compensation should reflect both individual and corporate performance.
- As a person’s level of responsibility increases, a greater portion of total compensation should be at risk and include more stock-based compensation to provide executives long-term incentives, and help to align further the interests of executives and stockholders in the enhancement of stockholder value.

Executive officer compensation has three primary components: base salary, bonuses granted under a bonus or cash incentive plan, and stock-based awards granted pursuant to our 2014 Equity Incentive Plan (“2014 Plan”). In addition, executive officers receive certain benefits that are generally available to all salaried employees. We do not have any defined benefit pension plans, non-qualified deferred compensation arrangements, or supplemental retirement plans for our executive officers.

During 2019, the Compensation Committee engaged Radford (a division of Aon) to assist with the review of the Company’s executive compensation by providing data on market trends and, more specifically, with respect to a group of peer companies having similar size and other characteristics to the Company based on the Company’s performance and how the Company’s compensation levels compared with such peers.

For each Named Executive Officer’s compensation for 2019, the Committee reviewed the proposed level for each compensation component based on various factors, including the median level for the peer group and other competitive market factors, internal equity and consistency, and an emphasis on pay for performance. The Committee made recommendations to our board of directors, based on input from the then Chief Executive Officer other than with respect to his own compensation, which then approved the final compensation amounts for each executive officer. We have not adopted any formal or informal policies or guidelines for allocating compensation between long-term and currently paid compensation, between cash and non-cash compensation, or among different forms of non-cash compensation.

### Base Salary

The Committee seeks to establish executive officer base salary levels that are competitive with the median amounts paid to executives performing similar functions within the Company's peer group. The Committee also takes into account a number of largely subjective factors, including changes in the individual's duties and responsibilities, the personal performance of such executive officer, the performance of the Company, cost-of-living increases, and such other factors as the Committee deems appropriate, including the individual's overall mix between fixed and variable compensation and between cash and stock-based compensation.

### Cash Incentive Plan

Effective July 16, 2019, an Executive Bonus Plan (the "Bonus Plan") was established, based on the Committee's recommendation to our board of directors, for executive management under which the executive officers are each eligible for a cash incentive payment. Our board of directors set the potential payments at up to the following percentages of such executive's 2019 prorated salary, with the final amounts payable to be determined by our board of directors based upon the 2019 financial results with respect to the metrics and percentages described below:

	Incentive Payment as a % of Base Salary (1)		
	Minimum	Target	Maximum
Chief Executive Officer	0%	120%	240%
President and Chief Financial Officer	0%	60%	120%

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(1) Based on the annual salary rate for the year and prorated for the portion of the year they worked for the Company.

Subject to the terms of the Bonus Plan, distribution of the 2019 bonus was based 70% on Company performance and 30% on individual performance. Our board of directors or the Committee could, in its sole discretion, adjust amounts payable to any participant downward or upward to reflect such considerations as it may in its sole discretion deem to be appropriate.

The Company performance metrics selected for the Bonus Plan by the Committee were revenue and cash management. The minimum targets for the revenue condition and the cash management condition for Company performance were not met in 2019. The individual performance distribution was determined to be \$120,000 for the Chief Executive Officer and \$50,000 for the President and Chief Financial Officer, for a total of \$170,000, which were paid in January 2020. As permitted by the Bonus Plan, the Committee used its discretion to grant Mr. Nestor a bonus that was \$9,500, in excess of the amount payable pursuant to the Bonus Plan in light of his performance during 2019.

### Discretionary Bonuses

The Committee may from time to time award a discretionary annual cash bonus to executive officers, in the amounts and based on the factors determined by the Committee. The bonus awards may be based on an executive officer's individual performance or on the overall success of the Company, or both. There were no discretionary bonuses awarded to the Named Executive Officers with respect to 2019, other than the discretionary bonus paid to Mr. Nestor under the Bonus Plan.

### Stock Awards and Other Stock-Based Awards

The Committee believes that employee equity ownership provides significant motivation to executive officers to maximize value for the Company's stockholders and, therefore; periodically grants time-based stock options and restricted stock units ("RSUs") under the Company's 2014 Stock Incentive Plan, as amended (the "Equity Incentive Plan") at the then current market price.

The Committee grants, or recommends to the Board to grant, options and/or RSUs to executive officers, typically after consideration of recommendations from the Chief Executive Officer. Recommendations for equity awards are based upon the relative position, responsibilities, and previous and expected contributions of each officer, previous equity award grants to such officers and customary levels of equity award grants for the respective position in other comparable companies. The exercise price for stock options is equal to the fair market value of our common stock on the grant date. Stock options generally vest over a four-year period with 25% vesting one year from the date of grant and the remaining 75% vesting equally on a monthly basis over the remaining 36 months. Options expire 10 years from the date of grant. RSUs, if granted, generally vest over a

three-year period with 33% vesting one year from the grant date, 33% vesting two years from the grant date, and the remaining 34% vesting three years from the grant date.

Under the Equity Incentive Plan, upon a Change of Control (as defined in such plan) all outstanding unvested RSUs become fully vested if not assumed, or substituted with a new award, by the successor to the Company and, if such awards are assumed or substituted by the successor to the Company, they become fully vested if the RSU holder's employment is terminated (other than a termination for cause) within two years following a Change of Control. If an option holder's employment is terminated within two years after a Change of Control for any reason other than death, retirement, disability or termination for cause, each outstanding stock option that is vested following such termination will remain exercisable until the earlier of the third anniversary of termination or the expiration of the term of the stock option.

In July 2019, Mr. Tu, Executive Chairman and Chief Executive Officer, was awarded 300,000 stock options and Mr. Nestor, President and Chief Financial Officer, was awarded 150,000 stock options. These options have an exercise price of \$0.42 per share. One fourth of these options vest on July 16, 2020, with the remaining three-fourths vesting in equal monthly installments thereafter over a three-year period.

#### *Change in Control Benefit Plan*

On February 19, 2017, we established a Change in Control Benefit Plan to provide for the payment of certain benefits to selected eligible employees and directors of the Company. A Change in Control is defined in the same manner as under the Equity Incentive Plan and, subject to limited exceptions, includes any one or more of the following events summarized below:

- any "person" becomes the beneficial owner, directly or indirectly, of 50% or more of the total voting power of the voting securities of the Company then outstanding and entitled to vote generally in the election of directors of the Company;
- individuals who, as of the beginning of any 24-month period, constitute the Board cease for any reason during such 24-month period to constitute at least a majority of the Board; or
- consummation of (A) a merger, consolidation or reorganization of the Company, in each case, with respect to which all or substantially all of the persons who were the respective owners of the voting securities of the Company prior to such merger, consolidation or reorganization, do not, following such merger, consolidation or reorganization beneficially own, directly or indirectly, at least 35% of the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors of the entity or entities resulting from such merger, consolidation or reorganization, (B) a complete liquidation or dissolution of the Company, or (C) a sale or other disposition of all or substantially all of the assets of the Company.

The Company entered into Change in Control participation agreements with Dr. Tewksbury on February 19, 2017 and with Mr. Turin on May 18, 2018 (which terminated upon their departure). The Change in Control participation agreement provides for a lump sum payment equal to one times annual base salary and target bonus, accelerated vesting of stock awards, and continuation of group health plan benefits for 12 months if the participant's employment is involuntarily terminated within 24 months of a Change in Control.

There are no Change in Control participation agreements in place with either Mr. Tu, Executive Chairman and Chief Executive Officer or Mr. Nestor, President Chief Financial Officer and Secretary.

#### *Employment Agreements with Named Executive Officers*

We do not have employment agreements with any of our Named Executive Officers.



## Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information with respect to equity awards outstanding for our Named Executive Officers as of December 31, 2019:

Name	Award Grant Date	Option Awards				
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)		Option Exercise Price (\$)	Option Expiration Date
James Tu	7/16/2019	—	300,000	(1)	\$0.42	7/16/2029
Tod Nestor	7/16/2019	—	150,000	(1)	\$0.42	7/16/2029
Theodore L. Tewksbury, III	2/27/2017	45,323	—	(2)	\$3.43	2/27/2027
Jerry Turin	0	—	—		\$0	0

- (1) One-fourth vests on the first anniversary of the grant date, and the remainder vests in equal monthly installments thereafter over a three-year period.
- (2) One third was to vest on the first anniversary of the grant date, and the remainder was to vest monthly in equal installments over the following 24-month period. Pursuant to the terms of Dr. Tewksbury's separation agreement with the Company, his unvested options terminated on April 1, 2019 and his vested options will remain exercisable for one year following his separation date, or through April 1, 2020.

## Compensation of Directors

We use a combination of cash and stock-based awards to attract and retain qualified candidates to serve on our board. In setting director compensation, our board considers the significant amount of time that directors expend in fulfilling their duties, the skill level required, and the compensation of board members at comparable companies.

Our board has approved the following annual cash and stock-based compensation for non-employee directors:

Annual Cash Retainer	\$	24,000
Additional Annual Cash Retainers:		
Lead Director	\$	14,750
Compensation Committee Chair	\$	14,000
Compensation Committee Member	\$	5,000
Audit and Finance Committee Chair	\$	19,000
Audit and Finance Committee Member	\$	7,000
Nominating and Corporate Governance Committee Chair	\$	9,000
Nominating and Corporate Governance Committee Member	\$	4,000
Initial Restricted Stock Unit Grant		20,000 (1)

- (1) Each current non-employee director received 20,000 RSUs/shares of common stock for their service during 2019, with any RSUs granted vesting in full on December 17, 2019, the date of our annual meeting of stockholders.

The Board, at its discretion, may grant options or other equity awards to newly elected directors and additional grants to other directors.

The following table shows the total annual compensation paid to non-employee directors for the year ended December 31, 2019:

Name	Fees Earned or Paid in Cash (\$) (1)	Stock Awards (\$) (2)	Total (\$)
Jennifer Cheng	24,033	14,286	38,319
Geraldine McManus	34,550	14,286	48,836
Philip Politziner	12,671	8,400	21,071
Stephen Socolof	31,103	8,400	39,503
Ronald D. Black (3)	28,638	—	28,638
Glenda M. Dorchak (3)	22,521	—	22,521
Marc J. Eisenberg (3)	23,088	—	23,088
Michael R. Ramelot (4)	49,443	—	49,443
Satish Rishi (3)	24,829	—	24,829

(1) Represents cash fees earned during 2019.

(2) Represents RSUs that vested on December 17, 2019 and settled in Common Stock or stock grants. The grant date fair value is calculated based on the closing price of the stock on the grant date.

(3) Dr. Black and Messrs. Eisenberg and Rishi resigned from our board of directors effective as of the April 1, 2019. Ms. Dorchak resigned from the Board as of February 21, 2019. Their unvested RSUs vested as of their respective resignation dates.

(4) Mr. Ramelot's term as a director expired at the 2019 Annual Meeting of stockholders held on December 17, 2019, and he was not re-nominated for an additional term.

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

### Securities authorized for issuance under equity compensation plans

The following table details information regarding our existing equity compensation plans as of December 31, 2019:

Plan category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	810,204	1.04 (2)	1,236,938 (1)

(1) Includes 385,778 shares available for issuance under the 2013 Employee Stock Purchase Plan and 851,160 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 33,051 shares that are restricted stock units and do not have an exercise price.

### Security Ownership of Principal Stockholders and Management

The following table sets forth certain information with respect to beneficial ownership of Common Stock as of February 21, 2020, as to (i) each person known by the Company to beneficially own more than 5% of the outstanding shares of Common Stock, (ii) each of the Company's current directors and Named Executive Officers listed below, and (iii) all current executive officers and directors of the Company as a group. Unless otherwise specified, the address for each

officer and director is 32000 Aurora Road, Suite B, Solon Ohio 44139. Except as otherwise indicated and subject to community property laws where applicable, each person or entity included in the table below has sole voting and investment power with respect to the shares beneficially owned by that person or entity.

As noted in the footnotes to the tables below, beneficial ownership of our common stock includes shares of Series A Preferred Stock, which are convertible into our common stock on a one-for-one-basis. Pursuant to the Series A Certificate of Designation, each holder of outstanding shares of Series A Preferred Stock is entitled to vote with holders of outstanding shares of our common stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration, except as provided by law. In any such vote, each share of Series A Preferred Stock shall be entitled to a number of votes equal to 55.37% of the number of shares of common stock into which such share of Series A Preferred Stock is convertible.

Name and Address	Shares Beneficially Owned		Percent of Outstanding Common Stock (1)
	Number of Shares	Percentage of Total	
<b>5% Stockholders</b>			
Schedule 13D Parties (James Tu and Gina Huang (Mei Yun Huang) 1 Bridge Plaza North, #275 Fort Lee, NJ 07024	3,038,413	(2)	17.3%
James Tu	1,224,253	(3)	7.3%
Gina Huang (Mei Yun Huang)	1,814,160	(4)	10.9%
<b>Current Directors and Named Executive Officers</b>			
Jennifer Cheng	24,390		*
Geraldine F. McManus	24,390		*
Philip Politziner	20,000		*
Stephen Socolof	20,000		*
Tod Nestor	0		*
James Tu	See "5% Stockholders" above		
Gina Huang (Mei Yun Huang)	See "5% Stockholders" above		
Theodore L. Tewksbury III	231,549	(5)	1.5%
Jerry Turin	18,064		*
<b>All Current Directors and Executive Officers as a Group</b>	<b>3,127,193</b>		<b>17.8%</b>

\*Less than one percent

- (1) Based on 15,892,526 shares of Common Stock outstanding as of February 21, 2020. In addition, shares of Common Stock issuable pursuant to options that are currently exercisable, or may become exercisable within 60 days of February 21, 2020, or pursuant to RSUs scheduled to vest within 60 days of February 21, 2019, are included in the reported beneficial holdings of the individual owning such options or RSUs. These shares of Common Stock have been treated as outstanding in calculating the percentage ownership of the individual possessing such interest, but not for any other individual.
- (2) On January 30, 2020, James Tu and Gina Huang and certain of their respective controlled affiliates filed a Schedule 13D that indicated that they may be deemed to be members of a "group" (as such term is defined in as defined in Section 13(d)(3) of the Exchange Act and Rule 13d-5(b) promulgated thereunder). This number reflects the beneficial ownership of the group collectively and includes 1,721,023 shares of Common Stock that could be acquired upon the conversion of 1,721,023 shares of Series A Preferred Stock. For information regarding the beneficial ownership of Mr. Tu and Ms. Huang individually, see footnotes (3) and (4), respectively.

- (3) Mr. Tu has shared voting and dispositive power over 300,000 shares of Common Stock held by 5 Elements Global Fund L.P. (“Global Fund”) and 924,253 shares of Common Stock issuable upon the conversion of 924,253 shares of Series A Preferred Stock held by Fusion Park LLC. (“Fusion Park”). Global Fund and Fusion Park are controlled affiliates of Mr. Tu.
- (4) Ms. Huang has shared voting and dispositive power over 1,214,160 shares of Common Stock (which includes 796,770 shares of Series A Preferred Stock convertible into 796,770 shares of Common Stock) held by Brilliant Start Enterprise, Inc. (“Brilliant Start”), and 600,000 shares of Common Stock held by Jag International Ltd. (“Jag”). Brilliant Start and Jag are controlled affiliates of Ms. Huang.
- (5) Includes 51,503 options currently exercisable until April 1, 2020.

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

#### Transactions with Related Persons

On November 30, 2018, each of Gina Huang, Brilliant Start, Jag, Jiangang Luo, Cleantech Global Ltd., James Tu, Global Fund, Yeh-Mei Hui Cheng, Communal International, Ltd., and 5 Elements Energy Efficiency Limited (the “Former Schedule 13D Parties”) filed a Schedule 13D with the SEC, indicating that they may have been deemed to be a “group” under Section 13(d)(3) of the Exchange Act of 1934, as amended, and Rule 13d-5 promulgated thereunder, and that such group beneficially owned 17.6% of our common stock. The Schedule 13D was amended on February 26, 2019 and April 3, 2019.

A description of the relationships between certain of the Former Schedule 13D Parties is set forth below:

- Gina Huang (“Ms. Huang”), who:
  - is the Chairperson of Brilliant Start and the sole owner of Jag;
  - has voting and dispositive power over the common stock beneficially owned by Brilliant Start and Jag;
- Jiangang Luo (“Mr. Luo”), who is the Managing Partner of Cleantech Global Ltd. (“Cleantech”), and a former member of our board of directors;
- James Tu (“Mr. Tu”), who is now the Company’s Chairman and Chief Executive Officer and member of our board and previously served as Chairman, Chief Executive Officer and President of the Company and a member of our board from December 18, 2012 until his resignation from such positions on February 19, 2017:
  - has voting and dispositive power over the common stock held by Global Fund;
  - is a Co-Founder and 50% owner of Communal International, Ltd. (“Communal”), which has 50% ownership interest in Energy Efficiency (defined below);
- Yeh-Mei Hui Cheng (“Ms. Cheng”), who:
  - is the general partner and controlling partner of Energy Efficiency (defined below);
  - owns 50% of Energy Efficiency;
  - is Co-Founder and 50% owner of Communal, which owns the other 50% of Energy Efficiency; and
  - is the mother of Jennifer Cheng, a current member of our board of directors, and Simon Cheng, a member of our board of directors through February 19, 2017 and a current employee of the Company.
- Communal, which holds 50% ownership interest in 5 Elements Energy Efficiency Limited (“Energy Efficiency”); and
- Energy Efficiency, which is owned 50% by Ms. Cheng and 50% by Communal.

On February 21, 2019, the Former Schedule 13D Parties entered into a settlement with the Company providing for the appointment of two directors (Geraldine McManus and Jennifer Cheng) and the nomination of those two director for election at the Company’s 2019 annual meeting of stockholders.

On March 29, 2019, the Company entered into a note purchase agreement (the “Note Purchase Agreement”) with certain investors, including Fusion Park (of which James Tu is the sole member) and Brilliant Start (which is controlled by Gina Huang), for the purchase of an aggregate of \$1.7 million in subordinated convertible promissory notes. Pursuant to the Note Purchase Agreement, Fusion Park and Brilliant Start purchased \$580,000 and \$500,000, respectively, in principal amount of the subordinated convertible promissory notes. The subordinated convertible promissory notes were amended on May 29, 2019 (as amended, the “Convertible Notes”). In connection with the sale of Convertible Notes, Mr. Tu was appointed as a member of our board of directors on April 1, 2019 and Chief Executive Officer, President and interim Chief Financial Officer on April 2, 2019.

The Convertible Notes had a maturity date of December 31, 2021 and bore interest at a rate of 5% per annum until June 30, 2019 and at a rate of 10% thereafter. Pursuant to their terms, on January 16, 2020 following approval of certain amendments to our certificate of incorporation by our stockholders, the principal amount of all of the Convertible Notes and the accumulated interest thereon in the amount of \$1,815,041 converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of Series A Preferred Stock, which is convertible on a one-for-one basis into shares of our common stock. Upon the conversion of the Convertible Notes, Fusion Park and Brilliant Start received 924,253 shares and 796,770 shares, respectively, of Series A Preferred Stock.

On January 30, 2020, the Former Schedule 13D Parties filed an amendment to their Schedule 13D, which among other things, reported that the “group” that may have been formed by the Former Schedule 13D parties was no longer a group. That amendment did note, however, that Ms. Huang, Jag, Brilliant Start, James Tu, Global Fund and Fusion Park may be deemed to be a “group” (as such term is defined in as defined in Section 13(d)(3) of the Exchange Act and Rule 13d-5(b) promulgated thereunder).

### Director Independence

Our board of directors has determined that each of the following current directors is an Independent Director:

- Jennifer Cheng
- Geraldine F. McManus
- Philip Politziner
- Stephen Socolof
- Gina Huang

In addition, to the knowledge of the current management, each of the following persons that served as a director during the last completed fiscal year but is no longer a member of our board of directors was an Independent Director during his or her tenure: Ronald D. Black, Glenda M. Dorchak, Marc J. Eisenberg, Michael Ramelot and Satish Rishi.

Each of the Audit and Finance Committee, the Nominating and Corporate Governance Committee and the Compensation Committee is comprised entirely of Independent Directors.

## ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

### Accountant Fees and Services

Plante & Moran, PLLC provided audit services to the Company for the fiscal year ending December 31, 2018. GBQ Partners, LLC, an independent member of the BDO Alliance USA, provided audit services to the Company for the fiscal year ending December 31, 2019. The following table presents fees for professional services rendered by Plante & Moran, PLLC for 2018; and Plante & Moran, PLLC and GBQ Partners, LLC collectively for 2019:

	Year Ended December 31,	
	2019	2018
Audit Fees	\$ 290,308	\$ 327,500
Audit-Related Fees	-	-
Tax Fees	-	-
All Other Fees	-	-
Total Fees	\$ 290,308	\$ 327,500

*Audit Fees.* “Audit Fees” include the aggregate fees billed for professional services rendered. Audit Fees for 2019 include fees billed by Plante & Moran, PLLC and GBQ Partners, LLC and include payments for professional services rendered in 2019, including audit services related to quarterly reviews and audits of consolidated financial statements, reviews in connection with SEC filings and related consents, comfort letters related to the public stock offering, and other consultations. Because we are a smaller reporting company, for both 2019 and 2018, we were not required to obtain an attestation report with respect to our internal control over financial reporting from our independent registered public accounting firm. Therefore, no fees related to that attestation report were incurred.

**Pre-Approval Policies and Procedures**

It is the Company's policy that all audit and non-audit services to be performed by the Company's principal auditors be approved in advance by the Audit and Finance Committee. The Audit and Finance Committee pre-approved all services provided by GBQ Partners, LLC during 2019.

**PART IV****ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES****(a) (1) Financial statements**

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

**(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
<b>Year ended December 31, 2019</b>				
Allowance for doubtful accounts and returns	\$ 33	\$ 30	\$ 35	\$ 28
Inventory reserves	4,212	814	1,381	3,645
Valuation allowance for deferred tax assets	12,822	1,568	—	14,390
<b>Year ended December 31, 2018</b>				
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	2,266	—	12,822
<b>Year ended December 31, 2017</b>				
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

**(3) Exhibits****EXHIBIT INDEX**

Exhibit Number	Description of Documents
<a href="#">3.1</a>	Certificate of Incorporation of Energy Focus, Inc. (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed May 1, 2006).
<a href="#">3.2</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on June 21, 2010 (filed with this Report).
<a href="#">3.3</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on October 9, 2012 (filed with this Report).

<a href="#">3.4</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on October 28, 2013 (filed with this Report).
<a href="#">3.5</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on July 16, 2014 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
<a href="#">3.6</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on July 24, 2015 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 27, 2015).
<a href="#">3.7</a>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on January 15, 2020 (filed with this Report).
<a href="#">3.8</a>	Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on March 29, 2019 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on April 1, 2019).
<a href="#">3.9</a>	Amendment to the Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on May 30, 2019 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 30, 2019).
<a href="#">3.10</a>	Amendment to the Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on January 15, 2020 (filed with this Report).
<a href="#">3.11</a>	Bylaws of Energy Focus, Inc. (incorporated by reference to Exhibit 3.5 to the Registrant's Annual Report on Form 10-K filed on March 10, 2016).
<a href="#">3.12</a>	Certificate of Ownership and Merger, Merging Energy Focus, Inc., a Delaware corporation, into Fiberstars, Inc., a Delaware corporation, filed with the Secretary of State of the State of Delaware on May 4, 2007 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 10, 2007).
<a href="#">4.1</a>	Description of Securities of Energy Focus, Inc. (filed with this Report).
<a href="#">4.2</a>	Form of Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on January 13, 2020).
<a href="#">4.3</a>	Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.2 of the Registrant's Current Report on Form 8-K filed on January 13, 2020).
<a href="#">10.1*</a>	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).
<a href="#">10.2*</a>	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).
<a href="#">10.3*</a>	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).
<a href="#">10.4*</a>	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).
<a href="#">10.5*</a>	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).
<a href="#">10.6*</a>	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).
<a href="#">10.7*</a>	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).
<a href="#">10.8*</a>	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).
<a href="#">10.9*</a>	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).
<a href="#">10.10*</a>	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).
<a href="#">10.11*</a>	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).
<a href="#">10.12*</a>	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).
<a href="#">10.13*</a>	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).
<a href="#">10.14*</a>	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).
<a href="#">10.15*</a>	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).
<a href="#">10.16*</a>	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).
<a href="#">10.17*</a>	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).

<a href="#">10.18*</a>	Agreement dated February 21, 2019 entered into by Energy Focus, Inc. and the Investor Group thereto (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on February 26, 2019).
<a href="#">10.19</a>	Note Purchase Agreement, dated March 29, 2019, among the Company and each of the Investors thereto (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on April 1, 2019).
<a href="#">10.20</a>	Form of Subordinated Convertible Promissory Note entered into by the Company and each of the Investors on March 29, 2019 (incorporated by reference to Exhibit 10.2 to the Registrant’s Current Report on Form 8-K filed on April 1, 2019).
<a href="#">10.21</a>	Separation Agreement and Release between Energy Focus, Inc. and Theodore L. Tewksbury III, effective as of April 1, 2019 (incorporated by reference to Exhibit 10.3 to the Registrant’s Current Report on Form 8-K filed on April 1, 2019).
<a href="#">10.22</a>	Separation Agreement and Release between Energy Focus, Inc. and Jerry Turin, effective as of April 1, 2019 (incorporated by reference to Exhibit 10.4 to the Registrant’s Current Report on Form 8-K filed on April 1, 2019).
<a href="#">10.23</a>	Form of Amended and Restated Subordinated Convertible Promissory Note entered into by the Company and each of the Investors thereto (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on May 30, 2019).
<a href="#">10.24*</a>	President and Chief Financial Officer Offer Letter dated June 18, 2019 between Tod A. Nestor and Energy Focus, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on July 22, 2019).
<a href="#">10.25*</a>	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 July 19, 2019).
<a href="#">10.26</a>	Note Purchase Agreement, dated November 25, 2019, by and between Energy Focus, Inc. and Iliad Research and Trading, L.P. (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on November 29, 2019).
<a href="#">10.27</a>	Promissory Note, effective November 25, 2019, in favor of Iliad Research and Trading, L.P. (incorporated by reference to Exhibit 10.2 to the Registrant’s Current Report on Form 8-K filed on November 29, 2019).
<a href="#">10.28</a>	Form of Securities Purchase Agreement, dated as of January 9, 2020, between the Company and each purchaser named in the signature pages thereto (incorporated by reference to Exhibit 10.1 of the Registrant’s Current Report on Form 8-K filed on January 13, 2020).
<a href="#">21.1</a>	Subsidiaries of the Registrant (filed with this Report).
<a href="#">23.1</a>	Consent of GBQ Partners, LLC, Independent Registered Public Accounting Firm (filed with this Report).
<a href="#">23.2</a>	Consent of Plante & Moran, PLLC, Independent Registered Public Accounting Firm (filed with this Report).
<a href="#">31.1</a>	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<a href="#">31.2</a>	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<a href="#">32.1+</a>	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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.

+ This exhibit shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

## 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.

Date: March 24, 2020

By: /s/ James Tu  
 James Tu  
 Executive Chairman and Chief Executive Officer  
*(Principal Executive Officer)*

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

<u>Date</u>	<u>Signature</u>	<u>Title</u>
March 24, 2020	<u>/s/ James Tu</u> James Tu	Executive Chairman and Chief Executive Officer <i>(Principal Executive Officer)</i>
March 24, 2020	<u>/s/ Tod Nestor</u> Tod Nestor	President and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>
March 24, 2020	<u>/s/ Jennifer Y. Cheng</u> Jennifer Y. Cheng	Director
March 24, 2020	<u>/s/ Gina Huang (Mei Yun Huang)</u> Gina Huang (Mei Yun Huang)	Director
March 24, 2020	<u>/s/ Geraldine F. McManus</u> Geraldine F. McManus	Director
March 24, 2020	<u>/s/ Philip Politziner</u> Philip Politziner	Director
March 24, 2020	<u>/s/ Stephen Socolof</u> Stephen Socolof	Director

**ENERGY FOCUS, INC.**

**CERTIFICATE**

The undersigned, Joseph G. Kaveski, hereby certifies that:

1. I am the duly elected and acting Chief Executive Officer of Energy Focus, Inc., a Delaware corporation (the "Corporation").

2. The Corporation's only issued and outstanding class of capital stock is its Common Stock. The holder of each share of Common Stock is entitled to cast one vote for each share held. At the Corporation's Annual Meeting of Shareholders held on June 16, 2010, shareholders voted a majority of the outstanding shares of common stock in favor of the following amendment to the Corporation's Certificate of Incorporation and thereby adopted the amendment in accordance with Section 242 of the Delaware Corporation Law:

Article IV(A) of the Corporation's Certificate of Incorporation shall be replaced in its entirety with the following:

**ARTICLE IV**

(A) The Corporation is authorized to issue two classes of stock to be designated, respectively, "Preferred Stock" and "Common Stock". The total number of shares which the Corporation is authorized to issue is Sixty-Two Million (62,000,000) shares, each with a par value of \$0.0001 per share. Sixty Million (60,000,000) shares shall be Common Stock and Two Million (2,000,000) shares shall be Preferred Stock.

3. On April 30, 2010, the Board of Directors of the Corporation, acting under Section 242 of the Delaware Corporation Law, adopted a resolution setting forth the above amendment, declared the advisability of the amendment, and directed that the amendment be considered at the Annual Meeting of Shareholders.

4. I affirm of my own knowledge that the matters set forth in this Certificate are true and correct. Executed at Solon, Ohio on June 16, 2010.

/s/ Joseph G. Kaveski  
Joseph G. Kaveski  
Chief Executive Officer

**ENERGY FOCUS, INC.**

**CERTIFICATE**

The undersigned, Joseph G. Kaveski, hereby certifies that:

1. I am the duly elected and acting Chief Executive Officer of Energy Focus, Inc., a Delaware corporation (the "Corporation").

2. The Corporation's only issued and outstanding class of capital stock is its Common Stock. The holder of each share of Common Stock is entitled to cast one vote for each share held. At the Corporation's Annual Meeting of Shareholders held on July 25, 2012, shareholders voted a majority of the outstanding shares of common stock in favor of the following amendment to the Corporation's Certificate of Incorporation and thereby adopted the amendment in accordance with Section 242 of the Delaware Corporation Law:

Article IV(A) of the Corporation's Certificate of Incorporation shall be replaced in its entirety with the following:

ARTICLE IV

(A) The Corporation is authorized to issue two classes of stock to be designated, respectively, "Preferred Stock" and "Common Stock", The total number of shares which the Corporation is authorized to issue is One Hundred-Two Million (102,000,000) shares, each with a par value of \$0.0001 per share. One Hundred Million (100,000,000) shares shall be Common Stock and Two Million (2,000,000) shares shall be Preferred Stock.

3. On May 8, 2012, the Board of Directors of the Corporation, acting under Section 242 of the Delaware Corporation Law, adopted a resolution setting forth the above amendment, declared the advisability of the amendment, and directed that the amendment be considered at the Annual Meeting of Shareholders.

4. I affirm of my own knowledge that the matters set forth in this Certificate are true and correct. Executed at Solon, Ohio on October 2, 2012.

/s/ Joseph G. Kaveski  
Joseph G. Kaveski  
Chief Executive Officer

**STATE OF DELAWARE  
CERTIFICATE OF AMENDMENT  
OF CERTIFICATE OF INCORPORATION**

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

**FIRST:** That via unanimous consent of the Board of Directors of Energy Focus, Inc. resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

**RESOLVED,** that this Board of Directors (i) deems and declares that it is advisable and in the best interests of the Corporation and its shareholders for the shareholders to adopt the following proposed amendment to the Corporation's Certificate of Incorporation, that would amend the Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 150,000,000 shares, and (ii) directs that this proposed amendment be considered at the 2013 Annual Meeting of Shareholders of the Corporation:

Proposed Amendment:

Article IV(A) of the Corporation's Certificate of Incorporation shall be replaced in its entirety with the following:

"ARTICLE IV

(A) The Corporation is authorized to issue two classes of stock to be designated, respectively, "Preferred Stock" and "Common Stock". The total number of shares which the Corporation is authorized to issue is One Hundred Fifty-Two Million (152,000,000) shares, each with a par value of \$0.0001 per share. One Hundred Fifty Million (150,000,000) shares shall be Common Stock and Two Million (2,000,000) shares shall be Preferred Stock."

**SECOND:** That thereafter, pursuant to resolution of its Board of Directors, the proposal was considered at the 2013 Annual Meeting of Shareholders of the Corporation at which meeting the necessary number of shares as required by statute of the General Corporation Law of the State of Delaware were voted in favor of the amendment.

**THIRD:** That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

**IN WITNESS WHEREOF,** said corporation has caused this certificate to be signed this 24th day of October, 2013.

By: /s/ James Tu

Name: James Tu

Title: Chairman and Chief Executive Officer

**CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF INCORPORATION  
OF  
ENERGY FOCUS, INC.**

**Pursuant to Section 242 of the  
General Corporation Law of the State of Delaware**

**Energy Focus, Inc.** (hereinafter called the “Company”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

A resolution was duly adopted by the Board of Directors of the Company pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth an amendment to the Certificate of Incorporation of the Company as amended, and declaring said amendment to be advisable. The stockholders of the Company duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

**RESOLVED**, that paragraph (A) of Article IV of the Certificate of Incorporation of the Company, as amended, be and hereby is deleted in its entirety and the following paragraph is inserted in lieu thereof:

*“(A) The Corporation is authorized to issue two classes of stock to be designated, respectively, “Common Stock” and “Preferred Stock.” The total number of shares which the Corporation is authorized to issue is Fifty-Five Million (55,000,000) shares, each with a par value of \$0.0001 per share. Fifty Million (50,000,000) shares shall be Common Stock and Five Million (5,000,000) shares shall be Preferred Stock.”*

IN WITNESS WHEREOF, the Company has caused this Certificate of Amendment to be signed by its Chief Executive Officer this 15th Day of January, 2020.

**ENERGY FOCUS, INC.**

By: /s/ James Tu  
James Tu  
Executive Chairman and Chief Executive Officer

**CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF DESIGNATION  
OF  
ENERGY FOCUS, INC.**

**Pursuant to Section 242 of the  
General Corporation Law of the State of Delaware**

**Energy Focus, Inc.** (hereinafter called the “Company”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

A resolution was duly adopted by the Board of Directors of the Company pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth an amendment to the Certificate of Designation of the Company as amended, and declaring said amendment to be advisable. The stockholders of the Company duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

**RESOLVED FURTHER**, that the Section 1 of the Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc., as amended, be and hereby is deleted in its entirety and the following paragraph is inserted in lieu thereof:

*“1. Designation. There shall be a series of Preferred Stock that shall be designated as “Series A Convertible Preferred Stock” (the “Series A Preferred Stock”) and the number of Shares constituting such series shall be Three Million Three Hundred Thousand (3,300,000). The rights, preferences, powers, restrictions and limitations of the Series A Preferred Stock shall be as set forth herein.”*

IN WITNESS WHEREOF, the Company has caused this Certificate of Amendment to be signed by its Chief Executive Officer this 15th Day of January, 2020.

**ENERGY FOCUS, INC.**

By: /s/ James Tu  
James Tu  
Executive Chairman and Chief Executive Officer

**DESCRIPTION OF REGISTRANT'S SECURITIES  
REGISTERED PURSUANT TO SECTION 12 OF  
THE SECURITIES EXCHANGE ACT OF 1934**

The following is a brief description of the securities of Energy Focus, Inc. (“we,” “us,” “our” and the “Company”), registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, or the “Exchange Act”. This description of the terms of our stock does not purport to be complete and is subject to and qualified in its entirety by reference to the applicable provisions of Delaware General Corporation Law, and the full text of our certificate of incorporation and our bylaws.

**General.**

Our certificate of incorporation provides that we may issue up to 55,000,000 shares of stock comprised of the following:

- 50,000,000 shares of common stock, par value \$0.0001 per share; and
- 5,000,000 shares of preferred stock, par value \$0.0001 per share.

**Common Stock.**

Holders of our common stock are entitled to one vote per share on all matters to be voted upon by stockholders. In accordance with Delaware law, the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present shall be the act of the stockholders. The shares of common stock have no pre-emptive rights, no redemption or sinking fund provisions, and are not liable for further call or assessment.

Holders of our common stock are entitled to receive dividends when and as declared by our board of directors out of funds legally available for dividends. We have not declared or paid any cash dividends and we do not anticipate paying cash dividends in the foreseeable future.

Upon a liquidation of the Company, our creditors and holders of our preferred stock with preferential liquidation rights will be paid before any distribution to holders of our common stock. The holders of common stock would be entitled to receive a pro rata distribution per share of any excess amount.

**Preferred Stock.**

Our certificate of incorporation empowers our board of directors to issue up to 5,000,000 shares of preferred stock from time to time in one or more series. Our board of directors may fix the designation, privileges, preferences and rights and the qualifications, limitations and restrictions of those shares, including dividend rights, conversion rights, voting rights, redemption rights, terms of sinking funds, liquidation preferences and the number of shares constituting any additional series or the designation of the series. Terms selected could decrease the amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and power, including voting rights, of the holders of our common stock without any further vote or action by the stockholders. The rights of holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued by us in the future. The issuance of preferred stock could have the effect of delaying or preventing a change in control of us or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock, and may adversely affect the voting and other rights of the holders of common stock.

Our board of directors has designated 3,300,000 shares of our preferred stock as Series A Convertible Preferred Stock.

**Antitakeover Effects of Our Certificate of Incorporation and Bylaws.**

Our certificate of incorporation and bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and that may have the effect of delaying, deferring or preventing a future takeover or change in control of the Company unless that takeover or change in control is approved by our board of directors. These provisions include:

*Action by Written Consent.* Our bylaws provide that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting.

*Advance Notice Procedures.* Our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting are only able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in accordance with our bylaws, of the stockholder's intention to bring that business before the meeting. Although the bylaws do not give the board of directors the power to approve or disapprove

stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the Company.

*Authorized but Unissued Shares.* Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

#### **Delaware Anti-Takeover Statute.**

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, calculated as provided under Section 203; or
- at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our certificate of incorporation and our bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

#### **Limitations on Liability and Indemnification of Officers and Directors.**

Our certificate of incorporation limits the liability of our directors to the fullest extent permitted by the Delaware General Corporation Law, and our bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by such law.

#### **Listing.**

Our common stock is listed on the NASDAQ Capital Market under the symbol "EFOI."

#### **Transfer Agent and Registrar.**

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc., 51 Mercedes Way, Edgewood, New York 11717.



## SUBSIDIARIES

<u>Name</u>	<u>Location</u>	<u>Doing Business as</u>
Energy Focus LED Solutions, LLC	Solon, Ohio	Energy Focus LED Solutions, LLC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Energy Focus, Inc.  
Solon, Ohio

We hereby consent to the incorporation by reference in the Registration Statements on Form S3 (No. 333-228255) and Form S8 (Nos. 333-219805, 333-206088, 333-197422, and 333-193024) of Energy Focus, Inc. of our report dated March 24, 2020, relating to the consolidated financial statements and financial statement schedule, which appear in this Form 10-K.

/s/ GBQ Partners, LLC

Columbus, Ohio  
March 24, 2020

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements on Form S-3 (333-228255) and Form S-8 (333-219805, 333-206088, 333-197422, 333-193024, 333-184028, 333-169274, 333-138963, and 333-122686) of Energy Focus, Inc. of our report dated April 1, 2019, with respect to the consolidated financial statements of Energy Focus, Inc. as of December 31, 2018 and for the years ended December 31, 2018 and 2017 included in this Annual Report (Form 10-K) of Energy Focus, Inc. for the year ended December 31, 2019.

/s/ Plante & Moran, PLLC

Cleveland, Ohio

March 24, 2020

## CERTIFICATION

I, James Tu, certify that:

1. I have reviewed this Annual Report on Form 10-K of Energy Focus, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

By: /s/ James Tu  
Name: James Tu  
Title: Chairman and Chief Executive Officer  
Date: March 24, 2020

## CERTIFICATION

I, Tod Nestor, certify that:

1. I have reviewed this Annual Report on Form 10-K of Energy Focus, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Tod Nestor  
Name: Tod Nestor  
Title: President, Chief Financial Officer and Secretary  
Date: March 24, 2020

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED  
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Energy Focus, Inc. (the "Company") on Form 10-K for the year ended December 31, 2019 (the "Report"), I, James Tu, Chairman and Chief Executive Officer of the Company and I, Tod Nestor, President, Chief Financial Officer and Secretary of the Company, each certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002, that to the best of my knowledge:

- (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James Tu

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James Tu  
Chairman and Chief Executive Officer  
Date: March 24, 2020

/s/ Tod Nestor

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Tod Nestor  
President, Chief Financial Officer and Secretary  
Date: March 24, 2020

A signed original of this written statement required by Section 906 has been provided to Energy Focus, Inc. and will be retained by Energy Focus, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.