Energy Recovery, Inc.
Form 10-K
March 10, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016
or
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission File Number: 001-34112

Energy Recovery, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**01-0616867**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*

1717 Doolittle Drive, San Leandro, CA 94577

(Address of Principal Executive Offices)

Registrant's telephone number, including area code:(510) 483-7370

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of Each Class	**Name of Exchange on Which Registered**
Common stock, $0.001 par value	The NASDAQ Stock Market LLC

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

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files).

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer	Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)	Smaller reporting company

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 voting stock held by non-affiliates amounted to approximately $274 million on June 30, 2016.

The number of shares of the registrant's common stock outstanding as of February 28, 2017 was 53,880,311.

DOCUMENTS INCORPORATED BY REFERENCE

Parts of the Proxy Statement for the Registrant's Annual Meeting of Stockholders to be held on June 22, 2017 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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FORWARD- LOOKING INFORMATION

This Annual Report on Form 10-K, including "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and certain information incorporated by reference, contain forward-looking statements within the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements in this report include, but are not limited to, statements about our expectations, objectives, anticipations, plans, hopes, beliefs, intentions, or strategies regarding the future.

Forward-looking statements represent our current expectations about future events, are based on assumptions, and involve risks and uncertainties. If the risks or uncertainties occur or the assumptions prove incorrect, then our results may differ materially from those set forth or implied by the forward-looking statements. Our forward-looking statements are not guarantees of future performance or events.

Words such as "expects," "anticipates," "aims," "projects," "intends," "plans," "believes," "estimates," "seeks," variation and similar expressions are also intended to identify such forward-looking statements. These forward-looking statements are subject to risks, uncertainties, and assumptions that are difficult to predict; therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. Readers are directed to risks and uncertainties identified under "Item 1A. Risk Factors" and elsewhere in this report for factors that may cause actual results to be different from those expressed in these forward-looking statements. Except as required by law, we undertake no obligation to revise or update publicly any forward-looking statements for any reason.

Forward-looking statements in this report include, without limitation, statements about the following:

- *our belief that levels of gross profit margin are sustainable to the extent that volume grows, we experience a favorable product mix, pricing remains stable, and we continue to realize cost savings through production efficiencies and enhanced yields;*

- *our plan to improve our existing energy recovery devices and to develop and manufacture new and enhanced versions of these devices;*

- *our belief that our PX® energy recovery devices are the most cost-effective energy recovery devices over time and will result in low life-cycle costs;*

- *our belief that our turbocharger devices have long operating lives;*

our objective of finding new applications for our technology and developing new products for use outside of desalination, including oil & gas applications;

our expectation that our expenses for research and development and sales and marketing may increase as a result of diversification into markets outside of desalination;

our expectation that we will continue to rely on sales of our energy recovery devices in the desalination market for a substantial portion of our revenue and that new desalination markets, including the United States, will provide revenue opportunities to us;

our ability to meet projected new product development dates, anticipated cost reduction targets, or revenue growth objectives for new products;

our belief that we can commercialize the VorTeq™ hydraulic fracturing system;

our belief that customers will accept and adopt our new products;

our belief that our current facilities will be adequate for the foreseeable future;

our expectation that sales outside of the United States will remain a significant portion of our revenue;

the timing of our receipt of payment for products or services from our customers;

our belief that our existing cash balances and cash generated from our operations will be sufficient to meet our anticipated liquidity needs for the foreseeable future, with the exception of a decision to enter into an acquisition and/or fund investments in newly developed technology arising from rapid market adoption that could require us to seek additional equity or debt financing;

our expectation that, as we expand our international sales, a portion of our revenue could continue to be denominated in foreign currencies;

our belief that new markets will grow in the water desalination market;

our expectation that we will be able to enforce our intellectual property rights; and

other factors disclosed under Items 1 – Business, Item 1A- Risk Factors, Item 2 – Properties, Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operation, Item 7A – Quantitative and Qualitative Disclosures about Market Risks and elsewhere in this Form 10-K.

You should not place undue reliance on these forward-looking statements, which reflect management's opinions only as of the date of the filing of this Annual Report on Form 10-K. All forward-looking statements included in this document are subject to additional risks and uncertainties further discussed under "Item 1ARisk Factors" and are based on information available to us as of March 9, 2017. We assume no obligation to update any such forward-looking statements. It is important to note that our actual results could differ materially from the results set forth or implied by our forward-looking statements. The factors that could cause our actual results to differ from those included in such forward-looking statements are set forth under the heading "Item 1A – Risk Factors" and our results disclosed from time to time in our reports on Forms 10-Q and 8-K and our Annual Reports to Stockholders.

PART I

Item 1 — Business

Overview

Energy Recovery, Inc. (the "Company," "Energy Recovery," "our," "us," and "we") is an energy solutions provider to industria fluid flow markets worldwide. Our core competencies are fluid dynamics and advanced material science. Our products make industrial processes more operational and capital expenditure efficient. Our solutions convert wasted pressure energy into a reusable asset and preserve or eliminate pumping technology in hostile processing environments. Our solutions are marketed and sold in fluid flow markets, such as water desalination, oil & gas, and chemical processing, under the trademarks ERI®, PX®, Pressure Exchanger®, PX Pressure Exchanger®, AT,™AquaBold,™VorTeq,™ IsoBoost®, and IsoGen®. Our solutions are owned, manufactured, and/or developed, in whole or in part, in the United States of America ("U.S.") and the Republic of Ireland.

Energy Recovery was incorporated in Virginia in 1992, reincorporated in Delaware in 2001, and became a public company in July 2008. Our headquarters and primary manufacturing center is located at 1717 Doolittle Drive, San Leandro, California 94577, and we have four (4) wholly-owned subsidiaries: ERI Energy Recovery Holdings Ireland Limited; ERI Energy Recovery Ireland Ltd.; Energy Recovery Iberia, S.L.; and Energy Recovery Canada Corp. We also have sales offices in Dubai, United Arab Emirates and Shanghai, Peoples Republic of China. Our main telephone number is (510) 483-7370.

The Energy Recovery website is *www.energyrecovery.com*. We use the Investor Relations section of our website as a routine channel for distribution of important information, including news releases, presentations, and financial statements. We intend to use the Investor Relations section of our website as a means of complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor our Investor Relations website in addition to press releases, Securities and Exchange Commission ("SEC") filings, and public conference calls and webcasts. Our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, all amendments to those reports, and the Proxy Statement for our Annual Meeting of Stockholders are made available, free of charge, in the Investor Relations section of our website, as soon as reasonably practicable after the reports have been filed with or furnished to the SEC. The information contained on our website or any other website is not part of this report nor is it considered to be incorporated by reference herein or with any other filing we make with the SEC.

Fluid Flow Markets

Our primary industrial fluid flow markets are water desalination and oil & gas. We have been and continue to be the technology leader for energy recovery devices ("ERDs") in the water desalination market with our proprietary Pressure Exchanger ("PX") and turbocharger technologies. We also provide high-performance and high-efficiency pumps to facilitate a packaged solution for our customers. Building on our leading technology, we have expanded our technology solutions offering into other fluid flow markets, such as those found in upstream, midstream, and downstream applications of the oil & gas industry, and are exploring other end markets for which our solutions may be applicable. We offer the VorTeq hydraulic fracturing system ("VorTeq"), IsoBoost, and IsoGen product lines to the oil & gas market.

Water Desalination

Water desalination has been our core market for revenue generation to date. The water desalination market ranges from small water desalination plants such as those used in cruise ships and resorts, to mega-project desalination plant deployments globally. Because of the geographical location of many significant desalination projects, geopolitical and economic events can have an effect on the timing of expected projects. In addition, population and economic growth in countries such as India and China are driving water demand for human, agricultural, and industrial use. We anticipate that markets traditionally not associated with water desalination, including the United States, will inevitably develop and provide further revenue growth opportunities. Our solutions leverage our PX, turbocharger, and pump technologies providing our customers significant operational efficiency and energy savings.

Oil & Gas

Across the oil & gas upstream, midstream and downstream markets, highly pressurized fluid flows are required to extract and process oil and gas. These pressurized fluid flows are both a necessity and liability to the oil & gas industry.

Within the oil & gas upstream sector, hydraulic fracturing is a well-stimulation technique in which pressurized liquid containing a highly abrasive, proppant-laden fluid is injected into a wellbore to create cracks in deep-rock formations thereby permitting oil & gas extraction. Oilfield service providers utilize high-pressure hydraulic fracturing pumps to pressurize the fracturing fluid at treating pressures up to 15,000 psi. These pumps are routinely destroyed by the abrasive fluids during the hydraulic fracturing process causing significant oilfield service operator costs associated with excessive downtime, repairs, maintenance, and capital equipment redundancy. Our VorTeq leverages our PX technology to isolate high-pressure hydraulic fracturing pumps from abrasive fracturing fluid thereby enabling oilfield service operators to realize immediate and long-term savings.

Within the oil & gas midstream and downstream sectors, pressure energy becomes a waste product at different stages of oil and gas processing. It is at these stages that our IsoBoost and IsoGen technology enables the recovery of pressure energy in the fluid flow either through the exchange of pressure within the application or by converting it to electricity. Our technology enables gas processing plant and pipeline owners and operators to achieve immediate and long-term energy savings with little or no operational disruption.

OUR SOLUTIONS

Energy, repairs, maintenance, and capital costs are major cost drivers in the water desalination and oil & gas markets. Energy Recovery has developed proprietary technology solutions to address these major cost drivers. In the water desalination market, our energy recovery solutions reduce plant operating costs by capturing and reusing the otherwise lost pressure energy from the reject stream of the desalination process. In the oil & gas market, our hydraulic fracturing solution reduces operating and capital equipment costs by isolating high cost pumping equipment from highly abrasive fracturing fluids; while our centrifugal solutions reduce plant or pipeline operating costs by capturing and reusing otherwise lost pressure energy.

Water Desalination

Our water desalination ERDs are categorized into two technology groups: PX Pressure Exchangers and turbochargers. The first technology group is comprised of our patented PX ERD technology consisting of ceramic rotors and almost frictionless hydrodynamic bearings. Our PX ERDs enable water desalination plant operators to capture wasted hydraulic pressure energy from a high-pressure fluid flow and transfer the energy to a low-pressure fluid flow, thereby recovering wasted pressure energy. Our PX ERDs perform with up to 98% efficiency and unmatched uptime in the desalination industry, and can reduce a desalination plant's energy costs by up to 60%.

The second technology group is comprised of turbochargers ("AT Turbochargers") designed for low-pressure brackish and high-pressure seawater reverse osmosis systems. Our AT Turbochargers provide premium efficiency with state-of-the-art engineering and configuration. Designed for reliability and optimum efficiency, our turbochargers offer substantial savings, and the custom-designed hydraulics and 3-D geometry allow for optimum performance. Also, the patent-protected technology for volute inserts allows field flexibility.

Complementing both our PX ERDs and AT Turbochargers are our high-performance, high-efficiency pumps.

Oil & Gas

In the oil & gas market, we design and manufacture innovative solutions that preserve or eliminate pumping technology in hostile processing environments and convert wasted pressure energy into a reusable asset. Our core technology solutions are the VorTeq and our centrifugal line of products, the IsoBoost and the IsoGen.

The VorTeq is an enabling technology for oilfield service ("OFS") companies to isolate and preserve costly hydraulic fracturing pumps by re-routing hostile fracturing fluid away from these critical pumps. These hydraulic fracturing pumps will then process only water, which leads to reduced repairs and maintenance costs, increased fleet revenue, and reduced capital costs by extending pump life expectancy and eliminating redundant capital equipment. The VorTeq further allows for the migration to increasingly efficient pumping technology that could lead to the revolutionizing of the hydraulic fracturing system.

During 2015, we conducted VorTeq field trials with Liberty Oil Field Services, our early stage test partner, culminating in the successful delivery of proppant to a well located in the Bakken Formation. In October 2015, through our subsidiary ERI Energy Recovery Ireland, Ltd., we entered into a fifteen-year license agreement with Schlumberger Technology Corporation (the "VorTeq Licensee") for the exclusive, worldwide right to use the VorTeq for hydraulic fracturing onshore operations. The VorTeq is currently in the research and development stage and we are actively working towards commercialization.

IsoBoost and IsoGen technologies were commercialized in 2012. Our IsoBoost energy recovery systems are comprised of hydraulic turbo chargers and related controls and automation systems. The IsoBoost enable oil & gas operators to capture wasted hydraulic pressure energy from a high-pressure fluid flow and transfer the energy to a low-pressure fluid flow, thereby recovering wasted pressure energy. Our IsoGen energy recovery systems are comprised of hydraulic turbines, generators, and related controls and automation systems. The IsoGen enables oil & gas operators to capture hydraulic energy and generate electricity from high-pressure fluid flows. Additionally, our energy recovery and power generation systems result in lower capital costs for oil & gas operators by minimizing the need for high-pressure pumps that consume large amounts of energy.

We have contracted and delivered oil and gas solutions, as pilot projects, to customers in North America, Asia, and the Middle East for use in gas processing and ammonia processing applications. In 2015, we commissioned our first IsoGen unit in a major gas processing plant in the Middle East. In 2016, we received our first major purchase order for multiple units of our IsoBoost technology for integration into a major gas processing plant to be constructed in the Middle East. The contract is for approximately $7 million worth of equipment and services with an option for an additional $4 million to be determined at a later date, which may or may not be exercised. The optional supply may not be confirmed by the customer until the latter portion of 2017.

Services

We provide a portfolio of services tailored to our customers' needs. Specifically, we assist our customers in the early stages of planning and design by leveraging our broad experience in fluid flows and advanced material science. We also provide engineering, technical support, and training to customers during installation and commissioning. Additionally, we offer preventive maintenance and support services as well as reinstallation services. To date, the revenue from these services has not represented a significant portion of our revenue.

CUSTOMERS

Water Desalination

Our water desalination customers include major international engineering, procurement, and construction ("EPC") firms that design and build large desalination plants; original equipment manufacturers ("OEM") which are companies that supply equipment and packaged solutions for small- to medium-sized desalination plants; and national, state and local municipalities worldwide.

Large Engineering, Procurement and Construction Firms

A significant portion of our revenue historically has come from sales of our ERD solutions to large EPC firms worldwide that have the required desalination expertise to engineer, undertake procurement for, construct, and sometimes own and operate, large desalination plants or mega-projects ("MPD"). We work with these firms to specify our solutions for their plants. The time between project tender and shipment can range from sixteen (16) to thirty-six (36) months. Each MPD project typically represents a revenue opportunity of $1 million to $10 million.

A limited number of these EPC firms can account for 10% or more of our product revenue. Revenue from customers representing 10% or more of product revenue varies from year to year. For the years ended December 31, 2016 and 2015, one customer, Acciona Agua, S.A.U., accounted for approximately 11% and 14%, respectively, of total product revenue. For the year ended December 31, 2014, one customer, IDE Americas, Inc., accounted for approximately 14% of total product revenue.

Original Equipment Manufacturers

We also sell our solutions and services to OEM suppliers of pumps and other water-related equipment for assembly and use in small- to medium-sized desalination plants located in hotels, power plants, cruise ships, farm operations, island bottlers, mobile and containerized water desalination solutions, and small municipalities. These OEMs also purchase our solutions for "quick water" or emergency water solutions. The time from project tender and shipment can range from one (1) to twelve (12) months. OEM projects typically represent revenue opportunities of $0.01 million to $1 million.

Our OEM customer base accounted for approximately 39%, 45%, and 57% of our total revenues, for the years ended December 31, 2016, 2015, and 2014, respectively. We typically sell and promote our packaged solutions to this sales channel represented by a product mix of PX Pressure Exchangers, turbochargers, high-pressure pumps, and circulation "booster" pumps.

Oil & Gas

Our oil & gas customers include international oil companies ("IOC"), national oil companies ("NOC"), exploration and production companies ("E&P"), oilfield service companies ("OFS"), and EPC firms that design and build oil & gas processing plants.

Upstream

OFS companies provide the infrastructure, equipment, intellectual property, and services needed by the oil & gas industry to explore for, extract, and transport crude oil and natural gas. OFS hydraulic fracturing operators face significant pressure to reduce costs as oil & gas companies curtail capital expenditures and seek operational efficiencies in response to lower commodity prices. We developed the VorTeq which enables these operators to isolate pumps from fracturing fluid thereby reducing operating and capital costs.

In the third quarter of 2014, we entered into a strategic partnership with Liberty Oil Field Services to pilot and conduct field trials with the VorTeq. These field trials commenced in the second quarter of 2015 and were completed in the fourth quarter of 2015 with the successful delivery of proppant to a well located in the Bakken Formation. In October 2015, we entered into a fifteen-year license agreement with the VorTeq Licensee for the exclusive, worldwide right to use our VorTeq technology for hydraulic fracturing onshore operations.

One customer, Schlumberger Technology Corporation, accounted for 100% of our license and development revenue for 2016 and 2015, which represented 9% and 2% of our total revenue for the years ended December 31, 2016 and 2015, respectively. There was no license and development revenue recognized for 2014.

Midstream and Downstream

We have contracted and delivered gas and oil solutions, as pilot projects, to customers in North America, Asia, and the Middle East for use in gas processing and/or ammonia processing applications. In 2015, we commissioned our first IsoGen unit in a major gas processing plant in the Middle East. In 2016, we received our first major purchase order for multiple units of our IsoBoost technology for integration into a major gas processing plant to be constructed in the Middle East.

For the year ended December 31, 2016, we recognized Oil & Gas Segment revenue from our licensing agreement with the VorTeq Licensee and from a purchase order for multiple units of our IsoBoost technology. For the year ended December 31, 2015, we recognized Oil & Gas Segment revenue from the license agreement with the VorTeq Licensee, a cancellation fee of an IsoBoost purchase order, and from the commissioning of an IsoGen system. For the year ended December 31, 2014, we recognized Oil & Gas Segment rental income from the operating lease and subsequent lease buy-out of an IsoGen system.

While one customer, Tecnicas Reunidas, accounted for 100% of our 2016 Oil & Gas Segment product revenue, no Oil & Gas Segment customer accounted for more than 10% of our total product revenue for the years ended December 31, 2016, 2015, and 2014, respectively.

Additional information regarding our product revenue by segment is included in Note 13 to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

COMPETITION

Water Desalination

The market for ERDs and pumps in the water desalination market is competitive. As the demand for fresh water increases and the market expands, we expect competition to persist and intensify.

We have three main competitors for our ERDs: Flowserve Corporation (“Flowserve”), Fluid Equipment Development Company (“FEDCO”), and Danfoss Group (“Danfoss”). We compete with these companies on the basis of price, quality, efficiency, lead time, life expectancy, downtime, and maintenance costs. Although these companies may offer competing solutions at lower initial price, our solutions offer a competitive advantage because we believe that they provide the lowest life-cycle cost and are therefore the most cost-effective ERDs for the reverse osmosis desalination industry over time.

In the market for large desalination projects, our PX ERDs and large turbochargers compete primarily with Flowserve's DWEER product. We believe that our PX ERDs have a competitive advantage over DWEER devices because our devices are made with highly durable and corrosion-resistant ceramic parts that are designed for a life of more than 25 years, are warranted for high efficiencies, cause no unplanned downtime, and offer lower lifecycle costs. Additionally, the PX ERDs offer optimum scalability with a quick startup as well as minimal maintenance. We believe that our large turbocharger solutions also have a competitive advantage over Flowserve's Pelton Turbine product, particularly in countries where energy costs are low and upfront capital costs are a critical factor in purchase decisions, because our turbocharger solutions have lower upfront capital costs, a simple design with one rotating assembly, a small physical footprint, and a long operating life that leads to low total lifecycle costs.

In the market for small-to-medium-sized desalination plants, our solutions compete with FEDCO's turbochargers and Danfoss's ERDs. We believe that our PX ERDs have a competitive advantage over these solutions because our devices provide up to 98% energy efficiency, have lower lifecycle maintenance costs, and are made of highly durable and corrosion-resistant ceramic parts. We also believe that our turbochargers compete favorably with FEDCO's turbochargers on the basis of efficiency and price and because our turbochargers have design advantages that enhance efficiency, field flexibility, and serviceability.

In the market for high-pressure pumps, our solutions compete with pumps manufactured by Clyde Union Ltd.; Düchting Pumpen Maschinenfabrik GmbH & Co KG; FEDCO; Flowserve; KSB Aktiengesellschaft; Torishima Pump Mfg. Co., Ltd.; Sulzer Pumps, Ltd.; and other companies. We believe that our pump solutions are competitive with these solutions because our pumps are developed specifically for reverse osmosis desalination, are highly efficient, and feature product-lubricated bearings.

Oil & Gas

The market for our technology in the oil & gas market is competitive. As demand for our products increase, we expect competition to intensify.

Within the oil & gas upstream market, OFS hydraulic fracturing operators utilize high-pressure hydraulic fracturing pumps to pressurize fracturing fluid. This fluid is sent through traditional missile manifolds into the wellbore to create cracks in the deep-rock formations thereby permitting oil & gas extraction. Our VorTeq is a hydraulic pumping system that replaces the traditional missile manifold used by OFS hydraulic fracturing operators. There are many manufacturers of the traditional missile manifolds.

We believe our VorTeq technology represents a competitive advantage over existing missile manifold technology because our solution re-routes abrasive proppant away from high-pressure pumps, thereby extending pump lifespan, reducing repairs and maintenance costs, and decreasing the need for redundant capital equipment. In addition, because our VorTeq technology isolates the high-pressure pumps from abrasive proppant, OFS hydraulic fracturing operators have the ability to transition to more robust, longer lived centrifugal pumps thereby further decreasing operating and capital costs.

Within the oil & gas midstream and downstream markets, acid gas removal — also known as amine gas treating — refers to a process that utilizes solvents such as an amine solution to remove acid gasses, specifically hydrogen sulfide (H2S) and carbon dioxide (CO2) from natural gas, synthesis gas, or other hydrocarbon streams. Our IsoBoost and IsoGen technologies integrate into acid gas removal systems to reduce energy consumption and increase the reliability and uptime of the amine circulation system. Currently, most acid gas removal plants use pumps and valves to pressurize and depressurize the amine solution and the depressurization of the cleansing fluid (e.g. amine) provides an opportunity for the use of ERDs.

Our IsoBoost system is based partly on hydraulic turbocharger technology. While to our knowledge the only turbocharger systems presently utilized in acid gas removal applications are manufactured by Energy Recovery, there is at least one established competitor, FEDCO, which makes a similar hydraulic turbocharger for desalination applications. We combine our highly competitive turbocharger technology with process equipment and control systems to make a unique, proprietary, and highly competitive offering for oil & gas and petrochemical plants.

Our IsoGen system is partly based on hydraulic turbine technology which converts recovered energy to electric power. Many other companies make hydraulic turbines for a broad range of applications. For acid gas removal plants, our competitors utilize reverse running pumps (also called hydraulic power recovery turbines or HPRTs) to perform the same energy recovery function that our IsoGen systems provide. These reverse running pumps are typically part of a large “skid-mounted” system, incorporating a multi-stage pump and motor, all rotating about a common shaft. Flowserve, Sulzer Pumps, Ltd, and Shin Nippon Machinery are known to have supplied these systems and other major pump companies may have built systems for this application as well. We believe most of our competitors’ reverse running pump systems present concerns related to reliability, operational flexibility, and low energy efficiency, as compared to our IsoGen solution.

Sales and Marketing

Energy Recovery has historically offered its products through a direct sales force and a capital sale procurement model. In 2015, the Company evolved its business model to a hybrid of direct capital sales and technology licensing. In 2016, the Company further expanded its procurement offerings to include energy service agreements, operating leases, and various forms of project financing.

We market and sell our solutions directly to customers through our direct sales organization and, in some countries, through authorized, independent sales agents. Our current sales organization consists of two groups: Water Desalination and Oil & Gas.

The Water Desalination group targets MPD, OEM, and aftermarket opportunities within the reverse osmosis desalination market. MPD opportunities are for desalination projects exceeding 50,000 cubic meters per day. OEM opportunities include sales of PX ERDs, turbochargers, and pumps for plants typically designed to produce less than 50,000 cubic meters per day. Aftermarket opportunities include new and replacement parts and products, as well as technical support, training, product installation, and plant commissioning.

Our Oil & Gas group targets IOCs, NOCs, E&Ps, OFSs, or EPCs on behalf of oil producers and chemical producers who have applications for our solutions and services.

Our sales branch in Dubai, United Arab Emirates serves the Middle East, where many water and oil & gas customers are located. We have a sales force in Spain focused on the Spain and European markets. We also have a sales office in Shanghai, China to address this emerging market for our energy recovery solutions. In North America, our sales office along with our corporate headquarters is located in San Leandro, California. As opportunities and diversification

dictate, particularly in oil & gas, we will look to expand our geographical presence.

A significant portion of our revenue is from outside of the United States. Additional segment and geographical information regarding our product revenue is included in Note 13 to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Manufacturing

Our primary Water Segment product manufacturing facility is located in San Leandro, California, where our ERDs and pumps are produced, assembled, and tested. We produce the majority of our ceramic components for our PX solutions in our advanced ceramics manufacturing facility, as well as complete machining and assemble of all ceramic components for our PX devices. In addition, many components of our turbochargers and pumps are also manufactured in San Leandro to protect the proprietary nature of our manufacturing methods and product designs and to maintain premium quality standards.

Our Oil & Gas Segment product manufacturing, assembly, and testing is conducted through our operations in Ireland. To produce our Oil & Gas Segment products, we utilize multiple supply chain partners and complete many machining, assembly, and testing operations in house to protect the proprietary nature of our manufacturing methods and product designs and to maintain premium quality standards. Our Ireland operations are also responsible for overseeing the commercialization of the VorTeq and expanding our manufacturing activities in Europe.

Research and Development

When developing products and ultimately markets for our products, we seek three distinct process criteria: (1) high rates of fluid flow; (2) large pressure differentials; and (3) high degrees of capital intensity, specifically in the form of pumping assets. Based on these criteria, our product development strategy is to identify fluid flow applications where pumps are being destroyed and/or where pressure energy is being wasted. Our technologies isolate pumping assets from hostile process fluids, or recover otherwise wasted pressure energy. Our research and development effort is therefore focused on (1) advancing new products in markets beyond desalination, with a specific and immediate emphasis on oil & gas, where our technology is utilized to preserve pumping assets; and (2) enhancing our existing energy recovery device and pumps for the water desalination market.

Energy Recovery developed a robust, multi-year product development road map which guides our research and development resource allocation. Specific to new product development, our focus is overwhelmingly on our proprietary pressure exchanger technology given its prohibitive nature and broad technical application. Our corporate objective is to achieve proof of concept of one new derivative of the pressure exchanger annually.

To support our product strategy, we have and will continue to invest in identifying and hiring strong engineering talent with expertise in fluid physics and advanced material science. In addition, to enable increasingly complex and shorter-cycle product development, we have invested in advanced numerical modeling and analysis infrastructure allowing for three-dimensional, multi-phase, multiphysics, computational fluid dynamics; this coupled with our existing structural interaction analytical capabilities supports our objective of achieving the proof of concept of one new derivative of the pressure exchanger each year.

Within our Water Segment, research and development investments have produced the latest and most efficient energy recovery device, the PX Prime. In addition, we continue to advance our turbocharger and pump technologies to better service our water end markets.

Within our Oil & Gas Segment, research and development investments are primarily focused on commercializing the VorTeq and developing products for applications where pumping assets are compromised due to hostile process fluids. We expect to announce a new product for these applications in 2017. Our priority remains the commercialization of our VorTeq.

Research and development expense totaled $10.1 million, $7.7 million, and $9.7 million for the years ended December 31, 2016, 2015, and 2014, respectively. Research and development costs are expensed as incurred. We expect research and development expenses to increase in the future as we further fund our product development road map and more broadly, execute against our product strategy.

Seasonality

In our Water Segment, we often experience substantial fluctuations in product revenue from quarter-to-quarter and from year-to-year because a single order for our ERDs by a large EPC firm for a particular plant may represent significant revenue. In addition, historically our EPC customers tend to order a significant amount of equipment for delivery in the fourth quarter, and as a consequence, a significant portion of our annual sales typically occur during the fourth quarter.

We do not currently have enough history to determine seasonal revenue patterns within our Oil & Gas Segment.

Intellectual Property

We seek patent protection for new technologies, inventions, and improvements that are likely to be incorporated into our solutions. We rely on patents, trade secret laws, and contractual safeguards to protect the proprietary tooling, processing techniques, and other know-how used in the production of our solutions. We have a robust intellectual property portfolio consisting of U.S. and International issued patents as well as pending patent applications.

We have registered the following trademarks with the United States Patent and Trademark office: “ERI,” “PX,” “PX Pressure Exchanger,” “Pressure Exchanger,” the Energy Recovery logo, “ERI Energy Recovery, Inc.,” “Making Desalination Affordable,” “AT,” “AquaBold,” “VorTeq,” “IsoBoost,” and “IsoGen.” We have also applied for and received registrations in international trademark offices.

In July 2015, the U.S. parent company transferred our Oil & Gas Segment intellectual property via platform license agreements to ERI Energy Recovery Holdings Ireland Limited.

Employees

As of December 31, 2016, we had 120 employees: 40 in manufacturing; 30 in corporate services and management; 28 in sales, service, and marketing; and 22 in engineering and research and development. Fourteen of these employees were located outside of the United States. We also engage a relatively small number of independent contractors, primarily as sales agents worldwide. We have not experienced any work stoppages, and our employees are not unionized.

Item 1A — Risk Factors

The following discussion sets forth what management currently believes could be the most significant risks and uncertainties that could impact our businesses, results of operations, and financial condition. Other risks and uncertainties, including those not currently known to the Company or its management, could also negatively impact our businesses, results of operations, and financial conditions. Accordingly, the following should not be considered a complete discussion of all of the risks and uncertainties the Company may face. We may amend or supplement these risk factors from time to time in other reports we file with the Securities and Exchange Commission ("SEC").

Risk Related to our Water Segment

Our Water Segment depends on the construction of new desalination plants for revenue, and as a result, our operating results have experienced, and may continue to experience, significant variability due to volatility in capital spending, availability of project financing, and other factors affecting the water desalination industry.

We currently derive the majority of our revenue from sales of products and services used in desalination plants for municipalities, hotels, mobile containerized desalination solutions, resorts, and agricultural operations in dry or drought-ridden regions of the world. The demand for our Water Segment products may decrease if the construction of desalination plants declines for political, economic, or other factors, especially in these dry or drought-ridden regions. Other factors that could affect the number and capacity of desalination plants built or the timing of their completion include the availability of required engineering and design resources; a weak global economy; shortage in the supply of credit and other forms of financing; changes in government regulation, permitting requirements, or priorities; and reduced capital spending for desalination. Each of these factors could result in reduced or uneven demand for our Water Segment products. Pronounced variability or delays in the construction of desalination plants or reductions in spending for desalination, could negatively impact our Water Segment sales and revenue, which in turn could have an adverse effect on our entire business, financial condition, or results of operations and make it difficult for us to accurately forecast our future sales and revenue.

Our Water Segment faces competition from a number of companies that offer competing energy recovery and pump solutions. If any one of these companies produces superior technology or offers more cost-effective products, our competitive position in the market could be harmed and our profits may decline.

The market for ERD and pumps for desalination plants is competitive and evolving. We expect competition, especially competition on price, to persist and intensify as the desalination market grows and new competitors enter the market. Some of our current and potential competitors may have significantly greater financial, technical, marketing, and other resources; longer operating histories; or greater name recognition. They may also have more

extensive products and product lines that would enable them to offer multi-product or packaged solutions as well as competing products at lower prices or with other more favorable terms and conditions. As a result, our ability to sustain our market share may be adversely impacted, which would affect our business, operating results, and financial condition. In addition, if one of our competitors were to merge or partner with another company, the change in the competitive landscape could adversely affect our continuing ability to compete effectively.

If we are unable to collect unbilled receivables, which are caused in part by holdback provisions, our operating results could be adversely affected.

Our contracts with large engineering, procurement, and construction firms generally contain holdback provisions that typically delay final installment payments for our products by up to twenty-four (24) months, after the product has been shipped and revenue has been recognized. Generally 10% or less of the revenue we recognize pursuant to our customer contracts is subject to such holdback provisions and is accounted for as unbilled receivables. Such holdbacks may result in relatively high unbilled receivables. If we are unable to collect these performance holdbacks, our results of operations would be adversely affected.

We depend on a limited number of suppliers for some of our components. If our suppliers are not able to meet our demand and/or requirements, our business could be harmed.

We rely on a limited number of suppliers for vessel housings, stainless steel ports, alumina powder, and tungsten carbide for our portfolio of PX ERDs and stainless steel castings and components for our turbochargers and pumps. Our reliance on a limited number of manufacturers for these supplies involves a number of risks, including reduced control over delivery schedules, quality assurance, manufacturing yields, production costs, and lack of guaranteed production capacity or product supply. We do not have long-term supply agreements with these suppliers but secure these supplies on a purchase order basis. Our suppliers have no obligation to supply products to us for any specific period, in any specific quantity, or at any specific price, except as set forth in a particular purchase order. Our requirements may represent a small portion of the total production capacities of these suppliers, and our suppliers may reallocate capacity to other customers, even during periods of high demand for our products. We have in the past experienced, and may in the future experience, product quality issues and delivery delays with our suppliers due to factors such as high industry demand or the inability of our vendors to consistently meet our quality or delivery requirements. If our suppliers were to cancel or materially change their commitments to us or fail to meet quality or delivery requirements needed to satisfy customer orders for our products, we could lose time-sensitive customer orders, be unable to develop or sell our products cost-effectively or on a timely basis, if at all, and have significantly decreased revenue, which could harm our business, operating results, and financial condition. We may qualify additional suppliers in the future, which would require time and resources. If we do not qualify additional suppliers, we may be exposed to increased risk of capacity shortages due to our dependence on current suppliers.

Risk Related to our Oil & Gas Segment

We may not be able to successfully commercialize the VorTeq.

In October 2015, we entered into the VorTeq License Agreement with the VorTeq Licensee which provides the VorTeq Licensee with exclusive worldwide rights to our VorTeq technology for hydraulic fracturing onshore applications. Once the VorTeq is commercialized, the VorTeq Licensee will begin paying ongoing recurring royalty fees to us for the VorTeq technology. In order to commercialize the VorTeq, the VorTeq License Agreement provides, among other things, that we successfully meet certain specified milestones against key performance indicators set forth in the license agreement. The VorTeq is a relatively new technology and the hydraulic fracturing process is extremely complex which presents a wide range of technological challenges for us. If we are unable to successfully solve these challenges and, as a result, fail to meet the milestones, we may not be able to successfully commercialize the VorTeq. In that circumstance, we will not receive any royalty payments from the VorTeq Licensee, which could have an adverse effect on our entire business, financial condition, or results of operation.

If the VorTeq Licensee fails to adopt the VorTeq, for any reason, we may not receive royalty payments or be able to successfully commercialize the VorTeq.

The successful commercialization of the VorTeq depends heavily on the VorTeq Licensee's support and ultimate adoption of the technology. If the VorTeq Licensee fails to adopt the VorTeq, for any reason, we may not be able to successfully commercialize the VorTeq with the VorTeq Licensee and consequently, we may not receive any royalties under the VorTeq License Agreement. In addition, we may not be able to find a suitable replacement for the VorTeq Licensee or be able to negotiate royalties similar to those contained in the VorTeq License Agreement or to commercialize the VorTeq at all. Failure to commercialize the VorTeq could have an adverse effect on our entire business, financial condition, or results of operation.

We may not meet the key performance indicators necessary to meet the two milestones in the VorTeq License Agreement.

The VorTeq License Agreement calls for certain milestone key performance indicators that if met will result in payments to the Company of $25 million for each of two milestones. Achievement of these milestones is uncertain, and while we believe we can meet the milestones, if we are unable to do so, the milestone payments will be delayed until such time as the milestones are met or not earned and received at all. Failure to meet said milestones may also jeopardize commercialization and the rate of adoption of our VorTeq.

Our Oil & Gas Segment may be impacted by prolonged deflation in global oil prices which may cause delays or cancellations of projects by Oil & Gas Segment customers, negatively affecting the rate of our market penetration and consequently our revenue and profitability.

A deflationary oil environment such as the one experienced over the last few years may delay and even stall adoption and deployment of our products within our Oil & Gas Segment including but not limited to the VorTeq as licensed for onshore applications by the VorTeq Licensee. Emerging market economies, those dependent on commodity exports, and especially those for whom oil exports make up a significant percent of total exports, may be unable to retrofit or expand their oil exploration, production, and gas processing infrastructure thus negatively impacting our addressable market and future revenue. Additionally, oil price deflation may continue to lead to widespread liquidity and insolvency issues for exploration, production, and processing customers, which may negatively affect our addressable markets and therefore our financial performance.

Within our Oil & Gas Segment, the use of the percentage-of-completion method of accounting for the IsoBoost and IsoGen products requires us to make estimates and judgments, which are subject to an inherent degree of uncertainty and which may differ from actual results.

The IsoBoost and IsoGen systems are highly engineered, customized solutions that are designed and manufactured over an extended period of time and are built specifically to meet a customer's specifications. It is the Company's position that the percentage-of-completion method of accounting is appropriate for the IsoBoost and IsoGen systems given the facts and circumstances of these projects. This methodology requires the application of significant judgment by management in selecting the appropriate assumptions for calculating revenue and costs. Revenue and profits are recognized over the life of a project based on costs incurred to date compared to total estimated project costs. Revisions to revenues and profits are made once amounts are known and can be reasonably estimated. In addition, percentage-of-completion revenue may vary from quarter to quarter while a project is being completed due to accounting requirements. Given the uncertainties in accurately estimating the costs of projects, as well as providing reliable estimates to completion, it is possible for actual amounts to vary significantly from estimates previously made, which may result in the reversal of revenues and gross profit previously recognized and publicly reported.

Risk Related to our Entire Business

Our diversification into new fluid flow markets, such as oil & gas, may not be successful

We have made a substantial investment in research, development, and sales to execute on our diversification strategy into fluid flow markets such as oil & gas and chemical processing. While we see diversification as core to our growth strategy, there is no guarantee that we will be successful in our efforts. Our model for growth is based on our ability to initiate and embrace disruptive technology trends, to enter new markets, both in terms of geographies and product areas, and to drive broad adoption of the products and services that we develop and market. Any inability to execute this model for growth could damage our reputation, limit our growth, and negatively affect our operation results. For example, while we believe that our products will enable gas processing plant operators to operate at a high level of energy efficiency with minimal downtime, we may be subject to warranty claims if customers of these offerings experience significant downtimes or failures for which our warranty reserves may be inadequate given the lack of historical failure rates associated with new product introductions. We also could be subject to damage claims based on our products against which we may not be able to properly insure. In addition, profitability, if any, in new industrial verticals may be lower than in our Water Segment, and we may not be sufficiently successful in our diversification efforts to recoup investments.

Our operating results may fluctuate significantly, making our future operating results difficult to predict and causing our operating results to fall below expectations.

Our operating results may fluctuate due to a variety of factors, many of which are outside of our control.

We have experienced significant fluctuations in revenue from quarter-to-quarter and year-to-year, and we expect such fluctuations to continue. In addition, in the past, customer buying patterns led to a significant portion of our sales occurring in the fourth quarter. This presents the risk that delays, cancellations, or other adverse events in the fourth quarter could have a substantial negative impact on annual results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Since it is difficult for us to anticipate our future results, in the event our revenue or operating results fall below the expectations of investors or securities analysts, our stock price may decline.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense. As a result, our sales are difficult to predict and may vary substantially from quarter to quarter, which may cause our operating results to fluctuate.

Our sales efforts involve substantial education of our current and prospective customers about the use and benefits of our energy recovery products. This education process can be time-consuming and typically involves a significant product evaluation process which is particularly pronounced when dealing with product introduction into new fluid flow industrial verticals. In our Water Segment, the sales cycle for our OEM customers, which are involved with smaller desalination plants, averages one (1) to twelve (12) months. The Water Segment sales cycle for our international engineering, procurement, and construction firm customers, which are involved with larger desalination plants, ranges from sixteen (16) to thirty-six (36) months. In our Oil & Gas Segment, experience indicates that sales efforts are prolonged due in part to customers' reluctance to accept new technology, procurement processes, plant turnaround dates, and budgetary constraints. The sales cycle for our Oil & Gas Segment customers ranges from 16 to 36 months. These long sales cycles make quarter-by-quarter revenue predictions difficult and results in our expending significant resources well in advance of orders for our products.

Our business entails significant costs that are fixed or difficult to reduce in the short term while demand for our products is variable and subject to fluctuation, which may adversely affect our operating results.

Our business requires investments in facilities, equipment, research and development, and training that are either fixed or difficult to reduce or scale in the short term. At the same time, the market for our products is variable and has experienced downturns due to factors such as economic recessions, increased precipitation, uncertain global financial markets, and political changes, many of which are outside of our control. During periods of reduced product demand, we may experience higher relative costs and excess manufacturing capacity, resulting in high overhead and lower gross profit margins while causing cash flow and profitability to decline. Similarly, although we believe that our existing manufacturing facilities are capable of meeting current demand and demand for the foreseeable future, the continued success of our business depends on our ability to expand our manufacturing, research and development, and testing facilities to meet market needs. If we are unable to respond timely to an increase in demand, our revenue, gross profit margin, net income, and cash flow may be adversely affected.

Parts of our inventory may become excess or obsolete, which would increase our cost of revenues.

Inventory of raw materials, parts, components, work in-process, or finished products may accumulate, and we may encounter losses due to a variety of factors, including technological change in the water desalination and oil & gas industries that result in product changes; long delays in shipment of our products or order cancellations; our need to order raw materials that have long lead times and our inability to estimate exact amounts and types of items needed, especially with regard to the configuration of our high-efficiency pumps and IsoBoost and IsoGen systems; and cost reduction initiatives resulting in component changes within the products.

In addition, we may from time to time purchase more inventory than is immediately required in order to shorten our delivery time in case of an anticipated increase in demand for our products. If we are unable to forecast demand for our products with a reasonable degree of certainty and our actual orders from our customers are lower than these forecasts, we may accumulate excess inventory that we may be required to write off, and our business, financial condition, and results of operations could be adversely affected.

We are subject to risks related to product defects, which could lead to warranty claims in excess of our warranty provision or result in a significant or a large number of warranty or other claims in any given year.

We provide a warranty for certain products for a period of eighteen (18) to thirty (30) months and provide up to a five-year warranty for the ceramic components of our PX-branded products. We test our products in our manufacturing facilities through a variety of means; however, there can be no assurance that our testing will reveal latent defects in our products, which may not become apparent until after the products have been sold into the market. The testing may not replicate the harsh, corrosive, and varied conditions of the desalination and other plants in which they are installed. It is also possible that components purchased from our suppliers could break down under those conditions. Certain components of our turbochargers and pumps are custom-made and may not scale or perform as required in production environments. Accordingly, there is a risk that we may have significant warranty claims or breach supply agreements due to product defects. We may incur additional cost of revenue if our warranty provisions are not sufficient to cover the actual cost of resolving issues related to defects in our products. If these additional expenses are significant, they could adversely affect our business, financial condition, and results of operations.

Business interruptions may damage our facilities or those of our suppliers.

Our operations and those of our suppliers may be vulnerable to interruption by fire, earthquake, flood, and other natural disasters, as well as power loss, telecommunications failure, and other events beyond our control. Our facilities in California are located near major earthquake faults and have experienced earthquakes in the past. If a natural disaster occurs, our ability to conduct our operations could be seriously impaired, which could harm our business, financial condition, results of operations, and cash flows. We cannot be sure that the insurance we maintain against general business interruptions will be adequate to cover all of our losses.

If we are unable to protect our technology or enforce our intellectual property rights, our competitive position could be harmed, and we could be required to incur significant expenses to enforce our rights.

Our competitive position depends on our ability to establish and maintain proprietary rights in our technology and to protect our technology from copying by others. We rely on trade secret, patent, copyright, and trademark laws, as well as confidentiality agreements with employees and third parties, all of which may offer only limited protection. We hold a number of U.S. and counterpart international patents, and when their terms expire, we could become more vulnerable to increased competition. The protection of our intellectual property in some countries may be limited. While we have expanded our portfolio of patent applications, we do not know whether any of our pending patent applications will result in the issuance of patents or whether the examination process will require us to narrow our claims, and even if patents are issued, they may be contested, circumvented, or invalidated. Moreover, while we believe our issued patents and patent pending applications are essential to the protection of our technology, the rights granted under any of our issued patents or patents that may be issued in the future may not provide us with proprietary protection or competitive advantages, and as with any technology, competitors may be able to develop similar or superior technologies now or in the future. In addition, our granted patents may not prevent misappropriation of our technology, particularly in foreign countries where intellectual property laws may not protect our proprietary rights as fully as those in the United States. This may render our patents impaired or useless and ultimately expose us to currently unanticipated competition. Protecting against the unauthorized use of our products, trademarks, and other proprietary rights is expensive, difficult, and in some cases, impossible. Litigation may be necessary in the future to enforce or defend our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Intellectual property litigation could result in substantial costs and diversion of management resources, either of which could harm our business.

Claims by others that we infringe their proprietary rights could harm our business.

Third parties could claim that our technology infringes their intellectual property rights. In addition, we or our customers may be contacted by third parties suggesting that we obtain a license to certain of their intellectual property rights that they may believe we are infringing. We expect that infringement claims against us may increase as the number of products and competitors in our market increases and overlaps occur. In addition, to the extent that we gain greater visibility, we believe that we will face a higher risk of being the subject of intellectual property infringement claims. Any claim of infringement by a third party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract management from our business. Furthermore, a party making such a

claim, if successful, could secure a judgment that requires us to pay substantial damages. A judgment against us could also include an injunction or other court order that could prevent us from offering our products. In addition, we might be required to seek a license for the use of such intellectual property, which may not be available on commercially reasonable terms, or at all. Alternatively, we may be required to develop non-infringing technology, which could require significant effort and expense and may ultimately not be successful. Any of these events could seriously harm our business. Third parties may also assert infringement claims against our customers. Because we generally indemnify our customers if our products infringe the proprietary rights of third parties, any such claims would require us to initiate or defend protracted and costly litigation on their behalf in one or more jurisdictions, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers.

We are currently involved in legal proceedings, and may be subject to additional future legal proceedings, that may result in material adverse outcomes.

In addition to intellectual property litigation risks discussed above, we are presently involved, and may become involved in the future, in various commercial and other disputes as well as related claims and legal proceedings that arise from time to time in the course of our business. See Note 9 to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for information about certain legal proceedings in which we are involved. Our current legal proceedings and any future lawsuits to which we may become a party are and will likely be expensive and time consuming to investigate, defend and resolve, and will divert our management’s attention. Any litigation to which we are a party may result in an onerous or unfavorable judgment that may not be reversed upon appeal or in payments of substantial monetary damages or fines, or we may decide to settle lawsuits on similarly unfavorable terms, which could have an adverse effect on our business, financial condition, or results of operations.

Our global operations expose us to risks and challenges associated with conducting business internationally, and our results of operations may be adversely affected by our efforts to comply with the laws of other countries, as well as U.S. laws which apply to international operations, such as the Foreign Corrupt Practices Act (FCPA) and U.S. export control laws.

We operate on a global basis with offices or activities in Europe, Africa, Asia, South America, and North America. We face risks inherent in conducting business internationally, including compliance with international and U.S. laws and regulations that apply to our international operations. These laws and regulations include tax laws, anti-competition regulations, import and trade restrictions, export control laws, and laws which prohibit corrupt payments to governmental officials or certain payments or remunerations to customers, including the U.S. Foreign Corrupt Practices Act (FCPA) or other anti-corruption laws that have recently been the subject of a substantial increase in global enforcement. Many of our products are subject to U.S. export law restrictions that limit the destinations and types of customers to which our products may be sold, or require an export license in connection with sales outside the United States. Given the high level of complexity of these laws, there is a risk that some provisions may be inadvertently or intentionally breached, for example through fraudulent or negligent behavior of individual employees, our failure to comply with certain formal documentation requirements, or otherwise. Also, we may be held liable for actions taken by our local dealers and partners. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, and prohibitions or conditions on the conduct of our business. Any such violations could include prohibitions or conditions on our ability to offer our products in one or more countries and could materially damage our reputation, our brand, our business, and our operating results.

In addition, we operate in many parts of the world that have experienced significant governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We may be subject to competitive disadvantages to the extent that our competitors are able to secure business, licenses, or other preferential treatment by making payments to government officials and others in positions of influence or through other methods that relevant law and regulations prohibit us from using. Our success depends, in part, on our ability to anticipate these risks and manage these difficulties.

These factors or any combination of these factors may adversely affect our revenue or our overall financial performance.

Significant developments stemming from the recent U.S. presidential election could have a material adverse effect on us.

The current administration has called for substantial change to fiscal and tax policies, regulatory oversight of businesses, and greater restrictions on free trade including significant increases on tariffs on goods imported into the United States, including from China. Proposals espoused by the current administration may result in changes to social, political, regulatory, and economic conditions in the United States or in laws and policies affecting the development and investment in countries where we currently conduct business, sell our products, or procure our raw materials. In addition, these changes could result in negative sentiments towards the United States among non-U.S. customers. We

cannot predict the impact, if any, of these changes to our business. However, it is possible that these changes could adversely affect our business due to the substantial exposure we have to international markets which could have an adverse effect on our business, financial condition, or results of operations.

Regulations related to conflict minerals could adversely impact our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability concerning the supply of certain minerals, known as conflict minerals, originating from the Democratic Republic of Congo ("DRC") and adjoining countries. As a result, in August 2012, the SEC adopted annual disclosure and reporting requirements for those companies who use conflict minerals mined from the DRC and adjoining countries in their products. Based on our purchasing policy and supplier selection, it is considered unlikely that any conflict minerals are used in the manufacturing of our products. Nevertheless, we are continuing reasonable country of origin inquiry and have implemented a program of due diligence on the source and chain of custody for conflict minerals.

There are costs associated with complying with these disclosure requirements, including loss of customers and potential changes to products, processes, or sources of supply as a consequence of our verification activities. The implementation of these rules could adversely affect the sourcing, supply, and pricing of materials used in our products. As there may be only a limited number of suppliers offering “conflict free” minerals, we cannot be sure that we will be able to obtain necessary materials from such suppliers in sufficient quantities or at competitive prices. Also, we may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict-free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we have implemented.

We may have risks associated with security of our information technology systems.

We make significant efforts to maintain the security and integrity of our information technology systems and data. Despite significant efforts to create security barriers to such systems, it is virtually impossible for us to entirely mitigate this risk. There is a risk of industrial espionage, cyber-attacks, misuse or theft of information or assets, or damage to assets by people who may gain unauthorized access to our facilities, systems, or information. Such cybersecurity breaches, misuse, or other disruptions could lead to the disclosure of confidential information, improper usage and distribution of our intellectual property, theft, manipulation and destruction of private and proprietary data, and production downtimes.

Although we actively employ measures to prevent unauthorized access to our information systems, preventing unauthorized use or infringement of our rights is inherently difficult. These events could adversely affect our financial results and any legal action in connection with any such cybersecurity breach could be costly and time-consuming and may divert management's attention and adversely affect the market's perception of us and our products.

We may have risks associated with our new international tax optimization structure.

In 2015, the Company implemented a new international tax optimization structure. Subsidiaries were established in Ireland and the Company transferred our Oil & Gas Segment intellectual property via platform licenses to ERI Energy Recovery Holdings Ireland Limited. The Company has undertaken extensive due diligence, implemented and continues to implement manufacturing, research and development, and sales operations to create Irish substance, and has conferred with tax experts to ensure that uncertain tax positions are unlikely. It is possible that the new international tax structure could be examined by the Internal Revenue Service in the U.S. and/or the Tax Authorities in Ireland, and it is possible that such an examination could result in an unfavorable impact on the Company.

If we need additional capital to fund future growth, it may not be available on favorable terms, or at all.

Our primary source of cash historically has been customer payments for our products and services and proceeds from the issuance of common stock. This has funded our operations and capital expenditures. We may require additional capital from equity or debt financing in the future to fund our operations or respond to competitive pressures or strategic opportunities, such as a potential acquisition or the expansion of operations. We may not be able to secure such additional financing on favorable terms or at all. The terms of additional financing may place limits on our financial and operational flexibility. If we raise additional funds through further issuances of equity, convertible debt securities, or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new securities that we issue could have rights, preferences, or privileges senior to those of existing or future holders of our common stock. If we are unable to obtain necessary financing on terms satisfactory to us, if and when we require it, our ability to grow or support our business and to respond to business challenges or opportunities could be significantly limited.

We may seek to expand through acquisitions of and investments in other businesses, technologies, and assets. These acquisition activities may be unsuccessful or divert management's attention.

We may consider strategic and complementary acquisitions of and investments in other businesses, technologies, and assets, and such acquisitions or investments are subject to risks that could affect our business, including risks related to:

- the necessity of coordinating geographically disparate organizations

- implementing common systems and controls
- integrating personnel with diverse business and cultural backgrounds
- integrating acquired research and manufacturing facilities, technology and products
- combining different corporate cultures and legal systems
- unanticipated expenses related to integration, including technical and operational integration
- increased costs and unanticipated liabilities, including with respect to registration, environmental, health and safety matters, that may affect sales and operating results
- retaining key employees
- obtaining required government and third-party approvals
- legal limitations in new jurisdictions
- installing effective internal controls and audit procedures
- issuing common stock that could dilute the interests of our existing stockholders
- spending cash and incurring debt
- assuming contingent liabilities and
- creating additional expenses.

We may not be able to identify opportunities or complete transactions on commercially reasonable terms, or at all, or actually realize any anticipated benefits from such acquisitions or investments. Similarly, we may not be able to obtain financing for acquisitions or investments on attractive terms. If we do complete acquisitions, we cannot ensure that they will ultimately strengthen our competitive or financial position or that they will not be viewed negatively by customers, financial markets, investors, or the media. In addition, the success of any acquisitions or investments also

will depend, in part, on our ability to integrate the acquisition or investment with our existing operations.

Insiders and principal stockholders will likely have significant influence over matters requiring stockholder approval.

Our directors, executive officers, and other principal stockholders beneficially own, in the aggregate, a substantial amount of our outstanding common stock. These stockholders could likely have significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions such as a merger or other sale of our company or its assets.

The market price of our common stock may continue to be volatile.

The market price of our common stock has been, and is likely to continue to be, volatile and subject to fluctuations. Changes in the stock market generally or as it concerns our industry, as well as geopolitical, economic, and business factors unrelated to us, may also affect our stock price. Significant declines in the market price of our common stock or failure of the market price to increase could harm our ability to recruit and retain key employees, reduce our access to debt or equity capital, and otherwise harm our business or financial condition. In addition, we may not be able to use our common stock effectively as consideration in connection with any future acquisitions.

Anti-takeover provisions in our charter documents and under Delaware law could discourage, delay, or prevent a change in control of our company and may affect the trading price of our common stock.

Provisions in our amended and restated certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our Board of Directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock;

- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

- specify that special meetings of our stockholders can be called only by our Board of Directors, the chairman of the board, the chief executive officer, or the president;

- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;

- establish that our Board of Directors is divided into three classes, Class I, Class II, and Class III, with each class serving staggered terms;

- provide that our directors may be removed only for cause;

- provide that vacancies on our Board of Directors may be filled only by a majority vote of directors then in office, even though less than a quorum;

- specify that no stockholder is permitted to cumulate votes at any election of directors; and

- require a super-majority of votes to amend certain of the above mentioned provisions.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. Section 203 generally prohibits us from engaging in a business combination with an interested stockholder subject to certain exceptions.

Item 1B — Unresolved Staff Comments

None

Item 2 — Properties

We lease approximately 170,000 square feet of space in San Leandro, California for product manufacturing, research and development, and executive headquarters under a lease that expires in November of 2019. We believe that this facility will be adequate for our purposes for the foreseeable future. Additionally, we lease offices near Dublin, Ireland; Dubai, United Arab Emirates; Shanghai, Peoples Republic of China; and Houston, Texas.

Item 3 — Legal Proceedings

See Note 9 — C*ommitments and Contingencies* to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K Item 8 of this report, under the heading "*Litigation,*" which is incorporated by reference into this Item 3, for a description of the lawsuits pending against us.

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 is quoted on the NASDAQ Stock Market under the symbol "ERII."

The following table sets forth the high and low intra-day sales prices of our common stock for the periods indicated.

	2016	2015
High		