UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2022

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®

Energy Recovery, Inc.
(Exact Name of Registrant as Specified in its Charter)

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

1717 Doolittle Drive, San Leandro, California 94577
(Address of Principal Executive Offices) (Zip Code)

(510) 483-7370
(Registrant's Telephone Number, Including Area Code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.001 par value	**ERII**	**The Nasdaq Stock Market LLC**

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 and post such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 Exchange Act Rule 12b-2). Yes☐ No ☑

As of October 27, 2022, there were 55,995,969 shares of the registrant's common stock outstanding.

ENERGY RECOVERY, INC.
TABLE OF CONTENTS

		Page No.
	PART I	
	FINANCIAL INFORMATION	
Item 1	Financial Statements (Unaudited)	
	Condensed Consolidated Balance Sheets— September 30, 2022 and December 31, 2021	1
	Condensed Consolidated Statements of Operations — Three and Nine Months Ended September 30, 2022 and 2021	2
	Condensed Consolidated Statements of Comprehensive Income — Three and Nine Months Ended September 30, 2022 and 2021	3
	Condensed Consolidated Statements of Stockholders' Equity — Three and Nine Months Ended September 30, 2022 and 2021	4
	Condensed Consolidated Statements of Cash Flows— Nine Months Ended September 30, 2022 and 2021	5
	Notes to Condensed Consolidated Financial Statements	6
Item 2	Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Item 3	Quantitative and Qualitative Disclosures About Market Risk	32
Item 4	Controls and Procedures	32
	PART II	
	OTHER INFORMATION	
Item 1	Legal Proceedings	33
Item 1A	Risk Factors	33
Item 2	Unregistered Sales of Equity Securities and Use of Proceeds	33
Item 3	Defaults Upon Senior Securities	33
Item 4	Mine Safety Disclosures	33
Item 5	Other Information	33
Item 6	Exhibits	34
Signatures		35

Forward-Looking Information

This Quarterly Report on Form 10-Q for the three and nine months ended September 30, 2022, including Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” (the “MD&A”) 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,” “continue,” “could,” “may,” “potential,” “should,” “will,” “would,” variations of such words 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 Part II, 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 the pressure exchanger is the industry standard for energy recovery in the seawater reverse osmosis desalination (“SWRO”) industry;
- forecasted production and evaluations and judgments regarding supply chain matters, particularly in light of the global supply environment;
- our belief that we have sufficient raw material and finished goods to mitigate supply chain issues;
- our belief that the scalability and versatility of our platform can help us achieve success in emerging markets similar to SWRO;
- our belief that the Ultra PX™ addresses key challenges associated with treating industrial wastewater in a range of reverse osmosis (“RO”) applications;
- our belief that the Ultra PX can accelerate adoption of RO in the growing zero liquid discharge (“ZLD”) and minimal liquid discharge (“MLD”) markets;
- our belief that the Ultra PX can help make RO the preferred treatment option to achieve ZLD and MLD requirements by enhancing RO’s affordability and efficiency compared to thermal treatment options.
- our belief that pressure exchanger technology can provide benefits to our customers, including the reduction of capital expenditures and energy use;
- our belief that our pressure exchanger technology can address inefficiencies and waste within industrial systems and processes that involve high-pressure and low-pressure fluid flows;
- our belief that our PX® Pressure Exchanger® (“PX”) has helped make SWRO an economically viable and more sustainable option in the production of potable water;
- our belief that our hydraulic turbochargers (“Turbochargers”) deliver substantial savings and ease of integration into desalination systems;
- our anticipation that markets not traditionally associated with desalination, such as the United States of America (the “U.S.”) and China will inevitably develop and provide further revenue growth opportunities;
- our belief that countries around the world will continue to mandate ZLD or MLD requirements for specific industries;
- our belief that leveraging the Ultra PX with RO will significantly lower thermal demand;
- our belief that the PX Q400 will be the highest-performing and highest capacity PX available for SWRO desalination and industrial wastewater facilities;
- our belief that, as the existing thermal technology is replaced with RO technology, demand for our products will be created;
- our belief that ongoing operating costs rather than capital expenditures is the key factor in the selection of an ERD solution for megaproject (“MPD”) customers;
- our belief that our PX offers market-leading value with the highest technological and economic benefit;

- our belief that our solutions offer a competitive advantage compared to our competitors' solutions because our ERDs provide the lowest life-cycle cost and are, therefore, the most cost-effective ERD solutions for RO desalination applications;
- our belief that leveraging our pressure exchanger technology will unlock new commercial opportunities in the future;
- our belief that sales of carbon dioxide ("CO_2") refrigeration systems will increase in response to regulations and supermarkets' search for safe natural refrigerants;
- our belief that our pressure exchanger technology can significantly help reduce the operating costs of CO_2 refrigeration systems by recycling the pressure energy of CO_2 gas thereby significantly reducing the energy needed to operate these systems;
- our belief that the PX G1300™ could eventually alter the standard refrigeration system architecture by reducing costs for retail end users such as grocery stores;
- our belief that we will be able to achieve efficiencies across a wider range of temperatures that exceed incumbent CO_2 refrigeration technologies;
- our belief that the Ultra PX™ can address the key challenges associated with treating industrial wastewater in ultra high-pressure reverse osmosis ("UHPRO") applications;
- our belief that the Ultra PX can help make UHPRO the preferred treatment option to achieve ZLD and MLD requirements by enhancing UHPRO's affordability and efficiency compared to thermal treatment options;
- our belief that our Ultra PX enables customers to optimize their wastewater treatment process for ZLD and MLD;
- our objective of finding new applications for our technology and developing new products for use outside of desalination;
- our belief that our current facilities will be adequate for the foreseeable future;
- our belief that by investing in research and development, we will be well positioned to continue to execute on our product strategy;
- our expectation that sales outside of the U.S. 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 and cash equivalents, our short and/or long-term investments, and the ongoing 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 our latest technology arising from rapid market adoption that could require us to seek additional equity or debt financing;
- our belief that we will be in compliance with the terms of the existing credit agreement, as amended, in the future;
- our tax and accounting estimates and estimates regarding any potential operational cost savings as a result of our decision to cease the VorTeq™ commercialization efforts;
- our belief that we expect to utilize all of our net operating loss ("NOL") carryforwards in fiscal year 2022 due to our projected income exceeding the amount of NOL carryforwards;
- our expectation that we will continue to receive a tax benefit related to U.S. federal foreign-derived intangible income;
- our expectation that we will be able to enforce our intellectual property ("IP") rights;
- our expectation that the adoption of new accounting standards will not have a material impact on our financial position or results of operations;
- the impact of changes in internal control over financial reporting; and
- other factors disclosed under the MD&A and Part I, Item 3, "Quantitative and Qualitative Disclosures about Market Risk," and elsewhere in this Form 10-Q.

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 Quarterly Report on Form 10-Q. All forward-looking statements included in this document are subject to additional risks and uncertainties further discussed under Part II, Item 1A, "Risk Factors," and are based on information available to us as of November 2, 2022. We assume no obligation to update any such forward-looking statements, certain risks and uncertainties which could cause actual results to differ materially from those projected in the forward-looking statements. These forward-looking statements are disclosed from time to time in our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K filed with or furnished to the Securities and Exchange Commission (the "SEC"), as well as in Part II, Item 1A, "Risk Factors," within this Quarterly Report on Form 10-Q.

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," in our Quarterly Reports on Form 10-Q, and in our Annual Reports on Form 10-K, and from time-to-time, in our results disclosed on our Current Reports on Form 8-K. In addition, when preparing the MD&A below, we presume the readers have access to and have read the MD&A in our Annual Report on Form 10-K, pursuant to Instruction 2 to paragraph (b) of Item 303 of Regulation S-K.

We provide our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements, Forms 3, 4 and 5 filed by or on behalf of directors, executive officers and certain large shareholders, and any amendments to those documents filed or furnished pursuant to the Securities Exchange Act of 1934, free of charge on the Investor Relations section of our website, www.energyrecovery.com. These filings will become available as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. From time to time, we may use our website as a channel of distribution of material company information.

We also make available in the Investor Relations section of our website our corporate governance documents including our code of business conduct and ethics and the charters of the audit, compensation and nominating and governance committees. These documents, as well as the information on the website, are not intended to be part of this Quarterly Report on Form 10-Q. We use the Investor Relations section of our website as a means of complying with our disclosure obligations under Regulation FD. Accordingly, you should monitor the Investor Relations section of our website in addition to following our press releases, SEC filings and public conference calls and webcasts.

PART I — FINANCIAL INFORMATION

Item 1 — Financial Statements (unaudited)

ENERGY RECOVERY, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2022	December 31, 2021
	(In thousands)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 52,131	$ 74,358
Short-term investments	30,156	31,332
Accounts receivable, net	18,422	20,615
Inventories, net	32,132	20,383
Prepaid expenses and other assets	6,377	5,075
Total current assets	139,218	151,763
Long-term investments	4,271	2,298
Deferred tax assets, net	11,214	11,421
Property and equipment, net	18,724	20,361
Operating lease, right of use asset	13,510	14,653
Goodwill and other intangible assets	12,819	12,827
Other assets, non-current	365	367
Total assets	$ 200,121	$ 213,690
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,931	$ 909
Accrued expenses and other liabilities	11,319	13,994
Lease liabilities	1,552	1,564
Contract liabilities	2,157	3,318
Total current liabilities	16,959	19,785
Lease liabilities, non-current	13,732	14,879
Other liabilities, non-current	127	247
Total liabilities	30,818	34,911
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Common stock	64	64
Additional paid-in capital	202,807	195,593
Accumulated other comprehensive loss	(509)	(149)
Treasury stock	(80,486)	(53,832)
Retained earnings	47,427	37,103
Total stockholders' equity	169,303	178,779
Total liabilities and stockholders' equity	$ 200,121	$ 213,690

See Accompanying Notes to Condensed Consolidated Financial Statements

ENERGY RECOVERY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except per share data)			
Revenue	$ 30,462	$ 20,781	$ 83,300	$ 70,328
Cost of revenue	9,417	6,089	25,835	22,251
Gross profit	21,045	14,692	57,465	48,077
Operating expenses:				
General and administrative	7,608	5,853	21,155	18,641
Sales and marketing	4,703	2,996	11,916	8,236
Research and development	3,828	4,416	14,170	13,342
Total operating expenses	16,139	13,265	47,241	40,219
Income from operations	4,906	1,427	10,224	7,858
Other income (expense):				
Interest income	259	36	486	179
Other non-operating (expense) income, net	(5)	1	(9)	(21)
Total other income, net	254	37	477	158
Income before income taxes	5,160	1,464	10,701	8,016
Provision for (benefit from) income taxes	371	393	377	(990)
Net income	$ 4,789	$ 1,071	$ 10,324	$ 9,006
Net income per share:				
Basic	$ 0.09	$ 0.02	$ 0.18	$ 0.16
Diluted	$ 0.08	$ 0.02	$ 0.18	$ 0.15
Number of shares used in per share calculations:				
Basic	55,881	57,026	56,291	57,053
Diluted	57,372	58,709	57,708	58,785

See Accompanying Notes to Condensed Consolidated Financial Statements

ENERGY RECOVERY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Net income	$ 4,789	$ 1,071	$ 10,324	$ 9,006
Other comprehensive (loss) income, net of tax				
Foreign currency translation adjustments	34	(20)	38	(40)
Unrealized loss on investments	(28)	(13)	(398)	(99)
Total other comprehensive (loss) income, net of tax	6	(33)	(360)	(139)
Comprehensive income	$ 4,795	$ 1,038	$ 9,964	$ 8,867

See Accompanying Notes to Condensed Consolidated Financial Statements

ENERGY RECOVERY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except shares)			
Common stock				
Beginning balance	$ 64	$ 63	$ 64	$ 62
Issuance of common stock, net	—	—	—	1
Ending balance	64	63	64	63
Additional paid-in capital				
Beginning balance	200,129	191,087	195,593	179,161
Issuance of common stock, net	1,259	242	2,244	8,938
Stock-based compensation	1,419	1,235	4,970	4,465
Ending balance	202,807	192,564	202,807	192,564
Accumulated other comprehensive loss				
Beginning balance	(515)	(53)	(149)	53
Other comprehensive (loss) income				
Foreign currency translation adjustments	34	(20)	38	(40)
Unrealized loss on investments	(28)	(13)	(398)	(99)
Total other comprehensive (loss) income, net	6	(33)	(360)	(139)
Ending balance	(509)	(86)	(509)	(86)
Treasury stock				
Beginning balance	(80,455)	(42,040)	(53,832)	(30,486)
Common stock repurchased	(31)	(5,602)	(26,654)	(17,156)
Ending balance	(80,486)	(47,642)	(80,486)	(47,642)
Retained earnings				
Beginning balance	42,638	30,769	37,103	22,834
Net income	4,789	1,071	10,324	9,006
Ending balance	47,427	31,840	47,427	31,840
Total stockholders' equity	$ 169,303	$ 176,739	$ 169,303	$ 176,739
Common stock issued (shares)				
Beginning balance	63,935,378	63,267,293	63,544,419	61,798,004
Issuance of common stock, net	196,110	31,690	587,069	1,500,979
Ending balance	64,131,488	63,298,983	64,131,488	63,298,983
Treasury stock (shares)				
Beginning balance	8,146,859	6,112,873	6,721,153	5,455,935
Common stock repurchased	1,653	295,728	1,427,359	952,666
Ending balance	8,148,512	6,408,601	8,148,512	6,408,601
Total common stock outstanding (shares)	55,982,976	56,890,382	55,982,976	56,890,382

See Accompanying Notes to Condensed Consolidated Financial Statements

ENERGY RECOVERY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Nine Months Ended September 30,	
	2022	2021
	(In thousands)	
Cash flows from operating activities:		
Net income	$ 10,324	$ 9,006
Adjustments to reconcile net income to cash provided by (used in) operating activities		
Stock-based compensation	5,101	4,574
Depreciation and amortization	4,946	4,141
Amortization of premiums and discounts on investments	647	340
Deferred income taxes	207	(1,063)
Other non-cash adjustments	235	161
Changes in operating assets and liabilities:		
Accounts receivable, net	2,208	(1,274)
Contract assets	(398)	1,892
Inventories, net	(11,848)	(8,874)
Prepaid and other assets	(461)	(1,097)
Accounts payable	1,121	2,739
Accrued expenses and other liabilities	(4,617)	(3,132)
Contract liabilities	(1,197)	(119)
Net cash provided by operating activities	6,268	7,294
Cash flows from investing activities:		
Maturities of marketable securities	34,107	20,686
Purchases of marketable securities	(35,964)	(43,339)
Capital expenditures	(2,999)	(4,899)
Proceeds from sales of fixed assets	734	5
Net cash used in investing activities	(4,122)	(27,547)
Cash flows from financing activities:		
Net proceeds from issuance of common stock	2,244	8,939
Repurchase of common stock	(26,654)	(17,156)
Net cash used in financing activities	(24,410)	(8,217)
Effect of exchange rate differences on cash, cash equivalents and restricted cash	38	(40)
Net change in cash, cash equivalents and restricted cash	(22,226)	(28,510)
Cash, cash equivalents and restricted cash, beginning of year	74,461	94,358
Cash, cash equivalents and restricted cash, end of period	$ 52,235	$ 65,848

See Accompanying Notes to Condensed Consolidated Financial Statements

ENERGY RECOVERY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1 — Description of Business and Significant Accounting Policies

Energy Recovery, Inc. and its wholly-owned subsidiaries (the “Company” or “Energy Recovery”) designs and manufactures solutions that make industrial processes more efficient and sustainable. Leveraging the Company’s pressure exchanger technology, which generates little to no emissions when operating, the Company’s solutions lower costs, save energy, reduce waste and minimize emissions for companies across a variety of industrial processes. As the world coalesces around the urgent need to address climate change and its impacts, the Company is helping companies reduce their energy consumption in their industrial processes, which in turn, reduces their carbon footprint. The Company believes that its customers do not have to sacrifice quality and cost savings for sustainability and is committed to developing solutions that drive long-term value – both financial and environmental. The Company’s solutions are marketed, sold in, or developed for, the fluid-flow and gas markets, such as seawater and industrial wastewater desalination, natural gas, chemical processing and refrigeration systems, under the trademarks ERI®, PX®, Pressure Exchanger®, PX® Pressure Exchanger® (“PX”), Ultra PX™, PX G1300™, PX G™, PX PowerTrain™, IsoBoost™, AT™, and Aquabold™. The Company owns, manufactures and/or develops its solutions, in whole or in part, in the United States of America (the “U.S.”).

Basis of Presentation

The Condensed Consolidated Financial Statements include the accounts of Energy Recovery, Inc. and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

The accompanying Condensed Consolidated Financial Statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”). Certain information and footnote disclosures normally included in the financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) have been condensed or omitted pursuant to such rules and regulations. The December 31, 2021 Condensed Consolidated Balance Sheet was derived from audited financial statements and may not include all disclosures required by GAAP; however, the Company believes that the disclosures are adequate to make the information presented not misleading.

The September 30, 2022 unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and the notes thereto for the fiscal year ended December 31, 2021 included in the Company’s Annual Report on Form 10-K filed with the SEC on February 24, 2022 (the “2021 Annual Report”).

All adjustments consisting of normal recurring adjustments that are necessary to present fairly the financial position, results of operations and cash flows for the interim periods have been made. The results of operations for the interim periods are not necessarily indicative of the operating results for the full fiscal year or any future periods.

Reclassifications

Certain prior period amounts have been reclassified in the Condensed Consolidated Statements of Operations, Condensed Consolidated Statements of Cash Flows and certain notes to the Condensed Consolidated Financial Statements to conform to the current period presentation.

Use of Estimates

The preparation of Condensed Consolidated Financial Statements, in conformity with GAAP, requires the Company’s management to make judgments, assumptions and estimates that affect the amounts reported in the Condensed Consolidated Financial Statements and accompanying notes.

The accounting policies that reflect the Company’s more significant estimates and judgments and that the Company believes are the most critical to aid in fully understanding and evaluating its reported financial results are revenue recognition; valuation of stock options; useful life and valuation of equipment; valuation and impairment of goodwill; inventory; deferred taxes and valuation allowances on deferred tax assets; and evaluation and measurement of contingencies. Those estimates could change, and as a result, actual results could differ materially from those estimates.

ENERGY RECOVERY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Although there has been uncertainty and disruption in the global economy, supply chain and financial markets, the Company is not aware of any specific event or circumstance that would require an update to its estimates or judgments or a revision of the carrying value of its assets or liabilities as of November 2, 2022, the date of issuance of this Quarterly Report on Form 10-Q. These estimates may change, as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions. The Company undertakes no obligation to update publicly these estimates for any reason after the date of this Quarterly Report on Form 10-Q, except as required by law.

Significant Accounting Policies

There have been no material changes to the Company's significant accounting policies in Note 1, "Description of Business and Significant Accounting Policies," of the Notes to Consolidated Financial Statements included in Item 8, "Financial Statements and Supplementary Data," in the 2021 Annual Report.

Recently Adopted Accounting Pronouncement

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-04, *Reference Rate Reform (Topic 848)* ("ASU 2020-04"), which provided optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships, and other transactions affected by the discontinuation of the London Interbank Offered Rate ("LIBOR") or by another reference rate expected to be discontinued. The FASB later issued ASU No. 2021-01, *Reference Rate Reform (Topic 848): Scope, to clarify the scope of Topic 848 so that derivatives affected by the discounting transition are explicitly eligible for certain optional expedients and exceptions in Topic 848* ("ASU 2021-01"). Entities may apply the provisions of the new standards as of the beginning of the reporting period when the election is made (i.e., as early as the first quarter of 2020). Unlike other topics, the provisions of this update are only available until December 31, 2022, when the reference rate replacement activity is expected to have been completed. An entity may elect to apply amendments prospectively through December 31, 2022.

On July 15, 2022, the Company amended its existing credit agreement (as defined in Note 6, "Lines of Credit") to change the reference rate for borrowings from LIBOR to the Secured Overnight Financing Rate ("SOFR"). The Company applied ASU 2020-04 and the optional expedients at the time of this modification. The Company's adoption of ASU 2020-04 and ASU 2021-01 on July 15, 2022, did not have a material impact on the Company's financial condition, results of operations, and cash flows. Refer to Note 6, "Lines of Credit," for more information.

Note 2 — Revenue

Disaggregation of Revenue

The following tables present the disaggregated revenues by segment, and within each segment, by product type, by primary geographical market based on the customer "shipped to" address, and by channel customers.

The Company classifies its channel customers as follows:

- *Megaproject ("MPD").* MPD customers are major firms that develop, design, build, own and/or operate large-scale desalination plants.
- *Original Equipment Manufacturer ("OEM").* OEM customers are companies that supply equipment, packaged systems, and various operating and maintenance solutions for small to medium-sized desalination plants, utilized by commercial and industrial entities, as well as national, state and local municipalities worldwide.
- *Aftermarket ("AM").* AM customers are desalination plant owners and/or operators who can utilize our technology to upgrade or keep their plant running.

Sales and usage-based taxes are excluded from revenues. See Note 9, "Segment Reporting," for further discussion related to the Company's segments.

	Three Months Ended September 30, 2022			Nine Months Ended September 30, 2022		
	Water	Emerging Technologies	Total	Water	Emerging Technologies	Total
			(In thousands)			
Product type						
PXs, pumps and turbo devices, and other	$ 30,462	$ —	$ 30,462	$ 83,191	$ 109	$ 83,300
Primary geographical market						
Middle East and Africa	$ 16,722	$ —	$ 16,722	$ 53,629	$ 79	$ 53,708
Asia	8,168	—	8,168	17,771	—	17,771
Americas	3,156	—	3,156	6,951	30	6,981
Europe	2,416	—	2,416	4,840	—	4,840
Total revenue	$ 30,462	$ —	$ 30,462	$ 83,191	$ 109	$ 83,300
Channel						
Megaproject	$ 17,347	$ —	$ 17,347	$ 51,178	$ 79	$ 51,257
Original equipment manufacturer	9,032	—	9,032	21,392	—	21,392
Aftermarket	4,083	—	4,083	10,621	30	10,651
Total revenue	$ 30,462	$ —	$ 30,462	$ 83,191	$ 109	$ 83,300

ENERGY RECOVERY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

	Three Months Ended September 30, 2021			Nine Months Ended September 30, 2021		
	Water	Emerging Technologies	Total	Water	Emerging Technologies	Total
			(In thousands)			
Product type						
PXs, pumps and turbo devices, and other	$ 20,767	$ 14	$ 20,781	$ 70,275	$ 53	$ 70,328
Primary geographical market						
Middle East and Africa	$ 14,825	$ 14	$ 14,839	$ 52,186	$ 53	$ 52,239
Asia	3,563	—	3,563	13,066	—	13,066
Americas	993	—	993	2,361	—	2,361
Europe	1,386	—	1,386	2,662	—	2,662
Total product revenue	$ 20,767	$ 14	$ 20,781	$ 70,275	$ 53	$ 70,328
Channel						
Megaproject	$ 13,261	$ 14	$ 13,275	$ 50,254	$ 53	$ 50,307
Original equipment manufacturer	4,844	—	4,844	11,909	—	11,909
Aftermarket	2,662	—	2,662	8,112	—	8,112
Total revenue	$ 20,767	$ 14	$ 20,781	$ 70,275	$ 53	$ 70,328

Contract Balances

The following table presents contract balances by category.

	September 30, 2022	December 31, 2021
	(In thousands)	
Accounts receivable, net	$ 18,422	$ 20,615
Contract assets, current (included in prepaid expenses and other assets)	891	493
Contract liabilities:		
Contract liabilities, current	$ 2,157	$ 3,318
Contract liabilities, non-current (included in other liabilities, non-current)	52	88
Total contract liabilities	$ 2,209	$ 3,406

Contract Liabilities

The Company records contract liabilities, which consist of customer deposits and deferred revenue, when cash payments are received in advance of the Company’s performance. The following table presents significant changes in contract liabilities during the period.

	September 30, 2022	December 31, 2021
	(In thousands)	
Contract liabilities, beginning of year	$ 3,406	$ 1,640
Revenue recognized	(3,049)	(1,415)
Cash received, excluding amounts recognized as revenue during the period	1,852	3,181
Contract liabilities, end of period	$ 2,209	$ 3,406

Future Performance Obligations

As of September 30, 2022, the following table presents the future estimated revenue by year expected to be recognized related to performance obligations that are unsatisfied or partially unsatisfied.

Year Recognized	Future Performance Obligations
	(In thousands)
2022 (remaining three months)	$ 3,660
2023	4,452
2024	7,493
Total	$ 15,605

Note 3 — Net Income Per Share

Net income for the reported period is divided by the weighted average number of common shares outstanding during the reported period to calculate basic net income per common share.

- Basic net income per common share excludes any dilutive effect of stock options and restricted stock units ("RSU").
- Diluted net income per common share reflects the potential dilution that would occur if outstanding stock options to purchase common stock were exercised for shares of common stock, using the treasury stock method, and if the shares of common stock underlying each unvested RSU were issued.

Outstanding stock options to purchase common stock and unvested RSUs are collectively referred to as “stock awards.”

The following table presents the computation of basic and diluted net income per common share.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except per share amounts)			
Numerator				
Net income	$ 4,789	$ 1,071	$ 10,324	$ 9,006
Denominator (weighted average shares)				
Basic common shares outstanding	55,881	57,026	56,291	57,053
Dilutive stock awards	1,491	1,683	1,417	1,732
Diluted common shares outstanding	57,372	58,709	57,708	58,785
Net income per share				
Basic	$ 0.09	$ 0.02	$ 0.18	$ 0.16
Diluted	$ 0.08	$ 0.02	$ 0.18	$ 0.15

Certain shares of common stock issuable under stock awards have been omitted from the diluted net income per common share calculations because their inclusion is considered anti-dilutive. The following table presents the weighted potential common shares issuable under stock awards that were excluded from the computation of diluted net income per common share.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Anti-dilutive stock award shares	387	26	522	456

Note 4 — Other Financial Information

Cash, Cash Equivalents and Restricted Cash

The Condensed Consolidated Statements of Cash Flows explain the changes in the total of cash, cash equivalents and restricted cash. The following table presents a reconciliation of cash, cash equivalents and restricted cash, such as cash amounts deposited in restricted cash accounts in connection with the Company's credit cards, reported within the Condensed Consolidated Balance Sheets that sum to the total of such amounts presented.

	September 30, 2022	December 31, 2021	September 30, 2021
		(In thousands)	
Cash and cash equivalents	$ 52,131	$ 74,358	$ 65,745
Restricted cash, non-current (included in other assets, non-current)	104	103	103
Total cash, cash equivalents and restricted cash	$ 52,235	$ 74,461	$ 65,848

Accounts Receivable, net

	September 30, 2022	December 31, 2021
	(In thousands)	
Accounts receivable, gross	$ 18,522	$ 20,732
Allowance for doubtful accounts	(100)	(117)
Accounts receivable, net	$ 18,422	$ 20,615

Inventories, net

	September 30, 2022	December 31, 2021
	(In thousands)	
Raw materials	$ 12,751	$ 7,352
Work in process	3,266	3,406
Finished goods	16,832	10,274
Inventories, gross	32,849	21,032
Valuation adjustments for excess and obsolete inventory	(717)	(649)
Inventories, net	$ 32,132	$ 20,383

Inventory amounts are stated at the lower of cost or net realizable value, using the first-in, first-out method.

Prepaid Expenses and Other Assets

	September 30, 2022	December 31, 2021
	(In thousands)	
Contract assets	$ 891	$ 493
Cloud computing arrangement implementation costs	881	1,041
Supplier advances	2,079	1,717
Other prepaid expenses and other assets	2,526	1,824
Total prepaid expenses and other assets	$ 6,377	$ 5,075

ENERGY RECOVERY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Goodwill and Other Intangible Assets

	September 30, 2022	December 31, 2021
	(In thousands)	
Goodwill	$ 12,790	$ 12,790
Other intangible assets, net	29	37
Total goodwill and other intangible assets	$ 12,819	$ 12,827

Goodwill

Goodwill is tested for impairment annually in the third quarter of the Company's fiscal year or more frequently if indicators of potential impairment exist. The recoverability of goodwill is measured at the reporting unit level, which represents the operating segment.

On July 1, 2022, the Company estimated the fair value of its reporting units using both the discounted cash flow and market approaches. The forecast of future cash flows, which is based on the Company's best estimate of future net sales and operating expenses, is based primarily on expected category expansion, pricing, market segment, and general economic conditions. The Company incorporates other significant inputs to its fair value calculations, including discount rate and market multiples, to reflect current market conditions. The analysis performed indicated that the fair value of each reporting unit that is allocated goodwill significantly exceeds its carrying value. As a result, no impairment charge was recorded during the three months ended September 30, 2022. The Company continues to actively monitor the industries in which it operates and its business performance for indicators of potential impairment.

Accrued Expenses and Other Liabilities

	September 30, 2022	December 31, 2021
	(In thousands)	
Current		
Payroll, incentives and commissions payable	$ 7,516	$ 10,170
Warranty reserve	910	879
Legal costs	583	317
Other accrued expenses and other liabilities	2,310	2,628
Total accrued expenses and other liabilities	11,319	13,994
Other liabilities, non-current	127	247
Total accrued expenses, and current and non-current other liabilities	$ 11,446	$ 14,241

Note 5 — Investments and Fair Value Measurements

Available-for-Sale Investments

The Company's investments in investment-grade short-term and long-term marketable debt instruments, such as corporate notes and bonds, are classified as available-for-sale. Available-for-sale investments are classified on the Condensed Consolidated Balance Sheets as either short-term and/or long-term investments.

The classification of available-for-sale investments on the Condensed Consolidated Balance Sheets and definition of each of these classifications are provided in Note 1, "Description of Business and Significant Accounting Policies - Significant Accounting Policies," subsections "Cash and Cash Equivalents" and "Short-term and Long-term Investments," of the Notes to Consolidated Financial Statements included in Item 8, "Financial Statements and Supplementary Data," in the 2021 Annual Report.

Expected maturities can differ from contractual maturities because borrowers may have the right to prepay obligations without prepayment penalties. The Company generally holds available-for-sale investments until maturity; however, from time-to-time, the Company may elect to sell certain available-for-sale investments prior to contractual maturity.

Fair Value of Financial Instruments

All of the Company's financial assets and liabilities are remeasured and reported at fair value at each reporting period, and are classified and disclosed in one of the following three pricing category levels:

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

Level 2 — Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable; and

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

The following table presents the Company's financial assets measured on a recurring basis by contractual maturity, including pricing category, amortized cost, gross unrealized gains and losses, and fair value. As of the dates reported in the table, the Company had no financial liabilities and no Level 3 financial assets.

		September 30, 2022				December 31, 2021			
	Pricing Category	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(In thousands)							
Cash equivalents									
Money market securities	Level 1	$ 34,775	$ —	$ —	$ 34,775	$ 50,865	$ —	$ —	$ 50,865
Total cash equivalents		34,775	—	—	34,775	50,865	—	—	50,865
Short-term and long-term investments									
Corporate notes and bonds – short-term	Level 2	30,536	—	(380)	30,156	31,371	—	(39)	31,332
Corporate notes and bonds – long-term	Level 2	4,446	—	(175)	4,271	2,307	—	(9)	2,298
Total short and long-term investments		34,982	—	(555)	34,427	33,678	—	(48)	33,630
Total		$ 69,757	$ —	$ (555)	$ 69,202	$ 84,543	$ —	$ (48)	$ 84,495

The following table presents a summary of the fair value and gross unrealized losses on the available-for-sale securities that have been in a continuous unrealized loss position, aggregated by type of investment instrument. The available-for-sale securities that were in an unrealized gain position have been excluded from the table.

	September 30, 2022		December 31, 2021	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In thousands)			
Corporate notes and bonds	$ 34,427	$ (555)	$ 33,630	$ (48)

Note 6 — Lines of Credit

Credit Agreement

The Company entered into a credit agreement with JPMorgan Chase Bank, N.A. (“JPMC”) on December 22, 2021 (the “Credit Agreement”). The Credit Agreement, which will expire on December 21, 2026, provides a committed revolving credit line of $50.0 million and includes both a revolving loan and a letters of credit (“LCs”) component. Under the Credit Agreement, as of September 30, 2022, there were no revolving loans outstanding. In addition, under the LCs component, the Company utilized $16.7 million of the maximum allowable credit line of $ 25.0 million, which includes newly issued LCs, and previously issued and unexpired stand-by letters of credits (“SBLCs”) and certain non-expired commitments under the Company’s previous Loan and Pledge Agreement with Citibank, N.A. which are guaranteed under the Credit Agreement.

On July 15, 2022, the Company and JPMC agreed to a modification of the Credit Agreement to change the indicated reference rate from LIBOR to SOFR. Changes in the Credit Agreement reference rate to SOFR did not materially change the provisions defined in the original Credit Agreement nor did this change materially affect the Company’s financial statements.

The following table presents the total outstanding LCs and SBLCs issued by the Company to our customers related to product warranty and performance guarantees.

	September 30, 2022	December 31, 2021
	(In thousands)	
Outstanding letters of credit	$ 13,523	$ 13,960

Note 7 — Commitments and Contingencies

Warranty

The following table presents the changes in the Company's accrued product warranty reserve.

	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
	(In thousands)			
Warranty reserve balance, beginning of period	$ 897	$ 809	$ 879	$ 760
Warranty costs charged to cost of revenue	109	104	311	312
Utilization charges against reserve	(7)	(1)	(31)	(14)
Release of accrual related to expired warranties	(89)	(82)	(249)	(228)
Warranty reserve balance, end of period	$ 910	$ 830	$ 910	$ 830

Litigation

From time-to-time, the Company has been named in and subject to various proceedings and claims in connection with its business. The Company may in the future become involved in litigation in the ordinary course of business, including litigation that could be material to its business. The Company considers all claims, if any, on a quarterly basis and, based on known facts, assesses whether potential losses are considered reasonably possible, probable and estimable. Based upon this assessment, the Company then evaluates disclosure requirements and whether to accrue for such claims in its consolidated financial statements. The Company records a provision for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. These provisions are reviewed at least quarterly and are adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Other than noted below, as of September 30, 2022, the Company was not involved in any material lawsuits and there were no material losses which were probable or reasonably possible.

In June 2022, Mr. Blanco, the Company's former Senior Vice President, Sales, petitioned the Spanish court to reopen the previously closed case regarding unpaid bonus, stock options, and non-compete compensation. The Company denies any allegations of wrongdoing; however, the Company determined it was in its best interest to seek a settlement. Accordingly, an immaterial probable loss was recorded as of September 30, 2022. In October 2022, the Company settled the matter with no material impact to the financial statements.

Note 8 — Income Taxes

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except percentages)			
Provision for (benefit from) income taxes	$ 371	$ 393	$ 377	$ (990)
Discrete items	331	9	1,134	2,364
Provision for income taxes, excluding discrete items	$ 702	$ 402	$ 1,511	$ 1,374
Effective tax rate	7.2 %	26.8 %	3.5 %	(12.4 %)
Effective tax rate, excluding discrete items	13.6 %	27.5 %	14.1 %	17.2 %

The Company’s tax provision for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, the Company updates its estimate of the annual effective tax rate, and if the estimated annual effective tax rate changes, the Company makes a cumulative adjustment in such period. The Company’s quarterly tax provision and estimate of its annual effective tax rate are subject to variation due to several factors, including variability in accurately predicting its pre-tax income or loss and the mix of jurisdictions to which they relate, intercompany transactions, the applicability of special tax regimes, and changes in how the Company does business.

For the three and nine months ended September 30, 2022, the recognized provision for income tax included benefits primarily related to the U.S. federal foreign-derived intangible income (“FDII”) and federal research and development (“R&D”) tax credit, along with a discrete tax benefit due primarily to stock-based compensation. For the three and nine months ended September 30, 2021, the recognized (benefit from)/provision for income tax included the U.S. federal R&D tax credit along with a discrete tax benefit due primarily to stock-based compensation.

The effective tax rate excluding discrete items for the nine months ended September 30, 2022, as compared to the prior year, was marginally lower largely related to the projected FDII benefit, partially offset by reduced federal R&D tax credit benefit for fiscal year 2022.

Note 9 — Segment Reporting

The Company's chief operating decision-maker ("CODM") is its chief executive officer. The Company continues to monitor and review its segment reporting structure in accordance with authoritative guidance to determine whether any changes have occurred that would impact its reportable segments.

The following tables present a summary of the Company's financial information by segment and corporate operating expenses.

.

	Three Months Ended September 30, 2022			Nine Months Ended September 30, 2022		
	Water	Emerging Technologies	Total	Water	Emerging Technologies	Total
	(In thousands)					
Revenue	$ 30,462	$ —	$ 30,462	$ 83,191	$ 109	$ 83,300
Cost of revenue	9,417	—	9,417	25,817	18	25,835
Gross profit	21,045	—	21,045	57,374	91	57,465
Operating expenses						
General and administrative	1,911	878	2,789	4,909	3,140	8,049
Sales and marketing	3,242	960	4,202	8,197	2,120	10,317
Research and development	1,216	2,612	3,828	3,159	11,011	14,170
Total operating expenses	6,369	4,450	10,819	16,265	16,271	32,536
Operating income (loss)	$ 14,676	$ (4,450)	10,226	$ 41,109	$ (16,180)	24,929
Less: Corporate operating expenses			5,320			14,705
Income from operations			$ 4,906			$ 10,224

	Three Months Ended September 30, 2021			Nine Months Ended September 30, 2021		
	Water	Emerging Technologies	Total	Water	Emerging Technologies	Total
	(In thousands)					
Revenue	$ 20,767	$ 14	$ 20,781	$ 70,275	$ 53	$ 70,328
Cost of revenue	6,089	—	6,089	22,251	—	22,251
Gross profit	14,678	14	14,692	48,024	53	48,077
Operating expenses						
General and administrative	1,437	1,373	2,810	4,777	3,854	8,631
Sales and marketing	2,250	327	2,577	6,535	735	7,270
Research and development	762	3,654	4,416	1,858	11,484	13,342
Total operating expenses	4,449	5,354	9,803	13,170	16,073	29,243
Operating income (loss)	$ 10,229	$ (5,340)	4,889	$ 34,854	$ (16,020)	18,834
Less: Corporate operating expenses			3,462			10,976
Income from operations			$ 1,427			$ 7,858

Note 10 — Concentrations

Revenue

The following table presents the Water segment customers that account for 10% or more of the Company's Water segment revenues. Although certain customers might account for greater than 10% of revenues at any one point in time, the concentration of revenue between a limited number of customers shifts regularly, depending on timing of shipments. The percentages by customer reflect specific relationships or contracts that would concentrate revenue for the periods presented and do not indicate a trend specific to any one customer.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Customer A	**	20%	**	19%
Customer B	**	**	17%	**
Customer C	**	**	**	16%
Customer D	29%	**	15%	**
Customer E	**	25%	**	12%

** Zero or less than 10%.

The following table presents the Emerging Technologies segment customers that account for 10% or more of the Company's Emerging Technologies segment revenues.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Customer A	**	100%	72%	100%
Customer B	**	**	28%	**

** Zero or less than 10%.

Note 11 — Stockholders' Equity

Share Repurchase Program

On March 9, 2021, the Company's Board of Directors authorized a share repurchase program under which the Company may repurchase its outstanding common stock, at the discretion of management, up to $50.0 million in aggregate cost, which includes both the share value of the acquired common stock and the fees charged in connection with acquiring the common stock (the "March 2021 Authorization"). Under the March 2021 Authorization, purchases of shares of common stock may be made from time to time in the open market, or in privately negotiated transactions, in compliance with applicable state and federal securities laws. The March 2021 Authorization does not obligate the Company to acquire any specific number of shares in any period, and may be expanded, extended, modified or discontinued at any time without prior notice.

The following table presents the share repurchase activities under the March 2021 Authorization as of September 30, 2022.

	Number of Shares Purchased	Average Price Paid per Share[1]	Plan Activity
			(In thousands)
March 2021 Authorization			$ 50,000
Repurchases under March 2021 Authorization	2,692,577	$18.55	(50,000)
Remaining amount under March 2021 Authorization			$ —

(1) Excluding commissions

On July 1, 2022, the Company concluded all share repurchases under the March 2021 Authorization. As of September 30, 2022, the Company has repurchased 8,148,512 shares of its common stock at an aggregate cost of $ 80.5 million under all of its share repurchase programs.

Item 2 — Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview

Energy Recovery, Inc. (the “Company”, “Energy Recovery”, “we”, “our” and “us”) designs and manufactures solutions that make industrial processes more efficient and sustainable. Leveraging our pressure exchanger technology, which generates little to no emissions when operating, our solutions lower costs, save energy, reduce waste and minimize emissions for companies across a variety of industrial processes. As the world coalesces around the urgent need to address climate change and its impacts, we are helping companies reduce their energy consumption in their industrial processes, which in turn, reduces their carbon footprint. We believe that our customers do not have to sacrifice quality and cost savings for sustainability and are committed to developing solutions that drive long-term value – both financial and environmental.

The original product application of our technology, the PX ® Pressure Exchanger® (“PX”) energy recovery device (“ERD”), was a major contributor to the advancement of seawater reverse osmosis desalination (“SWRO”), significantly lowering the energy intensity and cost of water production globally from SWRO. We have since introduced our pressure exchanger technology to the fast growing industrial wastewater (“IWW”) filtration market, such as battery manufacturers, mining operations, and manufacturing plants that discharge wastewater with significant levels of metals and pollutants, as well as the commercial and industrial refrigeration market.

Engineering, and research and development (“R&D”), have been, and remain, an essential part of our history, culture and corporate strategy. Since our formation, we have developed leading technology and engineering expertise through the continual evolution of our pressure exchanger technology, which can enhance environmental sustainability and improve productivity by reducing waste and energy consumption in high-pressure industrial fluid-flow systems. This versatile technology works as a platform to build product applications and is at the heart of many of our products. In addition, we have engineered and developed ancillary devices, such as our hydraulic turbochargers (“Turbochargers”) and circulation “booster” pumps, that complement our ERDs.

Quarterly Highlights

In September 2022, we announced awards totaling $12.6 million to supply our PX ERDs and an array of pumps to support SWRO desalination facilities in North Africa. We expect all orders under this award to be fulfilled by the end of 2022.

In September 2022, we released our third annual Environmental, Social, and Governance (“ESG”) report, which details our efforts to accelerate the environmental sustainability of our customers’ operations and enhance the management of ESG issues in our own operations. The report provides examples and data illustrating our products’ positive environmental impacts across the industries where we operate. We understand the importance of being a responsible corporate citizen and believe our ESG program provides us with a strategic roadmap to become a more sustainable and resilient business. Our ESG report outlines our ESG goals and aligns to leading sustainability frameworks and reporting standards, including the Sustainability Accounting Standards Board as well as select disclosures from the Global Reporting Initiative and the United Nations Sustainable Development Goals. Our complete 2021 ESG report can be found on our website at: https://ir.energyrecovery.com/websites/energyrecover/English/6500/esg-at-energy-recovery.html#. The foregoing link to our 2021 ESG report is an inactive textual reference, and the 2021 ESG report is not incorporated by reference into, and is not a part of, this Form 10-Q.

During the third quarter, we successfully installed and commissioned our PX G1300 ™ fully integrated with the carbon dioxide (“CO_2“) refrigeration rack for Vallarta Supermarkets in California.

In October 2022, we announced the launch of the PX Q400 pressure exchanger, the next evolution of our industry-leading PX pressure exchanger technology. The PX Q400 is the new flagship solution in our PX family of products and we expect it to be the highest-performing and highest-capacity PX available for SWRO and IWW facilities.

Key advantages of the PX Q400 are:

- Highest average efficiency compared to other PX technology products;
- At 400 gallons per minute, it is the highest capacity PX yet, which results in 25% fewer energy recovery devices compared to the PX Q300 (depending on plant size);
- Less than 3% volumetric mixing; and
- Offers the lowest projected life cycle cost of any energy recovery device for SWRO desalination.

Results of Operations

A discussion regarding our financial condition and results of operations for the three and nine months ended September 30, 2022, compared to the three and nine months ended September 30, 2021, is presented below.

Revenue

Variability in revenue from quarter to quarter is typical, therefore year-on-year quarterly and year-to-date comparisons are not necessarily indicative of the trend for the full year due to these variations. In addition, there is no specific seasonality in our revenues to highlight that occurs throughout a calendar year.

Revenues by channel customers are presented in the following tables.

	Three Months Ended September 30,					
	2022		2021			
	$	% of Revenue	$	% of Revenue	Change	
	(In thousands, except percentages)					
Megaproject	$ 17,347	57 %	$ 13,275	64 %	$ 4,072	31 %
Original equipment manufacturer	9,032	30 %	4,844	23 %	4,188	86 %
Aftermarket	4,083	13 %	2,662	13 %	1,421	53 %
Total revenue	$ 30,462	100 %	$ 20,781	100 %	$ 9,681	47 %

	Nine Months Ended September 30,					
	2022		2021			
	$	% of Revenue	$	% of Revenue	Change	
	(In thousands, except percentages)					
Megaproject	$ 51,257	62 %	$ 50,307	71 %	$ 950	2 %
Original equipment manufacturer	21,392	26 %	11,909	17 %	9,483	80 %
Aftermarket	10,651	12 %	8,112	12 %	2,539	31 %
Total revenues	$ 83,300	100 %	$ 70,328	100 %	$ 12,972	18 %

The Megaproject ("MPD") channel has been the main driver of our long-term growth as revenue from this channel benefits from the growing number of projects as well as an increase in the capacity of these projects. The higher revenues for the three months ended September 30, 2022, were due primarily to higher shipments of PXs; while shipments for the nine months ended September 30, 2022 were similar to the prior year. Comparative differences over the prior year's revenue are subject to timing of delivery of PXs, which is dependent on the MPD shipment cycle which is project specific.

The Original Equipment Manufacturer ("OEM") channel, where we sell into a number of industries, including tourism and hospitality, contains projects of shorter duration. For the revenues in the three and nine months ended September 30, 2022, the increases in SWRO OEM revenues were due primarily to increased project sizes in Europe, America, and the Middle East and Africa regions, as well as, we believe, our customers' reactivation of their suspended and delayed projects. In addition, in the three and nine months ended September 30, 2022, industrial wastewater revenues, accounted for 4.2% and 9.4%, respectively, of the total OEM revenues.

The Aftermarket ("AM") channel revenues generally fluctuate from year-to-year depending on support and services rendered to our installed customer base. In the three months ended September 30, 2022, we experienced an increase in service and support, partially offset by a decrease in sales of spare parts and components. In the nine months ended September 30, 2022, we experienced increased sales of product which we believe is a result of our customers consuming their existing spare parts inventory and strategically increasing their stock of critical components in advance of greater expected water needs in the near future. The AM channel had higher year-to-date revenues related to spare parts consumption in the Middle East and Africa, Asia, and America regions.

Gross Profit and Gross Margin

Gross profit represents our revenue less our cost of revenue. Our cost of revenue consists primarily of raw materials, personnel costs (including share-based compensation), manufacturing overhead, warranty costs, depreciation expense and manufactured components.

	Three Months Ended September 30,					
	2022		2021			
	$	Gross Margin	$	Gross Margin	Change in Product Gross Profit	
	(In thousands, except percentages)					
Gross profit and gross margin	$ 21,045	69.1 %	$ 14,692	70.6 %	$ 6,353	43.2 %

	Nine Months Ended September 30,					
	2022		2021			
	$	Gross Margin	$	Gross Margin	Change in Product Gross Profit	
	(In thousands, except percentages)					
Gross profit and gross margin	$ 57,465	69.0 %	$ 48,077	68.4 %	$ 9,388	19.5 %

The increase in gross profit in the three months ended September 30, 2022 was due primarily to increased sales of PXs, pumps and turbochargers in the MPD and OEM channels, partially offset by a decrease in gross margin. Gross margin decreased 150 basis points due primarily to manufacturing costs, overhead expenses and a change in product mix, partially offset by higher average selling prices of our PXs.

The increase in gross profit for the nine months ended September 30, 2022 was due primarily to increased sales of PXs, pumps and turbochargers across all channels and an increase in gross margin. Gross margin increased 60 basis points due primarily to change in average selling price, partially offset by higher manufacturing costs and overhead expenses, and product mix.

Operating Expenses

Total Operating Expenses

	Three Months Ended September 30,				
	2022		2021		
	$	% of Total Revenue	$	% of Total Revenue	Change	
	(In thousands, except percentages)					
General and administrative	$ 7,608	25 %	$ 5,853	28 %	$ 1,755	30 %
Sales and marketing	4,703	15 %	2,996	14 %	1,707	57 %
Research and development	3,828	13 %	4,416	21 %	(588)	(13 %)
Total operating expenses	$ 16,139	53 %	$ 13,265	64 %	$ 2,874	22 %

General and Administrative Expenses. The increase in general and administrative ("G&A") expenses was due primarily to higher period costs incurred in preparation for future growth along with an increase in on-going administrative costs. These higher period costs include an increase in compensation costs, share-based compensation expense, and travel and consultant costs.

Sales and Marketing Expenses. The increase in sales and marketing ("S&M") expenses was due primarily to our marketing efforts in the Water channel which has resulted in higher compensation costs, share-based compensation expense and travel costs.

Research and Development Expenses. The decrease in R&D expenses was due primarily to lower depreciation expense related to the disposal of fixed assets in the second quarter of 2022, and employee severance costs, both related to our decision to cease the VorTeq™ commercialization efforts.

	Nine Months Ended September 30,					
	2022		2021			
	$	% of Revenue	$	% of Revenue	Change	
	(In thousands, except percentages)					
General and administrative	$ 21,155	25 %	$ 18,641	27 %	$ 2,514	13 %
Sales and marketing	11,916	14 %	8,236	12 %	3,680	45 %
Research and development	14,170	17 %	13,342	19 %	828	6 %
Total operating expenses	$ 47,241	57 %	$ 40,219	57 %	$ 7,022	17 %

General and Administrative Expenses. The increase in G&A expenses was due primarily to higher third quarter period costs incurred in preparation for future growth along with an increase in on-going administrative costs. These higher third quarter period costs include an increase in compensation costs, share-based compensation expense, and travel and consultant costs.

Sales and Marketing Expenses. The increase in S&M expenses was due primarily to our marketing efforts in the Water channel which has resulted in higher compensation costs, travel costs, share-based compensation expense, and marketing-related costs, such as trade shows fees, arrangement costs and marketing material costs.

Research and Development Expenses. The increase in R&D expenses was due primarily to higher depreciation expense related to the disposal of fixed assets in the second quarter of 2022 and employee severance costs, both related to our decision to cease the VorTeq commercialization efforts, and an increase in consulting and testing-related costs. This increase was partially offset by lower employee-costs, such as compensation costs and share-based compensation expense.

Segment and Corporate Operating Expenses

Expense activities that are included in our Water and Emerging Technologies segments and corporate operating expenses are presented below. See Note 9, "Segment Reporting," of the Notes to Condensed Consolidated Financial Statements in Part I, Item 1, "Financial Statements (unaudited)," of this Quarterly Report on Form 10-Q (the "Notes") for further discussion regarding our segments.

	Three Months Ended September 30, 2022				Three Months Ended September 30, 2021			
	Water	Emerging Technologies	Corporate	Total	Water	Emerging Technologies	Corporate	Total
	(In thousands)							
Operating expenses								
General and administrative	$ 1,911	$ 878	$ 4,819	$ 7,608	$ 1,437	$ 1,373	$ 3,043	$ 5,853
Sales and marketing	3,242	960	501	4,703	2,250	327	419	2,996
Research and development	1,216	2,612	—	3,828	762	3,654	—	4,416
Total operating expenses	$ 6,369	$ 4,450	$ 5,320	$ 16,139	$ 4,449	$ 5,354	$ 3,462	$ 13,265

Water Segment. The increase in the Water segment operating expenses of $1.9 million was due primarily to higher employee-related costs, such as compensation costs, travel costs and share-based compensation expense, and litigation settlement accrual.

Emerging Technologies Segment. The decrease in the Emerging Technologies segment operating expenses of $0.9 million was due primarily to lower employee compensation, depreciation expense related to the disposal of fixed assets in the second quarter of 2022 and lower consulting and testing-related costs related to our decision to cease the VorTeq commercialization efforts. This decrease was partially offset by higher costs related to our CO_2 development, such as increased employee compensation, and testing and consulting costs.

Corporate Operating Expenses. The increase of corporate operating expenses of $1.9 million was due primarily to higher employee-related costs, such as compensation costs, travel costs and share-based compensation expense, and an increase in administrative costs.

	Nine Months Ended September 30, 2022				Nine Months Ended September 30, 2021			
	Water	Emerging Technologies	Corporate	Total	Water	Emerging Technologies	Corporate	Total
	(In thousands)							
Operating expenses								
General and administrative	$ 4,909	$ 3,140	$ 13,106	$ 21,155	$ 4,777	$ 3,854	$ 10,010	$ 18,641
Sales and marketing	8,197	2,120	1,599	11,916	6,535	735	966	8,236
Research and development	3,159	11,011	—	14,170	1,858	11,484	—	13,342
Total operating expenses	$ 16,265	$ 16,271	$ 14,705	$ 47,241	$ 13,170	$ 16,073	$ 10,976	$ 40,219

Water Segment. The increase in the Water segment operating expenses of $3.1 million was due primarily to an increase in employee-related costs, such as compensation costs, travel costs and share-based compensation expense, testing-related costs, and litigation settlement accrual.

Emerging Technologies Segment. The increase of the Emerging Technologies segment operating expenses of $0.2 million was due primarily to a higher depreciation expense related to the disposal of fixed assets in the second quarter of 2022, and employee severance costs, partially offset by lower employee compensation and employee-related costs related to our decision to cease the VorTeq commercialization efforts. This decrease was partially offset by higher costs related to our CO_2 development, such as increased employee compensation and employee-related costs, and consulting and testing costs.

Corporate Operating Expenses. The increase of the corporate operating expenses of $3.7 million was due primarily to an increase in employee-related costs, such as compensation costs, travel costs and share-based compensation expense, higher administrative costs and an increase in equipment depreciation expense.

Other Income, Net

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Interest income	$ 259	$ 36	$ 486	$ 179
Other non-operating expense, net	(5)	1	(9)	(21)
Total other income, net	$ 254	$ 37	$ 477	$ 158

The increase in Total other income, net in the three and nine months ended September 30, 2022, compared to the prior year, was due primarily to higher interest income related to increased investments in investment-grade marketable debt instruments as well as higher interest rates achieved on these investments.

Income Taxes

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except percentages)			
Provision for (benefit from) income taxes	$ 371	$ 393	$ 377	$ (990)
Discrete items	331	9	1,134	2,364
Provision for income taxes, excluding discrete items	$ 702	$ 402	$ 1,511	$ 1,374
Effective tax rate	7.2 %	26.8 %	3.5 %	(12.4 %)
Effective tax rate, excluding discrete items	13.6 %	27.5 %	14.1 %	17.2 %

The tax provision for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, we update our estimate of the annual effective tax rate, and if the estimated annual effective tax rate changes, we make a cumulative adjustment in such period. The quarterly tax provision and estimate of our annual effective tax rate are subject to variation due to several factors, including variability in accurately predicting our pre-tax income or loss and the mix of jurisdictions to which they relate, intercompany transactions, the applicability of special tax regimes, and changes in how we do business.

For the three and nine months ended September 30, 2022, the recognized provision for income tax included a benefit primarily related to the United States of America (the "U.S.") federal foreign-derived intangible income ("FDII") deduction as we expect to utilize all of our net operating loss ("NOL") carryforwards in fiscal year 2022 due to our projected income exceeding the amount of NOL carryforwards, and federal R&D tax credits, along with a discrete tax benefit due primarily to stock-based compensation. For the three and nine months ended September 30, 2021, the recognized (benefit from)/provision for income tax included the U.S. federal R&D tax credit along with a discrete tax benefit due primarily to stock-based compensation.

The annual effective tax rate excluding discrete items was marginally lower than the prior year largely related to the projected FDII benefit, partially offset by reduced federal R&D tax credit benefit for fiscal year 2022.

Liquidity and Capital Resources

Overview

From time-to-time, management and our Board of Directors review our liquidity and future cash needs and may make a decision on (1) the return of capital to our shareholders through a share repurchase program or dividend payout; or (2) seek additional debt or equity financing. As of September 30, 2022, our principal sources of liquidity consisted of (i) unrestricted cash and cash equivalents of $52.1 million; (ii) investment-grade short-term and long-term marketable debt instruments of $34.4 million that are primarily invested in corporate notes and bonds; and (iii) accounts receivable, net of allowances, of $18.4 million. As of September 30, 2022, there were unrestricted cash and cash equivalents of $1.1 million held outside the U.S. We invest cash not needed for current operations predominantly in investment-grade, marketable debt instruments with the intent to make such funds available for operating purposes as needed. Although these securities are available for sale, we generally hold these securities to maturity, and therefore, do not currently see a need to trade these securities in order to support our liquidity needs in the foreseeable future. We believe the risk of this portfolio to us is in the ability of the underlying companies to cover their obligations at maturity, not in our ability to trade these securities at a profit. Based on current projections, we believe existing cash balances and future cash inflows from this portfolio will meet our liquidity needs for at least the next 12 months.

Credit Arrangements

We entered into a credit agreement with JPMorgan Chase Bank, N.A. (“JPMC”) on December 22, 2021 (“Credit Agreement”) to provide us with additional capital to fuel our growth and expansion into emerging markets utilizing our pressure exchanger technology. The Credit Agreement, which will expire on December 21, 2026, provides a committed revolving credit line of $50.0 million and includes both a revolving loan and a letters of credit (“LCs”) component. Upon entering into the Credit Agreement, we terminated the existing Loan and Pledge Agreement dated January 27, 2017 with Citibank, N.A. (“Loan and Pledge Agreement”). As of September 30, 2022, we were in compliance with all covenants under the Credit Agreement.

On July 15, 2022, the Company and JPMC agreed to a modification of the Credit Agreement to change the indicated reference rate from London Interbank Offered Rate (“LIBOR”) to Secured Overnight Financing Rate (“SOFR”). Changes in the Credit Agreement reference rate to SOFR did not materially change the provisions defined in the original Credit Agreement nor did this change affect the Company’s financial statements.

Under the Credit Agreement, as of September 30, 2022, there were no revolving loans outstanding. In addition, as of September 30, 2022, under the LCs component, we utilized $16.7 million of the maximum allowable credit line of $25.0 million, which included newly issued LCs, and previously issued and unexpired stand-by letters of credits (“SBLCs”) and certain non-expired commitments under the Company’s previous Loan and Pledge Agreement, which are guaranteed under the Credit Agreement.

As of September 30, 2022, all of the issued and unexpired SBLCs issued under the Loan and Pledge Agreement were covered as a LC issuance under the Credit Agreement, and together with new LC issuances under the Credit Agreement, there were $13.5 million of outstanding LCs with a weighted average remaining life of twelve months. See Note 6, “Lines of Credit,” of the Notes for further discussion related to the Credit Agreement.

Share Repurchase Program

On March 9, 2021, our Board of Directors authorized a share repurchase program (the “March 2021 Authorization”) which we may repurchase, under management’s discretion, up to $50.0 million in aggregate cost, which includes both the share value of the acquired common stock and the fees charged in connection with acquiring the common stock. On July 1, 2022, we concluded all share repurchases under the March 2021 Authorization. Under the March 2021 Authorization, we repurchased 2,692,577 shares of our common stock at an aggregate cost of approximately $50.0 million.

Cash Flows

	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021	Change
	(In thousands)		
Net cash provided by operating activities	$ 6,268	$ 7,294	$ (1,026)
Net cash used in investing activities	(4,122)	(27,547)	23,425
Net cash used in financing activities	(24,410)	(8,217)	(16,193)
Effect of exchange rate differences on cash, cash equivalents and restricted cash	38	(40)	78
Net change in cash, cash equivalents and restricted cash	$ (22,226)	$ (28,510)	$ 6,284

Cash Flows from Operating Activities

Net cash provided by operating activities is subject to the project driven, non-cyclical nature of our business. Operating cash flow can fluctuate significantly from year to year, due to the timing of receipts of large project orders. Operating cash flow may be negative in one year and significantly positive in the next, consequently individual quarterly results and comparisons may not necessarily indicate a significant trend, either positive or negative.

The lower net cash provided by operating activities in the current year, compared to the net cash provided by operating activities in the prior year, was due primarily to increased planned inventory purchases and finished goods production, timing of invoices and cash collected on accounts receivables, and the timing of payments and recognition of expenses on accounts payable and accrued liabilities. The increase in inventory was according to our production forecast and intended to ensure there is sufficient raw material to mitigate supply chain issues, such as potential shipment delays related to port congestion, and/or supplier material and labor shortages, and an increase in finished goods in preparation for our shipments in the remaining months of 2022 and the first half of 2023.

Cash Flows from Investing Activities

Net cash used in investing activities primarily relates to maturities and purchases of investment-grade marketable debt instruments, such as corporate notes and bonds, and capital expenditures supporting our growth. We believe our investments in marketable debt instruments are structured to preserve principal and liquidity while at the same time maximizing yields without significantly increasing risk. The lower cash used in investing activities in the current year, as compared to cash used in investing activities in the prior year, was due primarily to an increase in investment in marketable debt instruments of $22.7 million in 2021. In mid-2021, we changed our investment strategy from holding highly liquid money market funds to investing in marketable debt instruments, which provided higher interest yields.

Cash Flows from Financing Activities

Net cash used in financing activities primarily relates to the share repurchases under our board authorized share repurchase program and offset by issuance of equity from our equity incentive plans. The higher net cash used in financing activities for the current year, as compared to the net cash used in financing activities for the prior year, was due primarily to an increase of share repurchases of $9.5 million under the March 2021 Authorization and lower cash of $6.7 million from issuance of equity related to our employee equity incentive plans.

Liquidity and Capital Resource Requirements

We believe that our existing resources and cash generated from our operations will be sufficient to meet our anticipated capital requirements for at least the next 12 months. However, we may need to raise additional capital or incur additional indebtedness to continue to fund our operations or to support acquisitions in the future and/or to fund investments in our latest technology arising from rapid market adoption. These needs could require us to seek additional equity or debt financing. Our future capital requirements will depend on many factors including the continuing market acceptance of our products, our rate of revenue growth, the timing of new product introductions, the expansion of our R&D, manufacturing and S&M activities, the timing and extent of our expansion into new geographic territories and the amount and timing of cash used for stock repurchases. In addition, we may enter into potential material investments in, or acquisitions of, complementary businesses, services or technologies in the future which could also require us to seek additional equity or debt financing. Should we need additional liquidity or capital funds, these funds may not be available to us on favorable terms, or at all.

Off-balance Sheet Arrangements. During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships such as entities often referred to as structured finance or special purpose entities which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recent Accounting Pronouncements

Refer to Note 1, “Description of Business and Significant Accounting Policies – Significant Accounting Policies,” of the Notes.

Item 3 — Quantitative and Qualitative Disclosures About Market Risk

Our exposure to market risk may be found primarily in two areas, foreign currency and interest rates.

Foreign Currency Risk

Our foreign currency exposures are due to fluctuations in exchange rates for U.S. dollar ("USD") versus the British pound, Saudi riyal, Emirati dirham, European euro, Chinese yuan, Indian rupee and Canadian dollar. Changes in currency exchange rates could adversely affect our consolidated operating results or financial position.

Our revenue contracts have been denominated in USD. At times, our international customers may have difficulty in obtaining USD to pay our receivables, thus increasing collection risk and potential doubtful account expense. As we expand our international sales, a portion of our revenue could be denominated in foreign currencies. As a result, our cash and operating results could be increasingly affected by changes in exchange rates.

In addition, we pay many vendors in foreign currency and, therefore, are subject to changes in foreign currency exchange rates. Our international sales and service operations incur expense that is denominated in foreign currencies. This expense could be materially affected by currency fluctuations. Our international sales and services operations also maintain cash balances denominated in foreign currencies. To decrease the inherent risk associated with translation of foreign cash balances into our reporting currency, we do not maintain excess cash balances in foreign currencies.

We have not hedged our exposure to changes in foreign currency exchange rates because expenses in foreign currencies have been insignificant to date and exchange rate fluctuations have had little impact on our operating results and cash flows. In addition, we do not have any exposure to the Russian ruble.

Interest Rate and Credit Risks

The primary objective of our investment activities is to preserve principal and liquidity while at the same time maximizing yields without significantly increasing risk. We invest primarily in investment-grade short-term and long-term marketable debt instruments that are subject to counter-party credit risk. To minimize this risk, we invest pursuant to an investment policy approved by our board of directors. The policy mandates high credit rating requirements and restricts our exposure to any single corporate issuer by imposing concentration limits.

As of September 30, 2022, our investment portfolio of $34.4 million, in investment-grade marketable debt instruments, such as corporate notes and bonds, are classified as either short-term and/or long-term investments on our Condensed Consolidated Balance Sheets. These investments are subject to interest rate fluctuations and will decrease in market value if interest rates increase. To minimize the exposure due to adverse shifts in interest rates, we maintain investments with a weighted average maturity of less than seven months. As of September 30, 2022, a hypothetical 1% increase in interest rates would have resulted in a less than $0.2 million decrease in the fair value of our investments in marketable debt instruments.

Item 4 — Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our President and Chief Executive Officer and our Chief Financial Officer, have evaluated the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934 as of the end of the period covered by this report.

Based on that evaluation, our President and Chief Executive Officer and our Chief Financial Officer have concluded that, as of September 30, 2022, our disclosure controls and procedures are effective.

Changes in Internal Controls

There were no changes in our internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1 — Legal Proceedings

Note 7, “Commitments and Contingencies – Litigation,” of the Notes to Consolidated Financial Statements in Part II, Item 8, “Financial Statements and Supplementary Data,” in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the U.S. Securities and Exchange Commission on February 24, 2022 (“2021 Annual Report”), provides information on certain litigation in which we are involved.

For an update on the litigation matters previously disclosed in the 2021 Annual Report, see the discussion in Note 7, “Commitments and Contingencies – Litigation,” of the Notes, which discussion is incorporated by reference into this Item 1.

Item 1A — Risk Factors

There have been no material changes in our risk factors from those disclosed in Part I, Item 1A, “Risk Factors,” in the 2021 Annual Report.

Item 2 — Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On March 9, 2021, our Board of Directors authorized a share repurchase program (the “March 2021 Authorization”). The following table summarizes the stock repurchase activity under the March 2021 Authorization during the three months ended September 30, 2022. On July 1, 2022, we concluded all share repurchases under the March 2021 Authorization.

Period	Total Number of Shares Purchased	Average Price Paid per Share[1]	Total Number of Shares Purchased as Part of Publically Announced Program	Maximum Number of Shares or Approximate Dollar Value[2] That May Yet to be Purchased Under the Program
				(In thousands)
July 1 – July 31, 2022	1,653	$18.96	2,692,577	$—
August 1 – August 31, 2022	—	—	2,692,577	—
September 1 – September 30, 2022	—	—	2,692,577	—

(1) Excluding commissions
(2) Including commissions

Item 3 — Defaults Upon Senior Securities

None.

Item 4 — Mine Safety Disclosures

Not applicable.

Item 5 — Other Information

None.

Item 6 — Exhibits

A list of exhibits filed or furnished with this report or incorporated herein by reference is found in the Exhibit Index below.

Exhibit Number	Exhibit Description
31.1*	Certification of Principal Executive Officer, pursuant to Exchange Act Rule 13a-14(a) or 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer, pursuant to Exchange Act Rule 13a-14(a) or 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Principal Executive Officer and Principal Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Inline XBRL Document Set for the consolidated financial statements and accompanying notes in Part I, "Financial Information" of this Quarterly Report on Form 10-Q.
104	Inline XBRL for the cover page of this Quarterly Report on Form 10-Q, included in the Exhibit 101 Inline XBRL Document Set.

* Filed herewith.

** The certifications furnished in Exhibits 32.1 are deemed to accompany this Form 10-Q and are not deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall they be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

			ENERGY RECOVERY, INC.
Date:	November 2, 2022	By:	/s/ ROBERT YU LANG MAO
			Robert Yu Lang Mao
			President and Chief Executive Officer
			(Principal Executive Officer)
Date:	November 2, 2022	By:	/s/ JOSHUA BALLARD
			Joshua Ballard
			Chief Financial Officer
			(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR 15d-14(a), AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert Yu Lang Mao, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Energy Recovery, Inc. for the period ended September 30, 2022;
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. I am 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 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. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the 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.

Date: November 2, 2022

/s/ ROBERT YU LANG MAO

Name:	Robert Yu Lang Mao
Title:	President and Chief Executive Officer
	(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR 15d-14(a), AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joshua Ballard, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Energy Recovery, Inc. for the period ended September 30, 2022;
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. I am 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 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. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the 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.

Date: November 2, 2022

/s/ JOSHUA BALLARD

Name:	Joshua Ballard
Title:	Chief Financial Officer
	(Principal Financial and Accounting Officer)

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code, Robert Yu Lang Mao, President and Chief Executive Officer of Energy Recovery, Inc., and Joshua Ballard, Chief Financial Officer of Energy Recovery, Inc., each hereby certify that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended September 30, 2022, to which this Certification is attached as Exhibit 32.1 (the “Quarterly Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and
2. The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Quarterly Report and results of operations of the Company for the period covered by the Quarterly Report.

IN WITNESS WHEREOF, the undersigned has set his hand hereto:

Date: November 2, 2022	/s/ ROBERT YU LANG MAO Robert Yu Lang Mao *President and Chief Executive Officer*
Date: November 2, 2022	/s/ JOSHUA BALLARD Joshua Ballard *Chief Financial Officer*

* This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Energy Recovery, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.