

December, 8, 2017

Energy Recovery, Inc.: ERII

Daniel McAvoy

Sector: Industrials Goods

Industry: Industrial Machinery

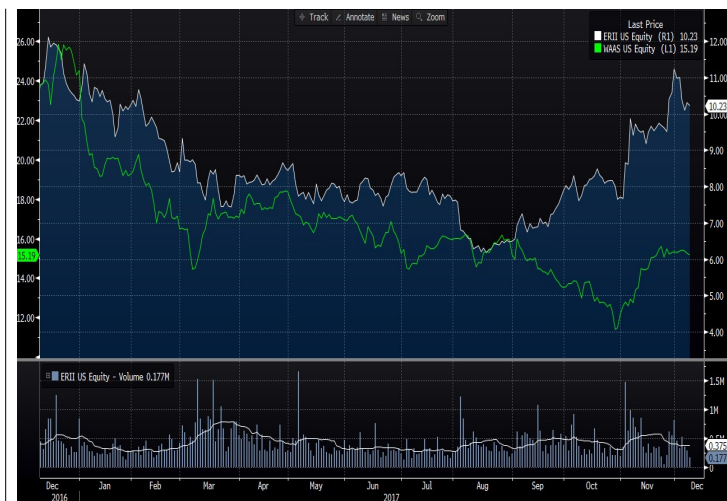
Current Price: \$10.24

Target Price: \$11.99

Energy Recovery, Inc. engages in the provision of energy solutions to industrial fluid flow markets worldwide. It operates in two different segments, which are Water and Oil & Gas. The Water segment represents the solutions sold for use in reverse osmosis desalination. The Oil & Gas segments works with the solutions sold and licensed for use in hydraulic fracturing, gas processing, and chemical processing. ERII was founded in April 1992, and is headquartered in San Leandro, CA.

BUY

Current Price: \$10.24
 Target Price: \$11.99
 Market Cap: \$552.03M
 ROIC: 5.23%
 WACC: 11.3%
 EBITDA Margin: 18.01%



Thesis:

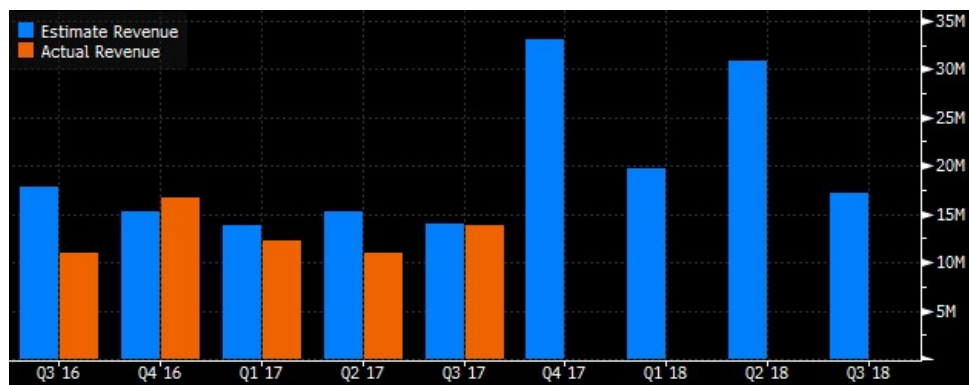
Energy Recovery, Inc. is a company that works in two different segments. Water and Oil & Gas is what ERII focuses on. For the water segment, they focus on desalination, which makes seawater potable. This is what they believe they can benefit from. ERII supports most of Spain's and other countries desalination plants. Going forward ERII plans to enter into the material science and manufacturing of ceramics, which is a key component of its PX devices. This will aim to boost device production, cut costs, and improve product quality. This company is part of an industry that will eventually save us when fresh water becomes a luxury product and this is why I can see a good future for ERII.

Catalysts:

- **Short Term(within the year):** Come out with a new product since the 24 month cycle is coming up.
- **Mid Term(1-2 years):** Keep expanding internationally with their water segment.
- **Long Term(3+):** Look to sign more contracts or licensing agreements with big time oil companies like with Schlumberger.

Earnings Performance:

Energy Recovery, Inc. has been steadily growing from year to year. They actually saw their most growth in their last quarterly report showing that they have grown from total revenue of \$54.7 million in September of 2016 to \$83.15 million this December of 2017. This was a 51.98% increase, which all the stakeholders love to see. They saw a massive EBITDA growth from September of 2017 to December of 2017, going from 6.1% to 31.10%. This was also similar when looking at their net income margins. They saw a spike during the same time period. From 6.6% net profit margins in September 30, 2017 to 23.09% in December of 2017. When talking about their revenue in the latest quarterly report they break it into two different segments. The Water Segment consists of revenue associated with products sold for use in reverse osmosis water desalination. The Oil & Gas Segment consists of product revenue associated with products sold for use in gas processing, chemical processing, and hydraulic fracturing and license and development revenue associated with hydraulic fracturing. ERII has been starting to see growth, but one thing they are still lacking is that they have not been beating their estimates except from Q4 of 2016.



Sectors:

Energy Recovery, Inc. breaks down its company into two different segments, which are Water and Oil & Gas, and then they work with chemicals with the Oil & Gas segment. With both segments, they work on a 24-month development cycle, commencing every 12 months. In their water segment, their main product is the PX Pressure exchanger. There is about 18,000 PX devices installed worldwide. The PX Pressure exchanger has a 25-year life with no maintenance needed. This product dominates global market share with 60%+ gross margins. This product not only has a short-term market opportunity, but also a long-term

opportunity. The global water demand/ supply gap is increasing every year. Being a part of the Middle East is a huge opportunity for ERII, since these are developing countries do not get clean water in every area. For their Oil & Gas segment, they have high thought for their VorTeq Missile. They can actually even use their pressure exchanger in this product too, but the VorTeq reduces the need for maintenance. It also decreases pump redundancy, which results in a lower CAPEX. ERII recently had a licensing agreement with Schlumberger Limited, which commercializes the VorTeq technology with one of the industry's most respected oil field service companies. A highlight with this deal was that Schlumberger paid an upfront \$75M exclusivity fee, which is going to be a 15-year revenue recognition. Another highlight with this deal is that upon commercialization, ERII will get a royalty rate of \$1.5M per VorTeq per year.

VorTeq Missile



Ownership:

Energy Recovery, Inc. ownership is spread out evenly throughout Investment Advisor, Individual, Hedge Fund Manager, and Other. Since July of 2017, they have seen the most change in the Investment Advisor and Hedge Fund manager. Investment Advisor had a decrease from 39.41% to 31.04%. On the other side Hedge Fund Manager increased 10.2%. Going from 9.55% to 19.75%. This is good to know because if hedge fund managers are increasing their shares shows that their something that they see. They would not increase their holdings unless they saw a possible profit. Individual and Other have not changed much over time besides decreasing by .59% for Other and .9% for Individual.

Ownership Type	07/02/17	Curr ↓	Change
11) Investment Advisor	39.41	31.04	-8.37
12) Individual	30.50	29.60	-0.90
13) Hedge Fund Manager	9.55	19.75	+10.20
14) Other	18.97	18.38	-0.59
15) Pension Fund	0.93	0.55	-0.38
16) Insurance Company	0.31	0.29	-0.02
17) Government	0.17	0.16	-0.01
18) Brokerage	0.09	0.16	+0.07
19) Bank	0.07	0.06	-0.01
20) Foundation	0.01	0.01	0.00

Debt:

Energy Recovery, Inc. actually does not have much debt. Their only debt is \$11 thousand, which is a long-term debt, and they will not mention any more on that topic. Then another long-term debt of \$19 thousand. Like the prior long-term debt they do not mention what exactly the long-term debt is. Stakeholders of ERII are pleased to know that this company only has \$30 thousand in debt. This can easily be paid off and I could see it being paid off soon, since at the end of every fiscal year they claim they have no debt at all.

Competitors:

When comparing ERII to its competitors it has three companies that beat them in market share, but around the same numbers when comparing EBITDA, profit margins, gross margins, and operating margins. ERII is basically the median with the market cap median being the same as ERII. For EBITDA they are at 17.52% with the median being 17%. ERII's profit margin is 12.33% and the median is 9.44%. ERII has the highest gross margin rate when comparing to all of its competitors at 69.25%. Than for the operating margin they have the same number as the median being at 11.13%. They do have big time competitors, but have established themselves in their industry with great products and can see their market cap increasing in the near future.

Name (BICS Best Fit)	Ticker	Mkt Cap	EBITDA to Net Sales:Q	PM LF	GM:Q	OPM LF
Median		548.81M	17.00%	9.44%	47.97%	11.13%
100) ENERGY RECOVERY INC	ERII US	548.81M	17.52%	12.33%	69.25%	11.13%
101) AQUAVENTURE HOLDINGS...	WAAS US	401.82M	16.46%	-25.31%	48.58%	-10.75%
102) UNIVERSAL DETECTION T...	UNDT US	204.58M	--	--	--	--
103) HUDSON TECHNOLOGIES I...	HDSN US	235.84M	7.91%	8.52%	20.52%	5.97%
104) DONALDSON CO INC	DCI US	6.34B	17.00%	9.44%	34.79%	14.07%
105) CANTEL MEDICAL CORP	CMD US	4.16B	18.67%	10.78%	47.97%	14.87%
106) EVOQUA WATER TECHNOL...	AQUA US	2.63B	--	--	--	--

Water Scarcity:

Water for people in the United States is something a person could find right around the corner, like at a drinking fountain or a vending machine that has water bottles. This is not the same case for everyone in the world though. On the website World Wild Life they talk about and predict what will be the future with water. The author writes, “However, freshwater—the stuff we drink, bathe in, irrigate our farm fields with—is incredibly rare. Only 3% of the world’s water is fresh water, and two-thirds of that is tucked away in frozen glaciers or otherwise unavailable for our use. As a result, some 1.1 billion people worldwide lack access to water, and a total of 2.7 billion find water scarce for at least one month of the year.” He later states his prediction by using the consumption rate of the world, “At the current consumption rate, this situation will only get worse. By 2025, two-thirds of the world’s population may face water shortages. And ecosystems around the world will suffer even more.” This just goes to show that water is slowly becoming scarce and if two-thirds of the world will face water shortages, then this would make water a luxury product at some point in some parts of the world.

Source: <https://www.worldwildlife.org/threats/water-scarcity>

Conclusion:

This company is in an industry that is going to take off in the future when talking about their water segment of their business. Water does not make up much of their revenue with Oil & Gas leading the way, but with the demand for clean and healthy water raising it can only mean good things for ERII. They need to continue to innovate in this part of their business so they can stay on top for when fresh water starts becoming scarce. ERII has great products that are creating working in the Water field and Oil & Gas field easier and more safe. This company has no debt and does not look likely to take on an extreme amount of debt unless they decide to expand more. I believe this is a good long term buy that will give good results in the future to come.

Energy Recovery, Inc. (ERII)

CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by: Daniel McAvoy

Current Price:

\$10.24

Intrinsic Value:

\$10.09

Target 1 year Return: 17.1%

12/10/2017

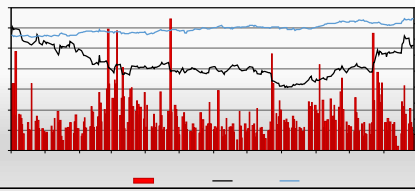
Dividend Yield:

0.0%

Target Price:

\$11.99

Probability of Price Increase: 93%



Description
Energy Recovery, Inc. provides energy solutions to industrial fluid flow markets under the ERI, PX, Pressure Exchanger, PX Pressure Exchanger, AT, AquaBold, VorTaq, IsoBoost, and IsoGen names worldwide.

General Information

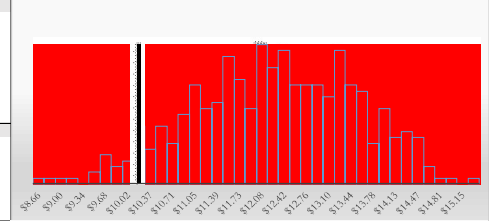
Sector	Industrials
Industry	Machinery
Last Guidance	November 3, 2015
Next earnings date	March 6, 2018
Estimated Country	Risk Premium 6.81%
Effective Tax rate	23%
Effective Operating Tax rate	23%

Market Data

Market Capitalization	\$548.81
Daily volume (mil)	0.21
Shares outstanding (mil)	53.60
Diluted shares outstanding (mil)	57.96
% shares held by institutions	116%
% shares held by investment Managers	26%
% shares held by hedge funds	11%
% shares held by insiders	5.39%
Short interest	14.33%
Days to cover short interest	16.97
52 week high	\$12.73
52 week low	\$6.13
Volatility	75.15%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
9/30/2016	-5.58%	-98.98%
12/31/2016	30.78%	127.79%
3/31/2017	1.59%	-78.22%
6/30/2017	-18.78%	-76.87%
9/30/2017	4.30%	120.36%
Mean	2.48%	-1.18%
Standard error	8.1%	51.3%



Management

Position	Total compensations growth	Total return to shareholders
CEO, President & Director	76.08% per annum over 3y	22.59% per annum over 3y
Chief Financial Officer	N/M	0% per annum over 0y
Vice President of Operations	10.9% per annum over 3y	22.59% per annum over 3y
Vice President of Global Des	N/M	N/M
Vice President of Strategy & Chief Accounting Officer & C	N/M	N/M

Profitability

	ERII (LTM)	ERII (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	-12.2%	-5.97%	4.54%
Operating Margin	16%	-13.58%	5.08%
Revenue/Capital (GAAP)	-0.79	0.44	0.89
ROE (GAAP)	8.1%		7.3%
Net margin	10.8%	#VALUE!	5.1%
Revenue/Book Value (GAAP)	0.75		1.43

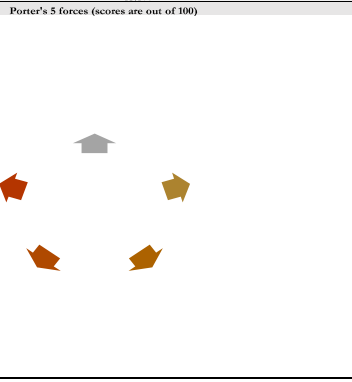


Invested Funds

	ERII (LTM)	ERII (5 years historical average)	Peers' Median (LTM)
Cash/Capital	106.4%	35.9%	15.7%
NWC/Capital	-39.1%	63.4%	30.8%
Operating Assets/Capital	19.4%	-11.3%	39.7%
Goodwill/Capital	15.3%	11.9%	15.8%

Capital Structure

	ERII (LTM)	ERII (5 years historical average)	Peers' Median (LTM)
Total Debt/Market Capitalization	0.06	0.05	0.25
Cost of Existing Debt	8.5%	8.3%	4.1%
CGIS Rating (F-score, Z-score, and default Probability)	A	BB	BBB
WACC	15.1%	16.7%	11.1%



Revenue Growth Forecast

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	11%	17.9%	0.56
9/30/2018	26%	37.9%	0.65
9/30/2019	4%	30.2%	0.51
9/30/2020	13%	31.1%	0.47
9/30/2021	4%	30.8%	0.41
9/30/2022	3%	30.0%	0.37
9/30/2023	8%	29.8%	0.35
9/30/2024	6%	31.9%	0.33
9/30/2025	7%	32.1%	0.31
9/30/2026	8%	32.6%	0.30
9/30/2027	8%	33.0%	0.29
Continue Period	9%	33.8%	0.29

Return on Capital Forecast

Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	10.3%	15.1%	\$9.88
9/30/2018	24.6%	11.0%	\$11.99
9/30/2019	15.3%	10.8%	\$13.31
9/30/2020	14.7%	10.8%	\$14.73
9/30/2021	12.7%	10.9%	\$16.25
9/30/2022	11.1%	10.9%	\$17.88
9/30/2023	10.3%	10.7%	\$19.60
9/30/2024	10.4%	11.0%	\$21.50
9/30/2025	10.0%	11.0%	\$23.58
9/30/2026	9.8%	11.0%	\$25.85
9/30/2027	9.7%	11.1%	\$28.35
Continue Period	9.6%	11.0%	