

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

---

**FORM 8-K**

---

**CURRENT REPORT**  
**Pursuant to Section 13 or 15(d)**  
**of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): November 27, 2017**



**ENERGY RECOVERY, INC.**

(Exact Name of Registrant as Specified in its Charter)

**Delaware**

(State or Other Jurisdiction of Incorporation)

**000-26734**

(Commission File Number)

**77-0191793**

(I.R.S. Employer Identification No.)

**1717 Doolittle Drive, San Leandro, California 94577**

(Address if Principal Executive Offices) (Zip Code)

**510-483-7370**

(Registrant's telephone number, including area code)

**Not applicable**

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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.

---

---

**Item 7.01 Regulation FD Disclosure.**

The Company is furnishing with this report an investor presentation that will be used by the Company during meetings with investors and analysts. The presentation is attached hereto as Exhibit 99.1, which is incorporated herein by reference and will also be posted on our website at <http://www.energyrecovery.com>.

The Company is not undertaking to update this presentation. This report is not intended as a statement concerning the materiality of any information contained in the presentation.

The information furnished in this Item 7.01 shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<u>Exhibit Number</u>	<u>Description</u>
99.1	<a href="#">Management Presentation</a>

---

**SIGNATURE**

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 hereunto duly authorized.

Date: November 27, 2017

**Energy Recovery, Inc.**

By: /s/ William Yeung

William Yeung

General Counsel

# ERI INVESTOR PRESENTATION

(NASDAQ: ERII)

2017



## FORWARD LOOKING STATEMENT

This presentation contains 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 that 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,” “believes,” “estimates,” 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. You should not place undue reliance on these forward-looking statements, which reflect management’s opinions only as of the date of this presentation. All forward-looking statements included in this presentation are subject to certain risks and uncertainties, which could cause actual results to differ materially from those projected in the forward-looking statements, as disclosed from time to time in our reports on Forms 10-K, 10-Q, and 8-K as well as in our Annual Reports to Stockholders and, if necessary, updated in our quarterly reports on Form 10 Q or in other filings. We assume no obligation to update any such forward-looking statements. It is important to note that our actual results could differ materially from the results set forth or implied by our forward-looking statements.

# ENERGY RECOVERY SNAPSHOT

## Who We Are

An energy solutions provider and technology leader in applying fluid dynamics and advanced materials science

**Pressure Energy is our Arbitrage**

## What We Do

- Create markets to preserve or eliminate pumps that are subject to and destroyed by hostile process fluids
- Convert wasted pressure energy into a reusable asset

## Core End-Markets

OIL & GAS



WATER



CHEMICALS



## VORTEQ COMMERCIALIZATION UPDATE

- VorTeq private testing deemed highly successful
  - Tested all 12 PXs individually up to 8.5 barrels per minute each at 9000 psi clean (no proppant)
  - Achieved long duration runs in excess of 60 bpm at 9000 psi clean
  - Pumped a total of 100,000 pounds of proppant throughout testing at up to 64 bpm
  - Culminated in a 33 minute continuous run at up to 2.4 pounds per gallon of sand and rates up to 64 bpm, equating to 87,000 pounds of proppant delivery to simulated wellbore without VorTeq system failure
  - Choke and dissipation system erosion precluded achievement of full pressure and run was predominantly in a range of 6800 psi to 7200 psi;
    - ✓ Choke and dissipation system is to simulate well conditions as part of test apparatus, not VorTeq system; enhanced design will be used at license partner facility test
- Continue to expect milestone success in 2017

## VORTEQ – A MATTER OF ENGINEERING NOT PHYSICS

- System excitation (vibration / shaking) at elevated flow rates was primary failure mode – resulting in:
  - Axial bearing failure – increase in friction, *cartridge rotation impeded*
  - PX cartridge liftoff – PX not seated flush / correctly within housing, increase in friction, *cartridge rotation impeded*
  - Radial bearing failure – sand enters radial channel, increase in friction, *cartridge rotation impeded*
  - Carbide fracture – cracks in carbide, increase in friction, *cartridge rotation impeded*
- Design enhancements to mitigate failure modes
  - New Missile Design – Caterpillar Kemper designed manifold: System excitation addressed via modal & harmonic analysis on entire manifold
  - New Cartridge Design: Bearing failure addressed through hybrid bearing with optimized hydrostatic and secondary hydrodynamic features
  - New Housing: Cartridge liftoff addressed mechanically and hydraulically (bolted-down and force-balanced)
  - New Carbide Grade: addresses carbide fracture through use of grade with greater ductility
- Computational and Experiential Design Process
  - Over 17,500 man-hours consisting of 5 PhDs and multiple masters and bachelor degreed engineers
  - Engineering Disciplines employed – fluid dynamics, fluid-structural interaction, structural dynamics, rotor dynamics, fracture mechanics, tribology



# HISTORY OF ENERGY RECOVERY

## 1992 - 2014



Developed Pressure Exchanger Technology



Invested in R&D



Established Market Leadership in Desalination



Increased shipments of Energy Recovery Devices Worldwide

## 2015



New Corporate Strategy and Management Team



Signed 15-year license with Schlumberger



Installed first Energy Recovery device in Saudi Aramco production portfolio



Revenues up 47% in 2015

## 2016



Commenced collaborative VorTeq testing with Schlumberger



Secured largest purchase order in company history



Record company gross margins



2014-2016 revenue CAGR of 34%

# INVESTMENT HIGHLIGHTS



## Growth

- Commercialize VorTeq technology
- MTeq product introduction and commercialization
- Alderley agreement to further penetrate Saudi Aramco & greater GCC
- Expand water desalination segment's total addressable market



## Perpetual Innovation

- Pressure exchanger technology, adaptable to other industries
- Target-rich product development road map
- World-class engineering talent – critical mass of PhD assets



## Validation of New Corporate Strategy & Management Team

- Signed 15 year exclusive licensing agreement with Schlumberger
- Signed 10 year exclusive licensing agreement with Alderley in the GCC for IsoGen & IsoBoost
- Corporate speed and agility – new product introductions on 12 month cycle

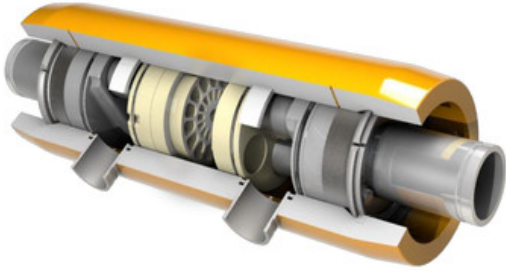


## Financial Strength

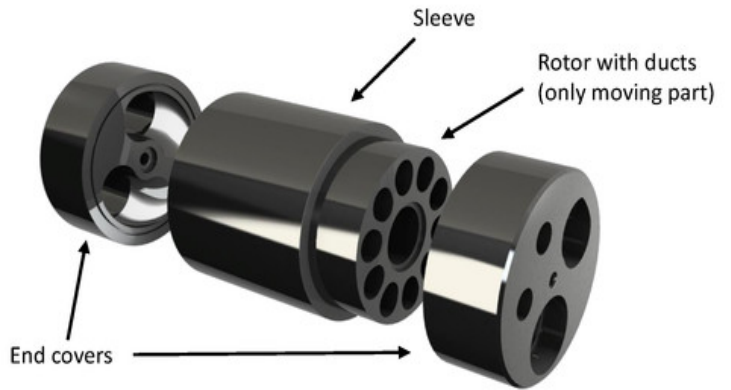
- Industry leading balance sheet (~\$100MM in cash, no debt)

# CORE TECHNOLOGY – THE PRESSURE EXCHANGER

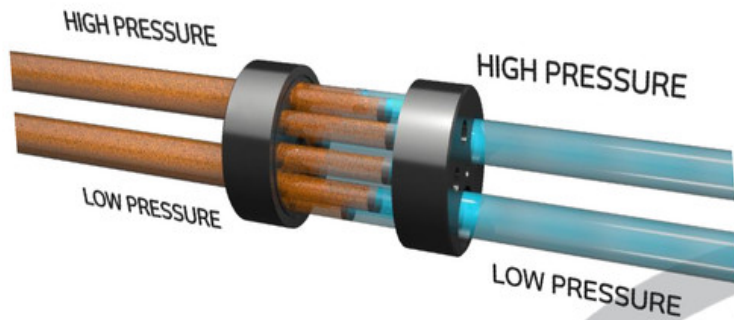
## Desalination - Ceramic PX



## Energy Applications - Tungsten Carbide PX



## Pressure Exchange Motion Snapshot



# PRODUCT PORTFOLIO

## WATER

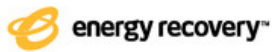


Making Desalination  
Affordable

Pressure Exchanger



18,000 Installations  
on 7 continents



## OIL & GAS



Hydraulic Fracturing: **VorTeq**

## CHEMICALS



**IsoBoost Applications**

- Gas Processing
- Ammonia

**IsoGen Applications**

- Gas Processing
- Pipelines
- Ammonia

# UBIQUITOUS TECHNOLOGY WITH SIGNIFICANT GROWTH

## Continue to invest in R&D

- 27.5% of OPEX in 2014
- 20.2% of OPEX in 2015
- 27.8% of OPEX in 2016



Derivative of Pressure Exchanger

\$?M

Develop derivatives of Pressure Exchanger Technology every 24 months, in annual cycles

SLB Licensing Revenue

~\$80M to \$200M per annum

Desal

~\$50M

2016





\$54.7M

Incremental Revenue Opportunity

2020+

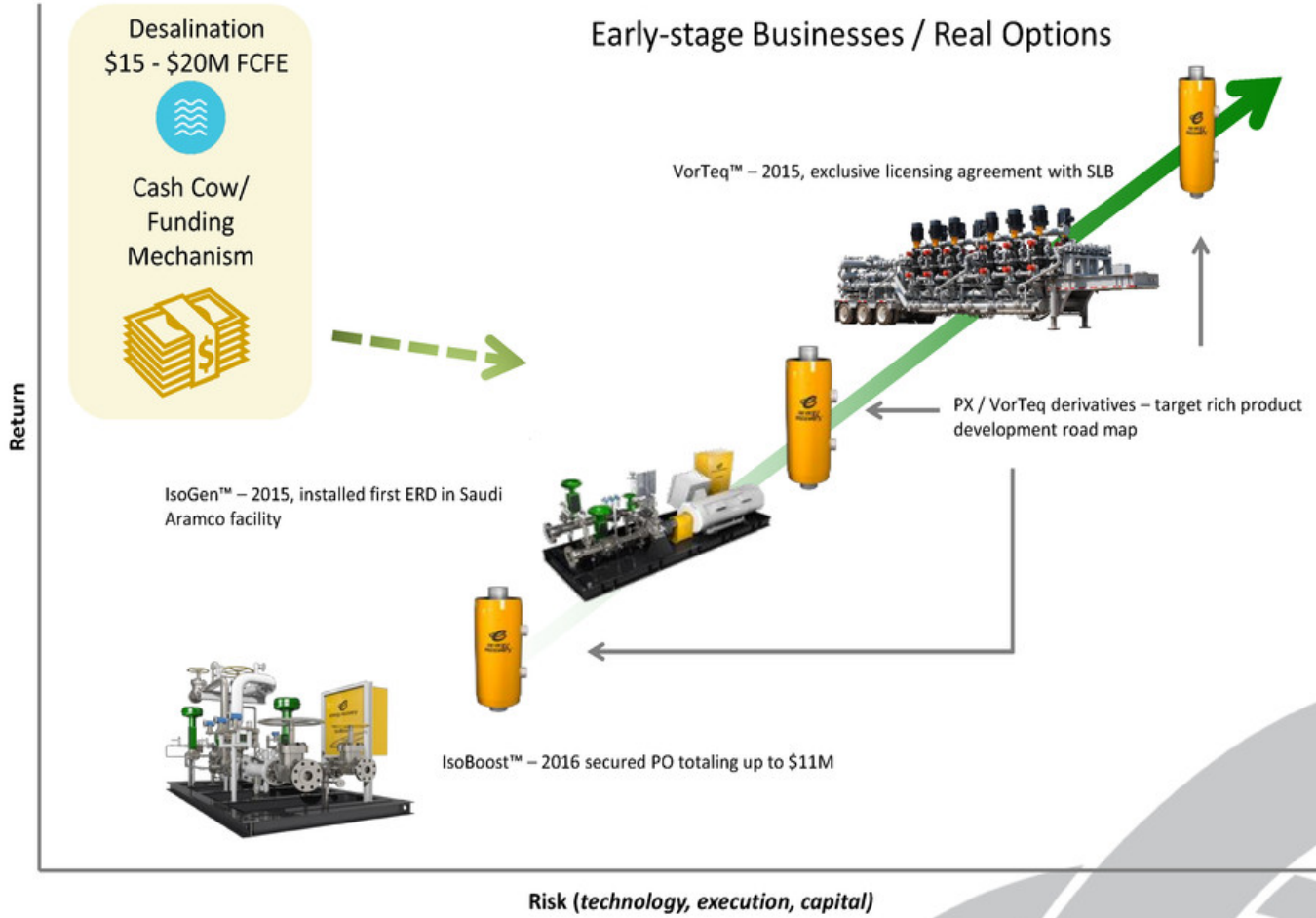
\$200M+

## NEW PRODUCT AND MARKET DEVELOPMENT

	High rates of flow	✓
	High pressure differentials	✓
	High capital intensity in the form of pumps and ancillary equipment	✓
	Hostile process fluid applications	✓

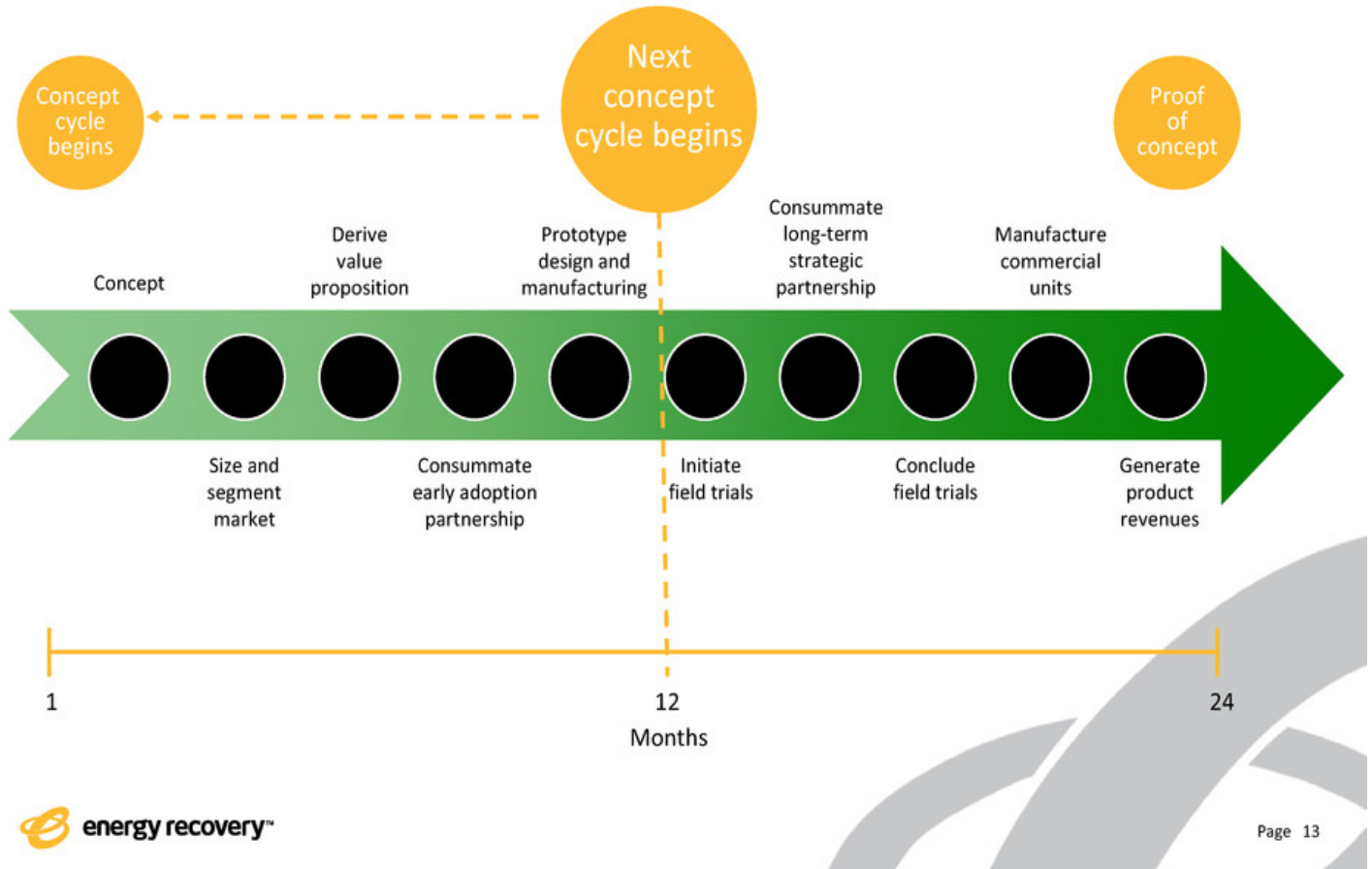
**Flow x Pressure Differential = Energy Density**

# EFFICIENT FRONTIER OF PRODUCT OPTIONALITY



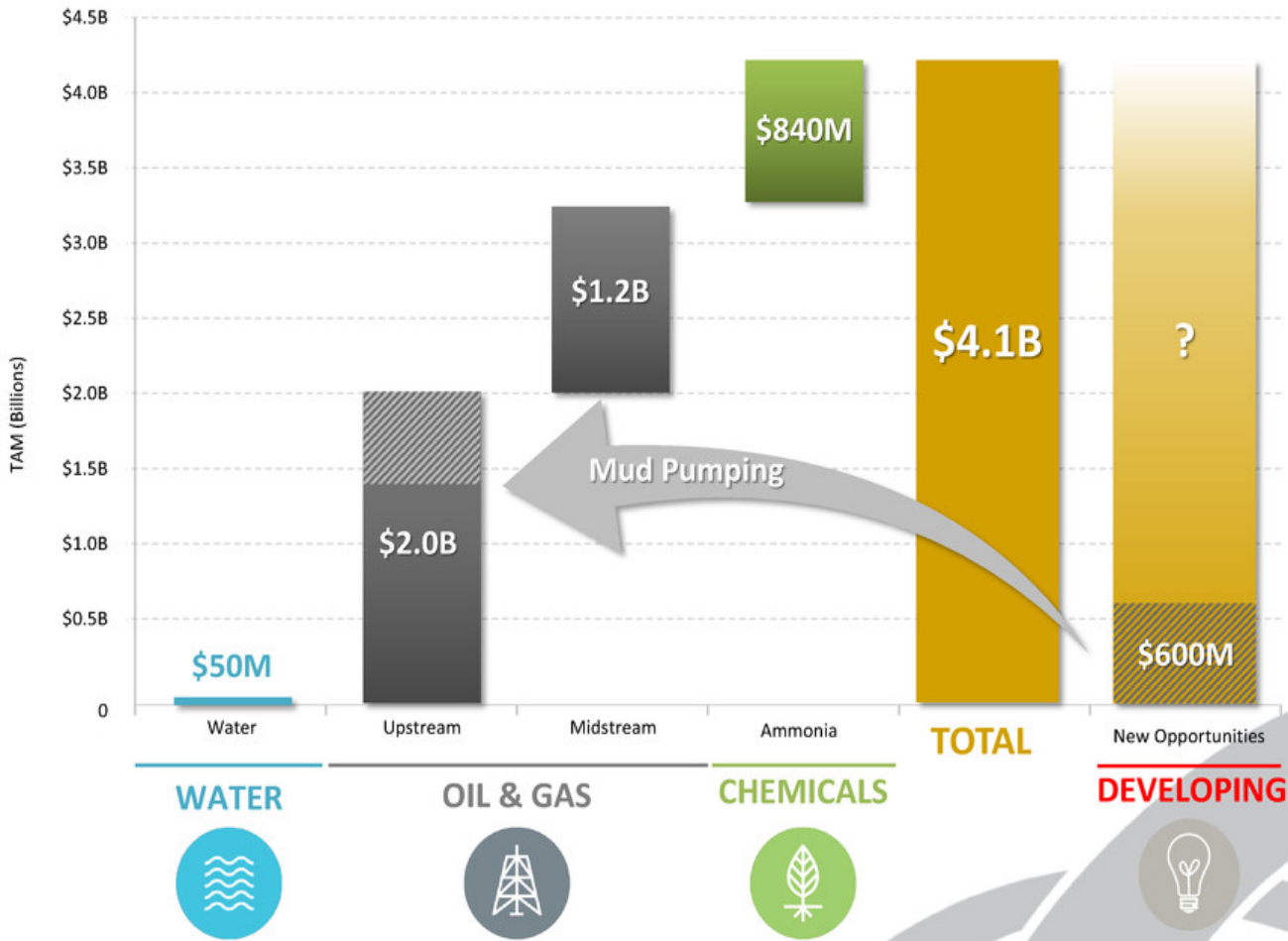
# GO TO MARKET STRATEGY

Targeting 24 month development cycles, commencing every twelve months





# \$4.1B ADDRESSABLE MARKET OPPORTUNITY





# Desalination

---



### The “PX Pressure Exchanger”

- 18,000 PX devices installed worldwide
- 25-year life with no maintenance
- Dominant global market share
- 60%+ gross margins

### Compelling short and long term market opportunity

- Global water demand / supply gap
- Expand product offering to increase total addressable market
- Expand procurement vehicle options – Energy Services Agreements

**Significant Cash Flow Funds Growth Initiatives**



# Emerging Markets

## Upstream Oil & Gas

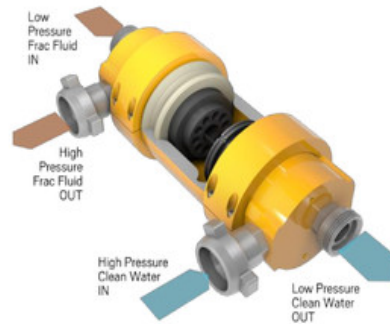


# VORTEQ HYDRAULIC PUMPING SYSTEM

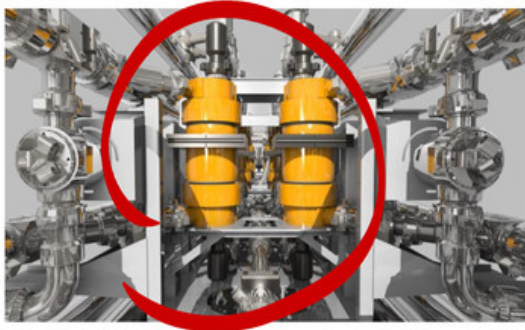
## Hydraulic Piston Concept



## Fluid Flows in Pressure Exchanger



## PX on Missile

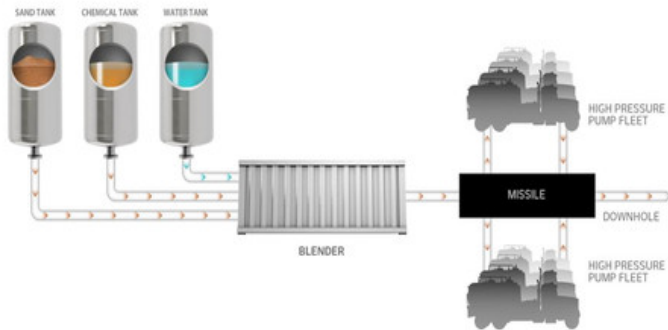


## VorTeq Missile

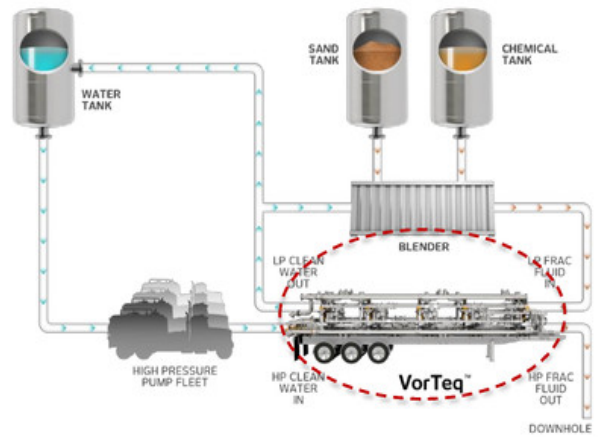


# VORTEQ INTEGRATION

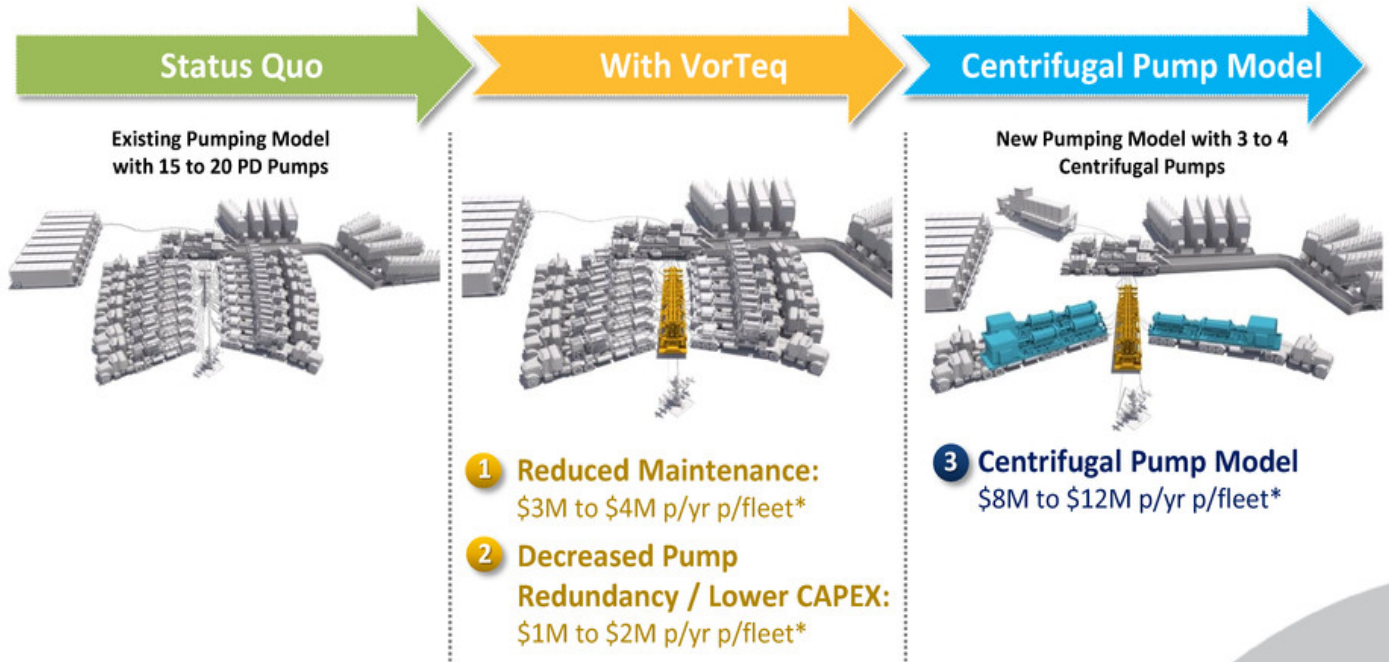
## Status Quo



## With VorTeq



# IS VORTEQ DISRUPTIVE?



\*ERI estimates

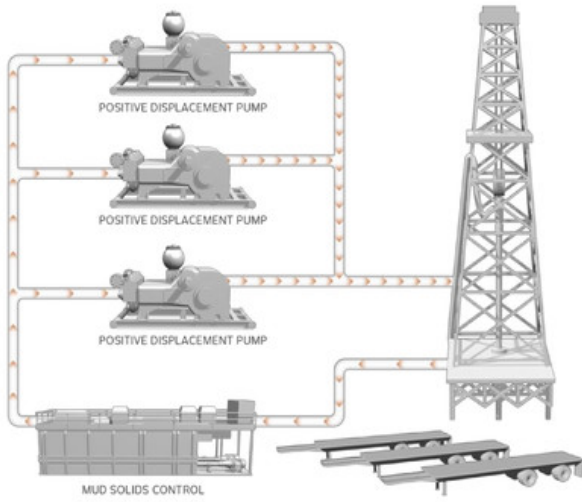
## SLB LICENSING AGREEMENT STRUCTURE

- Agreement provides exclusive rights to ERI's VorTeq™ Hydraulic Pumping System for on-shore hydraulic fracturing (Field of Use)
  - Commercializes the VorTeq™ technology with one of the industry's most respected oil-field services companies
- Highlights
  - Schlumberger paid an upfront **\$75M** exclusivity fee (15 year revenue recognition)
  - Schlumberger will pay two separate **\$25M** milestone payments (for a total of **\$50M**) subject to certain KPI's (revenue recognition in period milestone achieved)
    - ✓ Milestone 1: Frac on test well at SLB Oklahoma facility
    - ✓ Milestone 2: Frac on E&P well
  - Path to commercialization and royalties
    - ✓ New manifold/missile design implemented and approved for field use
    - ✓ Upon commercialization, royalty rate of **\$1.5M** per VorTeq per year
    - ✓ Royalty payments on a "take or pay" basis

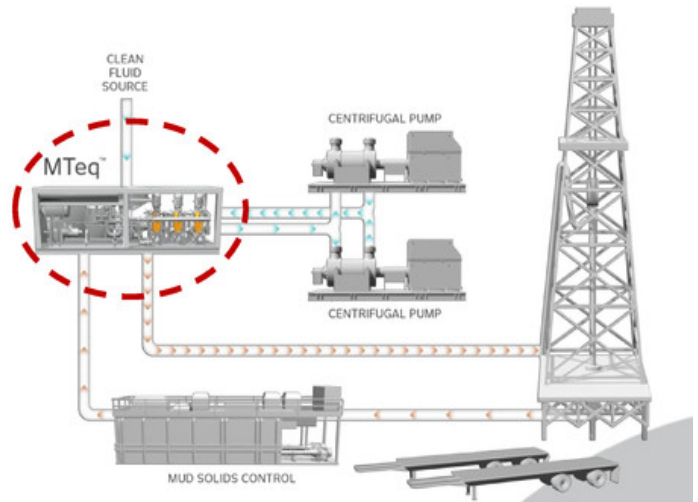


# MTEQ MUD PUMPING SYSTEM

## Status Quo

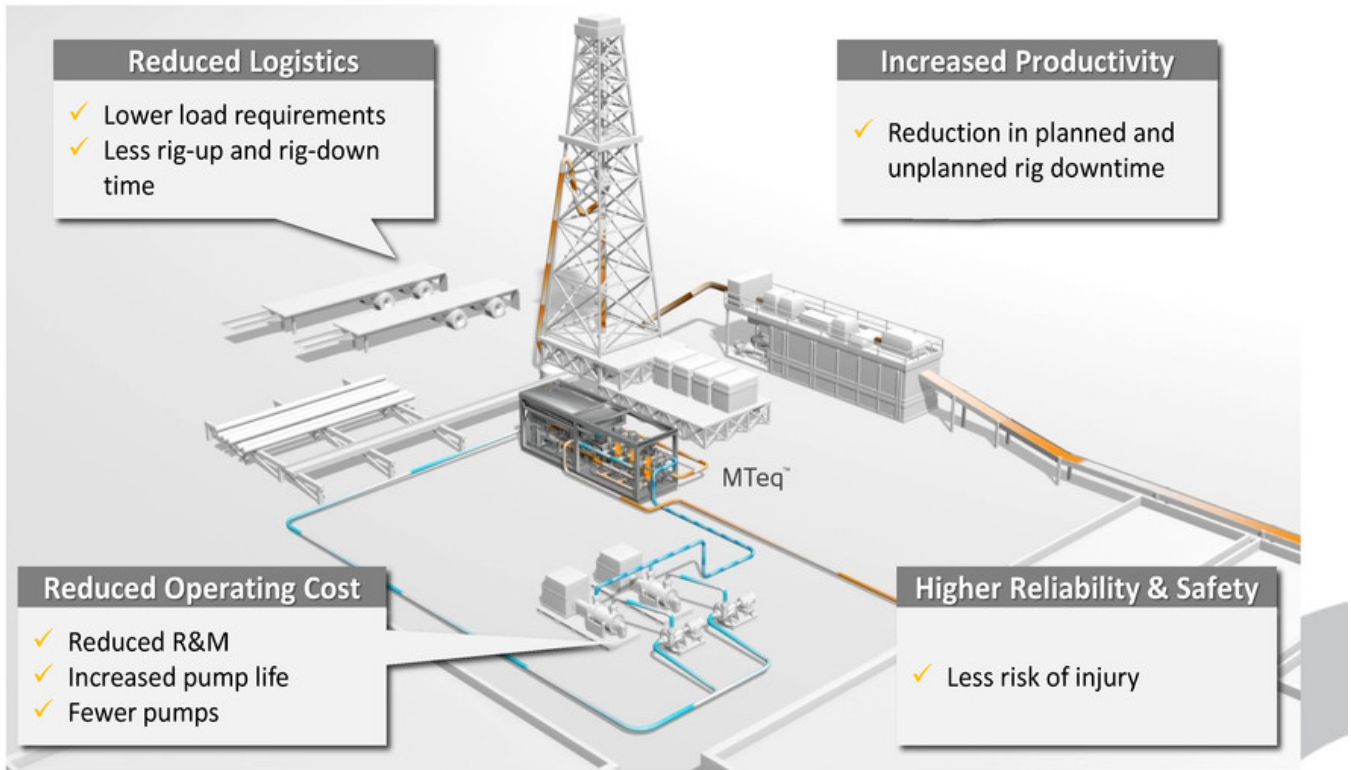


## With MTeq



# MTEQ UNLOCKS VALUE FOR OPERATORS

## Drilling Configuration with MTeq & Centrifugal Pumps





# Emerging Markets Midstream & Chemicals



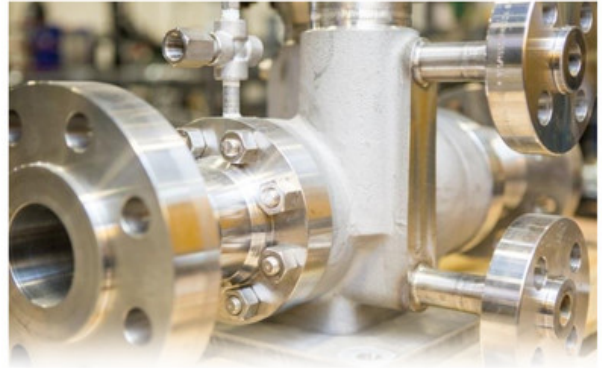
## OUR SOLUTION – GAS PROCESSING, AMMONIA, AND PIPELINES

### IsoBoost and IsoGen recover pressure energy and increase reliability of pumping systems

- Save millions of dollars in energy over life of plant
- Improve reliability, availability, maintainability
- Decrease carbon footprint

### Licensing Agreement with Alderley plc

- 10 year exclusive license for IsoBoost™ & IsoGen™ in Gas Processing & Pipelines in the GCC, Iraq & Iran\*
- Agreement leverages ERI's unique technology & Alderley's distribution channel with GCC operators
- The agreed royalty rates increase the product's margin profile and mitigate execution risk
- Subject to certain minimum sales requirements to maintain exclusivity



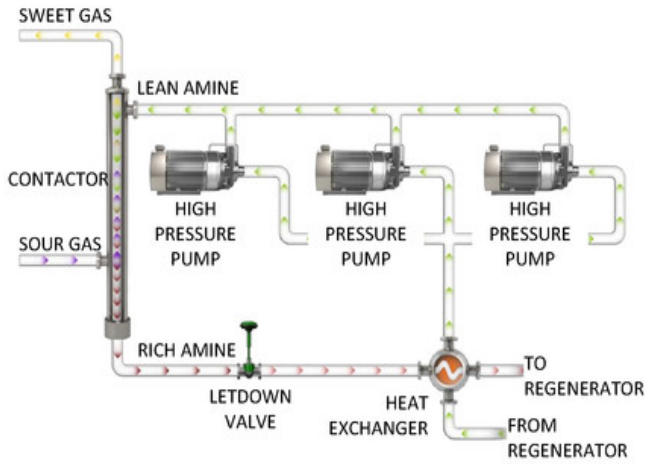
**Helps Plants Save Energy, Reduce Maintenance,  
And Run More Profitably**

\*To the extent international sanctions and laws permit



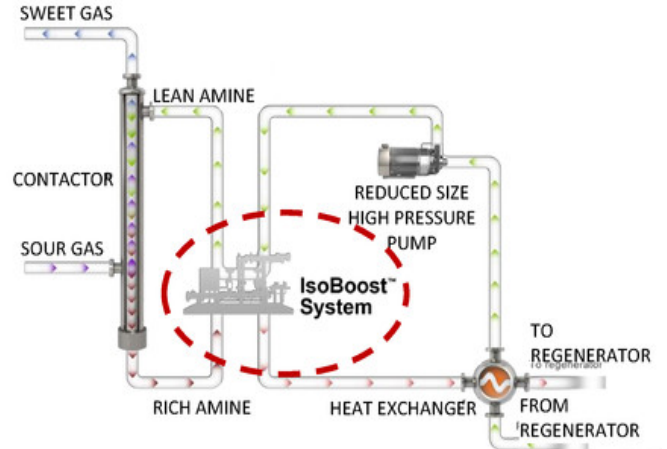
# OUR SOLUTION – GAS PROCESSING AND AMMONIA

## Status Quo



Wasted Pressure Energy & High Pump CAPEX

## With IsoBoost



Reduced OPEX & Pump CAPEX

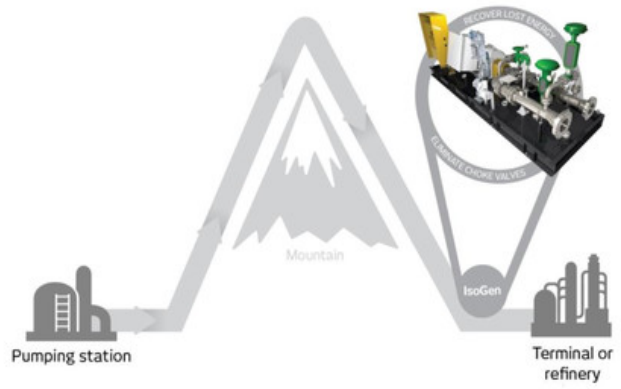
# OUR SOLUTION - PIPELINES

## Status Quo



Vertical Pipelines Must Be Depressurized

## With IsoGen



Pressure Generating Power



# Strategic Imperatives

## Short Term and Long Term Goals



## STRATEGIC IMPERATIVES



### Commercialize VorTeg

- On schedule to achieve Milestone success in 2017
- Deployment estimated to commence in 2018



### Product Innovation

- Innovate and achieve proof of concept of new products that are derivatives of Pressure Exchanger technology every 24 months, in annual cycles
- MTeq introduction demonstrates success of strategy in 2017



### Market Expansion

- Enhance market position in water desalination
- Increased sales into retrofit market have commenced



### Monetize Centrifugal Product Lines

- Alderley relationship provides path for growth in GCC
- Execute similar structure for monetization in other regions around the globe



**THANK YOU**



