Energy Recovery
Investor Presentation
June 2020
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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.

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About Energy Recovery
For more than 20 years, Energy Recovery has created technologies that solve complex challenges for industrial fluid flow markets. We design and manufacture solutions that reduce waste, improve operational efficiency, and drive significant cost-savings for our customers in Water and Oil & Gas. Our worldwide sales and technical service organization provides on-site support for our products.
WHY ENERGY RECOVERY?

Our technologies lower production costs of clean water and oil & gas, enabling more affordable access to these critical resources.

Our Water solutions are in desalination facilities on seven continents, reducing carbon emissions and helping to combat water scarcity around the globe.

The PX® Pressure Exchanger® energy recovery device revolutionized seawater reverse osmosis desalination, reducing energy costs by up to 60%*

In-development VorTeq™ technology can reduce emissions and energy intensity of oil & gas production while lowering costs – fewer pump failures, smaller site footprint.

*Energy Recovery estimate
OUR PRODUCT CATEGORIES

**Water**

**Energy Recovery Devices**

*PX® Pressure Exchanger®*

**Pumps**

**Oil & Gas**

**Hydraulic Fracturing Solution**

*VorTeq™*

*in development*
OUR CORE TECHNOLOGY PLATFORM IS THE PRESSURE EXCHANGER (PX)

- Our pressure exchanger acts like a fluid piston, transferring energy between high- and low-pressure fluids through continuously rotating ducts.
- PX technology provides benefits in a variety of industrial applications using high-pressure fluids:
  - **Water** – pressure exchangers lower energy consumption and emissions, as well as reduce the pump size needed for seawater reverse osmosis desalination (PX Pressure Exchanger).
  - **Oil & Gas** – pressure exchangers can protect pumps from erosion, reducing equipment failure common during well completion and drilling operations (VorTeq).

Pressure Exchanger Internal Components

Fluid Flows in a Pressure Exchanger
Sealed Phase
Two fluids on opposite sides of PX; rotor duct is sealed, isolating high, low pressure fluid streams

Pressure Exchange Phase
1. Low pressure driven fluid enters the rotor duct
2. High pressure motive fluid enters the rotor duct
3. Low pressure driven fluid contacts motive fluid, expelling it at low pressure
4. High pressure motive fluid contacts driven fluid, expelling it at high pressure

**Pressure is exchanged continuously as the rotor spins at high speed**
INVESTING IN MULTI-DISCIPLINARY ENGINEERING TALENT

Significant investments in R&D team in recent years to strengthen our capabilities
- Over 5x increase in R&D headcount since 2013 – one-third of ERI holds engineering degrees
- Expertise in critical disciplines to incubate and commercialize new industrial fluid-flow solutions

Team focused on incubation of new products with clear commercialization objectives and returns
- Late 2019 reorganization provided further transparency and accountability

- Fluid Mechanics & Aerodynamics
- Solid Mechanics
- CFD & FEA
- Hydrodynamic Bearings
- Multi-Phase Flow
- Dynamics & Controls
- Acoustics & Vibrations
- Tribology
- Material Science & Coatings
- Pumps and Turbines
- Turbomachinery
- Rotating Equipment
Advanced ceramics manufacturing capabilities help drive water success

- Vertically integrated ceramics manufacturing facility located in-house in CA
  - Creates potential competitive barrier to entry
- Best practices ensure high-quality production process
  - Approximately 99.9% of every PX Pressure Exchanger passes final stringent quality control before shipping

Ceramics expertise directly translates to tungsten carbide for Oil & Gas applications

- Production follows comparable path – from powder to final machining
- Rigid quality control and precision manufacturing
DISTRIBUTION STRATEGY LEVERAGES OUR STRENGTHS IN EACH MARKET

Global Water Distribution Channel
- Sales and technical service organization's tenure and global reach delivers advantages in a relationship-driven market
  - Entrenched, stable team located in 11 countries across 5 continents
- Strong relationships and extensive database enable early project identification

Oil & Gas Strategy Differs Due to Our Position
- Licensing model is an effective method for a newcomer in a mature, competitive market
  - De-risks market entry
  - Partnerships provide faster credibility
  - Eliminates need to build our own distribution channel
  - Reduces time to market

Water sales and service personnel located in United States, Canada, Spain, India, China, Saudi Arabia, United Arab Emirates, Jordan, Egypt, Mexico, Peru
We are positioned to make critical investments in our business

- Exploring opportunities to expand our water business
- Commercialization and subsequent launch of VorTeq
- Incubation efforts pushing the technical and commercial boundaries of our PX Pressure Exchanger technology
Water – Global Demand Trends Driving Robust Future Outlook for Energy Recovery
FRESH WATER SCARCITY IS INCREASING

Fresh water demand is increasing, creating global demand gaps
- Water demand driven by population growth, industrialization, rapid urbanization, climate change
- The world will only have 60% of the water it needs by 2030\(^1\)
- Potable water demand expected to increase by roughly 30% by 2050\(^1\)

Desalinating seawater is an increasingly important part of meeting global water demand
- We are well-positioned to be part of the global supply solution
- SWRO expertise and commanding market position offers potential springboard to growth

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**Continued Growth in SWRO Desalination CAPEX Spend 2014 – 2022\(^2\)**

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<tbody>
<tr>
<td>CAPEX Spend (Bn)</td>
<td>$2.1B</td>
<td>$2.0B</td>
<td>$2.5B</td>
<td>$3.3B</td>
<td>$3.3B</td>
<td>$5.0B</td>
<td>$7.7B</td>
<td>$8.9B</td>
<td>$8.2B</td>
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\(^1\)United Nations World Water Development Report; \(^2\)DesalData Forecasts
\(^3\)Third year projections typically dips due to limited market visibility
Thermal seawater desalination was the dominant technology through the 1990s

- Operational savings from devices like the PX made SWRO significantly cheaper than thermal
  - Thermal OPEX costs today are roughly 2x higher than SWRO
  - $1B SWRO retrofit of two Saudi thermal plants will generate OPEX savings of $360M/year

Potential for roughly $0.5 Billion in Energy Recovery Device sales to maintain current water supply

- Cost saving opportunities could accelerate pace of thermal to SWRO retrofits

Desalination Capacity Increases and Percent Market Share by Decade

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1. DesalData Forecasts; 2. Energy Recovery estimates
PX PRESSURE EXCHANGER RECYCLES HYDRAULIC ENERGY, REDUCES ENERGY COSTS

Without Energy Recovery Devices (ERDs)

- Energy consumption and costs made SWRO uneconomical historically
- Approx. 60% of energy wasted during SWRO prior to implementation of ERDs

With PX Pressure Exchanger

- PX lowers energy consumption by up to 60%
- Recycles energy, reduces high pressure pump size, making SWRO more economical
- PX durability lowers facility lifecycle cost

1Ocean or other geological mass
OUR WATER SOLUTIONS

Energy Recovery Devices

PX Pressure Exchanger

- Most widely used ERD in SWRO
- Unmatched efficiencies for desalination up to 98%
- Highest uptime in the market (99.8%)
- Designed for up to 25+ years of useful life

AT Turbocharger

- Efficiencies up to 80%
- Volute insert technology for best efficiency range
- Lower initial capital costs
OUR WATER SOLUTIONS

Pump Products

AquaBold High Pressure Pump

- Water lubricated bearing for long life and low maintenance
- Cast, duplex stainless-steel hydraulics for higher quality and uptime

Vertical and Horizontal Circulation Pumps

- Specialized pumps pair with PX application
- Designed for long life with low maintenance
- Reliable performance in high suction pressure operating environments
| 17M cubic meters/day of potable water produced | Helps produce water to meet daily consumption of >50M people | $2.0B/year saved for customers | >11.5M metric tons CO₂ emissions prevented/year – equal to >2.4M cars | >20,000 devices installed worldwide |

*Energy Recovery estimates, assumes all deployed devices are in operation*
OUR IP AND GLOBAL FOOTPRINT HAVE DRIVEN GROWTH AND PROFITABILITY

Global Water Demand Drives Growth
- Global demand for water continues to take on increased levels of importance
- Larger numbers of projects, in increasingly greater size, are appearing in our backlog and pipeline
- Despite continued backlog execution and record revenue, the backlog remains robust

Extended growth cycle
- Evidence of extended cycle and upward shift in global water demand curve
- Revenue growth trend since 2014 suggests a secular water demand shift
- Entered 2020 with largest backlog ever

Exceptional margins
- Margin improvement reflects increased MPD demand

**Historical Water Revenues**
- 2016: $48M, +14%
- 2017: $54M, +11%
- 2018: $61M, +20%
- 2019: $73M

**Historical Water Gross Margins**
- 2016: 66%
- 2017: 70%
- 2018: 72%
- 2019: 72%
FOCUSED ON EXPANDING OUR WATER BUSINESS

We currently focus on only 1-2% of a project’s capital spend

- Energy recovery devices make up a small fraction of CAPEX and are critical to make plant operations affordable
- We have a small offering of high efficiency Pumps (<1%)
- Currently no exposure to other areas of desalination spend

Leverage our market leadership presence

- Our desalination position and distribution channel is a springboard to expand sales
- Improving our existing solutions to further increase competitive advantage
- Focused on increasing offering in pumps and packaged/engineered solutions
- Utilize demand for and recognition of our strong PX Pressure Exchanger brand

Energy Recovery product segments (current/potential)

Energy Recovery dominates the ERD segment and has select offerings in Pumps

1DesalData Forecasts for 2023
Oil & Gas – Material Progress Made on Path to Commercializing VorTeq Technology
WE ARE APPLYING OUR WATER EXPERTISE TO OIL & GAS

Water and Oil & Gas have similarities
- High pressure fluid-flow environments
- Potential to transfer pressure energy from a high-pressure fluid to a low-pressure fluid
- Opportunities to eliminate waste in system – increase efficiencies and decrease costs

Leveraging Water experience to develop Oil & Gas solutions
- Advanced fluid & structural mechanics, bearing performance, and material expertise of R&D
- Precision manufacturing coupled with enhanced experimental capabilities
- In-house simulation tools to model performance and results

Our Solutions Can Protect Pumps
- High pressure pumps used in Oil & Gas are susceptible to abrasion, erosion, fatigue, corrosion
- We keep abrasive frac fluid away from pumps - pressure exchangers handle this fluid instead of pumps
- Fewer pump failures, less pump redundancy
- Lower maintenance, capital costs
- Reduced emissions, energy intensity
- Smaller site footprint
Entered into a 15-year license agreement with Schlumberger Technology Corporation

- Exclusive rights to VorTeq for on-shore hydraulic fracturing
  - Upfront $75M exclusivity fee
  - Two separate $25M milestone payments (for a total of $50M) subject to certain KPIs
    - Milestone 1 (M1): Frac at product licensee test facility
    - Milestone 2 (M2): Frac at customer exploration & production (E&P) well
  - Commercialization Highlights:
    - $1.5MM per VorTeq per year
    - Acceptance standards inclusive of M1 and M2, as well as other performance tests
    - Product licensee responsible for missile manufacturing; ERI provides PX Pressure Exchangers, housing and motors
    - Five years from first unit to full deployment across product licensee fleets

Liberty Oilfield Services carve-out (our early-stage test partner)

- Rights for up to 20 VorTeq units for up to 5 years
- We provide full missile and cartridges – vendors have been qualified
- Commercialization standards differ and thus speed to market may be faster
- Pricing based on contractual ROIC
- Hydraulic fracturing technology solution
- Houses 12 pressure exchangers
- Designed to isolate and save frac pumps
VORTEQ PROTECTS HIGH PRESSURE PUMPS, REDUCES COSTS

**Status Quo**

- Pumps handle frac fluid (water, chemicals and sand)
- Pumps quickly destroyed

**With VorTeq**

- Pumps are isolated, clean water fed to pumps
- VorTeq handles frac fluid
- Capital savings ($1M - $2M\(^1\)) – less pump redundancy = less waste
- Maintenance savings ($3M - $4M\(^1\))

\(^1\)Energy Recovery Estimates – savings measured in pumps/year pumps/fleet
OUR COMMERCIAL DEVELOPMENT CENTER IS CRITICAL TO GROWTH

Rigorous VorTeq testing ongoing
- Center uses industry standard equipment to simulate pressures, flow, and operating conditions of a frac site
- Allows us to confirm system reliability and repeatability in real-world conditions

Expanded testing capabilities help accelerate the path to commercialization
- Continuous access to testing resources speeds R&D cycle from design concept to validation and implementation

An investment in the long-term success of our Oil & Gas business
- Houses advanced equipment to machine, inspect and test tungsten carbide components
- Enables rigorous testing of tungsten carbide pressure exchangers prior to field deployment
- Designed to scale up or down according to our needs
Strategic Summary
**ENERGY RECOVERY – A BALANCED RISK / REWARD APPROACH**

<table>
<thead>
<tr>
<th>Water</th>
<th>Incubation</th>
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<tr>
<td><strong>Steady, Visible Growth</strong></td>
<td><strong>Refocus on new verticals in 2020</strong></td>
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<tr>
<td>o Global water demand outlook remains robust in 2020 despite economic challenges globally due to COVID and falling oil prices</td>
<td>o Leveraging learnings from VorTeq to improve R&amp;D and commercialization strategies</td>
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<td>o Thermal to SWRO technology transition adds to potential long-term demand trends</td>
<td>o Reorganization of teams to increase accountability and transparency</td>
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<td><strong>Applying PX Expertise Beyond Water</strong></td>
<td>o Focus on ROI, size of potential investments and timelines</td>
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<tr>
<td>o VorTeq – Commercial Development Center is delivering results</td>
<td>o Exploit multi-functional aspects of PX</td>
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<td>o Significant progress to commercialization made in 2019</td>
<td><strong>Financially Flexible Balance Sheet</strong></td>
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<tr>
<td>o Preparations for M1 testing underway</td>
<td>o Cash is king</td>
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<td>o Ongoing search for live well test frac</td>
<td>o Solid net cash position provides strategic options amid global crises</td>
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<td>o Core business is secure</td>
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<td>o Growth remains a focus</td>
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Thank You