

Energy Recovery

Investor Presentation

August 2019

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.

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Seawater Reverse Osmosis (SWRO) Desalination Continues to Drive Growth

- 2019 YTD revenues continue record pace
- Revenue growth for 2019 forecasted to be as high as the low teens
- Industry trends continue to point to a lengthened growth cycle, possibly extending the next two to three years
- First phase of company's capacity expansion is complete
 - Second phase underway and expected to be completed mid 2020

Focus Remains on VorTeq Commercialization

- Rigorous testing ongoing at our Commercial Development Center outside Houston, TX
- Concrete steps begin taken to prepare the organization to support future commercialization
 - Key members of Oil & Gas team relocated to TX
 - New team members being trained in San Leandro to machine and refurbish cartridges in TX
 - Foundation laid on the building at our new facility
 - Substantial work preparing supply chain, systems and overall organization is underway

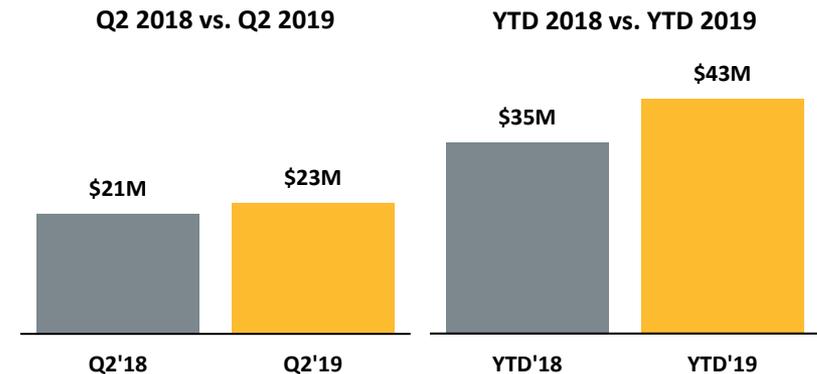
Strong Q2 Results Driven by Water

- 10% Q2 revenue growth over Q2 2018
- 23% revenue growth YTD
- Net cash (and securities) position of over \$96M

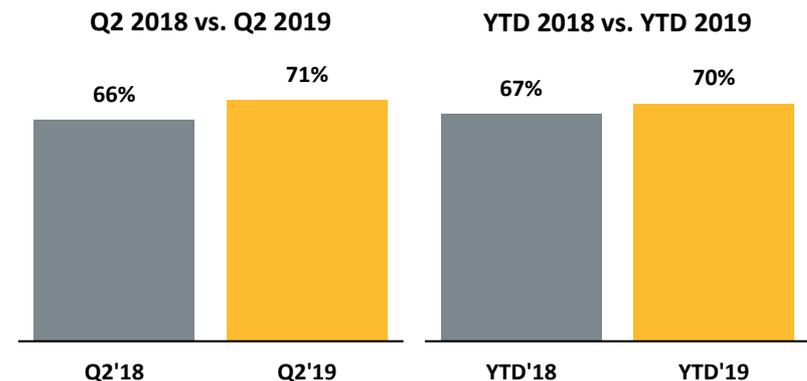
Compelling Product Gross Margins

- Profitability driven by PX Pressure Exchanger sales
- High margins expected to continue for foreseeable future

Revenue



Product Gross Margins





About Energy Recovery



Who Are We

- An engineering-driven technology company delivering innovative solutions for industrial fluid flow processes
- Our technologies drive meaningful cost savings and operational efficiencies for customers

Our Approach

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

Our Current Markets

- Water
- Oil & Gas



OUR PRODUCTS AND SOLUTIONS

Water

Energy Recovery Devices



PX[®] Pressure Exchanger[®]



AT Turbocharger

Pumps



AquaBold[™] High Pressure Pump



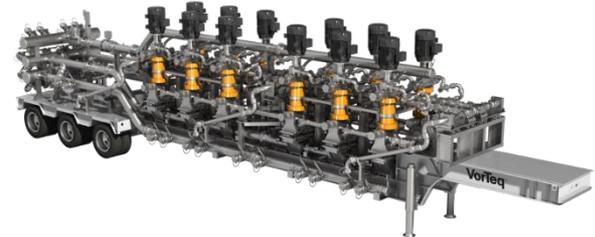
Vertical Circulation Pump



Horizontal Circulation Pump

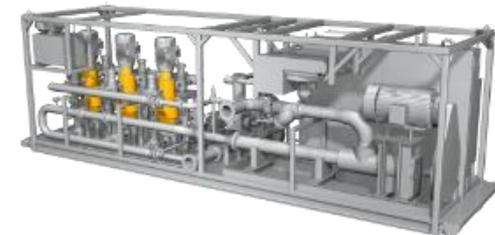
Oil & Gas

Hydraulic Fracturing Solution



VorTeq[™]

Mud Pumping Solution

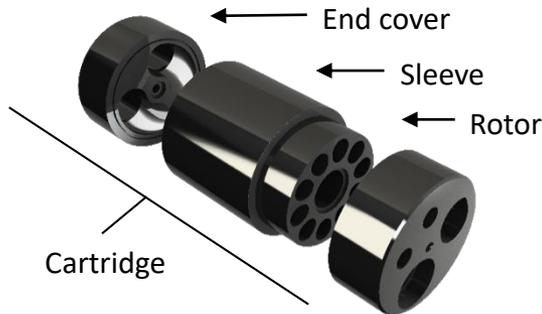


MTeq[™]

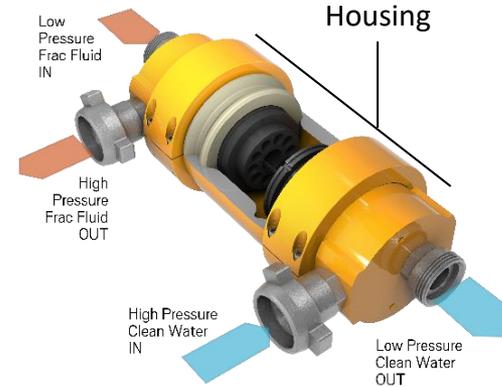
OUR CORE TECHNOLOGY IS THE PX PRESSURE EXCHANGER

Pressure Exchanger Key Components

Transfers energy with only one moving part (rotor)

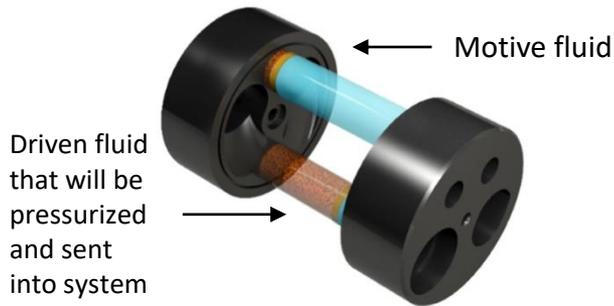


Fluid Flows in PX Pressure Exchanger

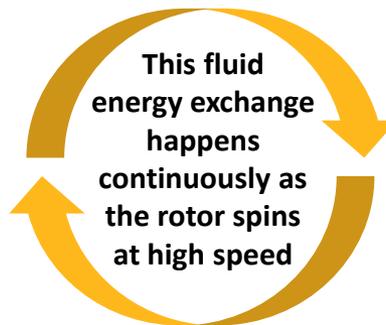


How the PX Pressure Exchanger Works

Two fluids on opposite sides of the PX; the rotor duct is sealed, isolating high and low-pressure fluid streams

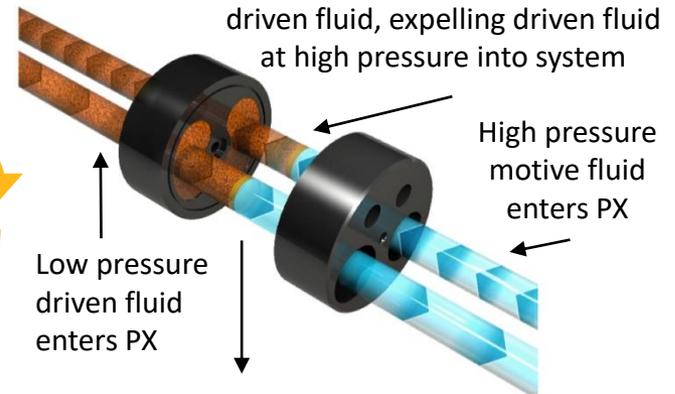


Rotor duct rotates to pressure exchange phase



Rotor duct rotates to sealed phase

High pressure motive fluid contacts driven fluid, expelling driven fluid at high pressure into system



Low pressure driven fluid contacts motive fluid, expelling motive fluid at low pressure

DISTRIBUTION STRATEGY LEVERAGES OUR STRENGTHS IN EACH MARKET

Seasoned Water Salesforce and Global Distribution Channel

- Salesforce's tenure delivers strategic advantages in a relationship-driven market
 - Business unit leader Rodney Clemente, a 20-year industry veteran, has overseen rapid water growth
 - Entrenched, stable team located globally in 11 countries¹
- Strong relationships and extensive database enable early project identification

Oil & Gas Sales Strategy Differs Due to Our Position

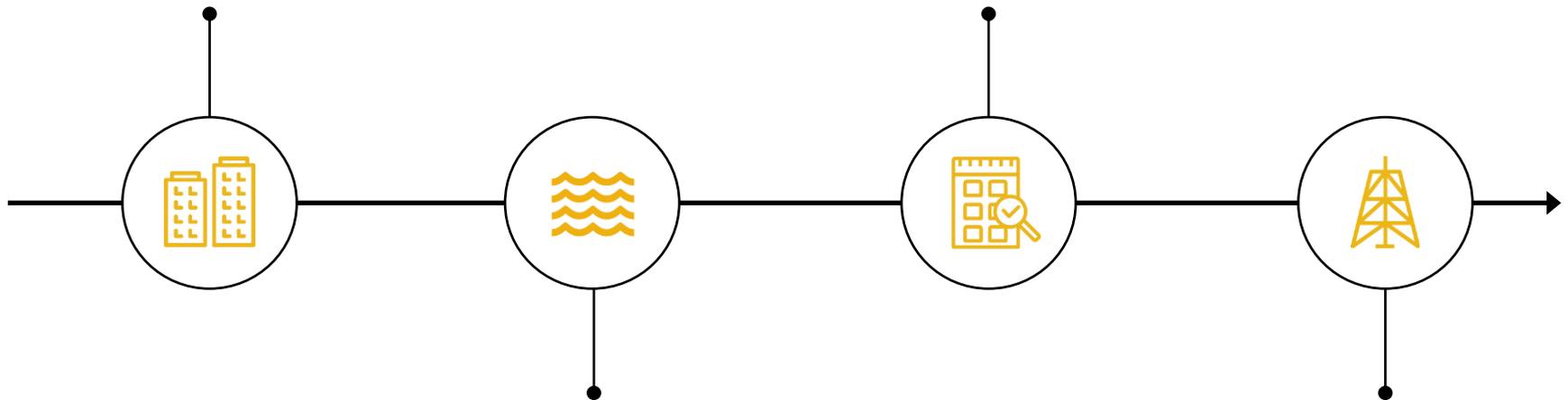
- Licensing model is more effective for a newcomer in a large, mature and vastly competitive industry
 - De-risks market entry
 - The right partnerships provide quicker credibility
 - Eliminates need to build our own distribution channel
 - Reduces time to market



STRATEGIC OBJECTIVES

**Build and enhance
infrastructure for growth**

**Commission Commercial
Development Center**



**Grow and expand existing market
presence in seawater desalination
and beyond**

Commercialize VorTeq

BUILDING AND ENHANCING INFRASTRUCTURE FOR GROWTH

In 2018, we began investing in infrastructure to ensure we can deliver on growth expectations

- Realigned organization to ensure proper focus on execution and resource allocation
- Refocused on key strategic imperatives – Water growth/reinvestment; VorTeq commercialization
- Began implementing new systems and hiring talent to support growth

In 2019, we are continuing to build and enhance our infrastructure to support growth

- Expanding our Water business
 - Finalizing phase 1 of capacity expansion in 2019; phase 2 completion expected 2020
 - Improving existing product lines
 - Advancing water growth initiatives (organic and inorganic)
- Investing in critical Oil & Gas expertise and assets
 - Commenced construction of Commercial Development Center facility
 - Procured equipment to precision machine and inspect tungsten carbide components
 - Expanding field operations team
 - Hiring and training machinists and other manufacturing personnel
 - Expanding supply base for key VorTeq system-level components to manage potential bottlenecks at commercialization

STRATEGICALLY SHIFTING TO AN ENGINEERING DRIVEN ORGANIZATION

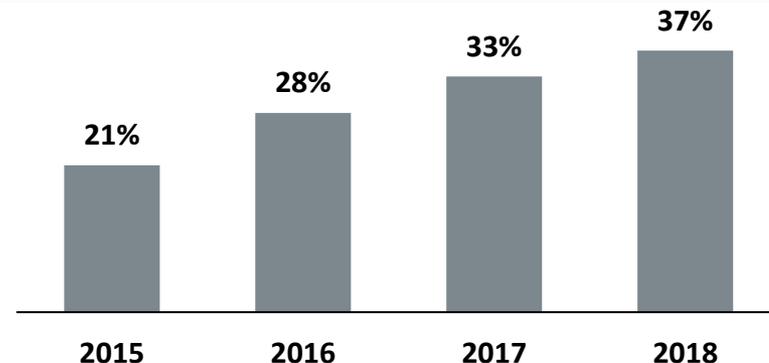
Investing in multi-disciplinary engineering talent

- Over 5x increase in R&D headcount since 2013
 - One-third of our company now holds engineering degrees
 - 9 PhDs and 14 Masters Degrees

Realigning R&D organization to improve focus and ability to execute

- Building necessary infrastructure
- Enhancing capabilities critical for development of disruptive technologies

R&D Spend as % of OPEX



Our In-House Expertise Spans Critical Engineering Disciplines

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

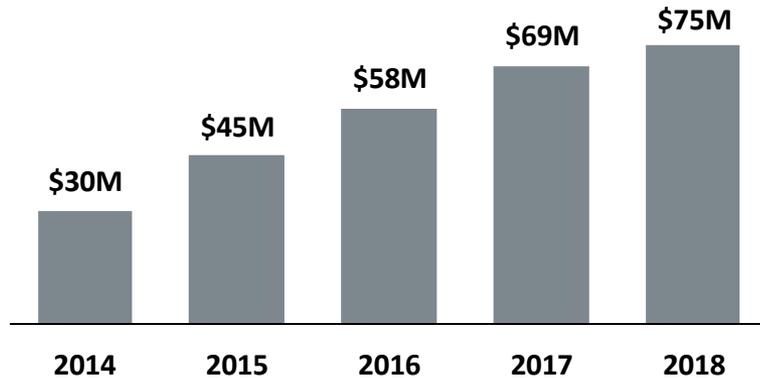
Ceramics expertise directly translates to tungsten carbide for Oil & Gas applications

- Production follows comparable path – from powder to final machining
- Rigid quality control and precision manufacturing

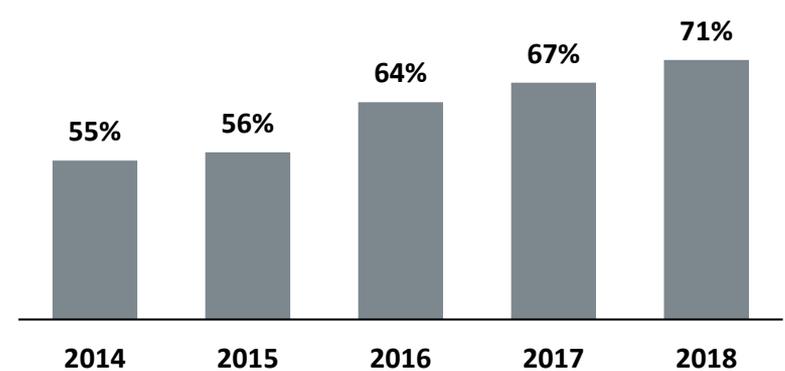


HISTORICAL FINANCIAL RESULTS

Revenue: 25% CAGR 2014-2018



Product Gross Margin Strength



Net Cash and Securities Position of over \$96M

We are positioned to make critical investments in our business

- Organic or inorganic opportunities to expand our water business
- Commercialization and subsequent launch of VorTeq, further development of operational infrastructure



Water

*Global Demand Trends
Driving Robust Future
Outlook for Energy Recovery*



FRESH WATER SCARCITY IS INCREASING

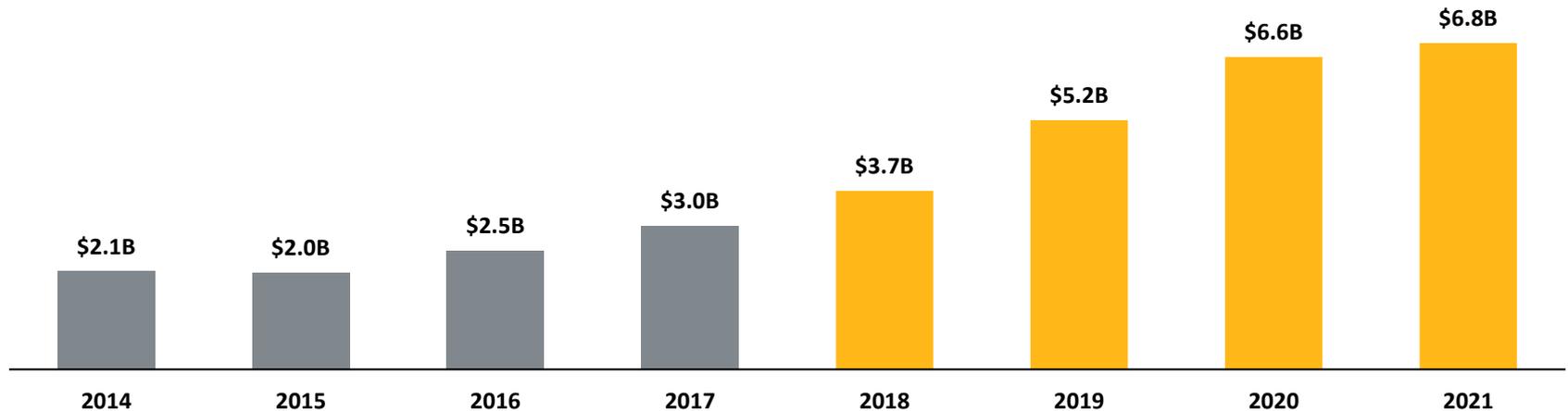
Fresh water demand is increasing, creating global demand gaps

- Water demand driven by population growth, industrialization, rapid urbanization, climate change
- The world will only have 60% of the water it needs by 2030¹
- Potable water demand expected to increase by roughly 30% by 2050²

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 a springboard to growth

Continued Growth in SWRO Desalination CAPEX Spend 2014 – 2021³



THERMAL DESALINATION DECOMMISSIONING CREATING INCREMENTAL DEMAND

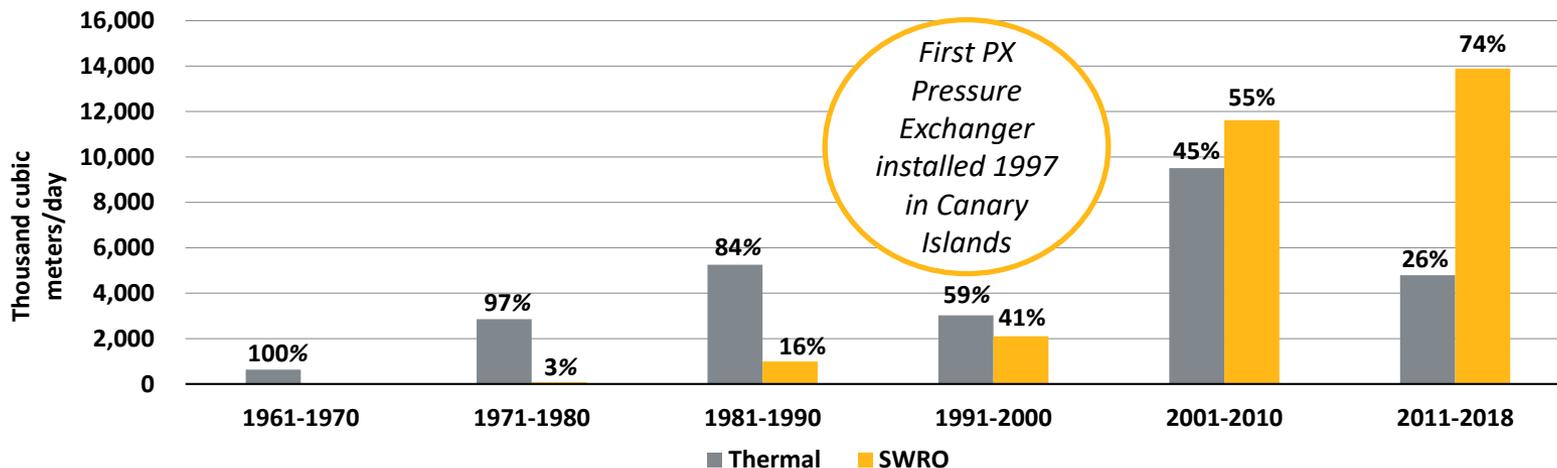
Thermal seawater desalination was the dominant technology through the 1990s

- 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 Arabia thermal plants will generate operational savings of \$360M/year¹

Potential for 100 - 150 new SWRO mega projects to maintain water supply status quo²

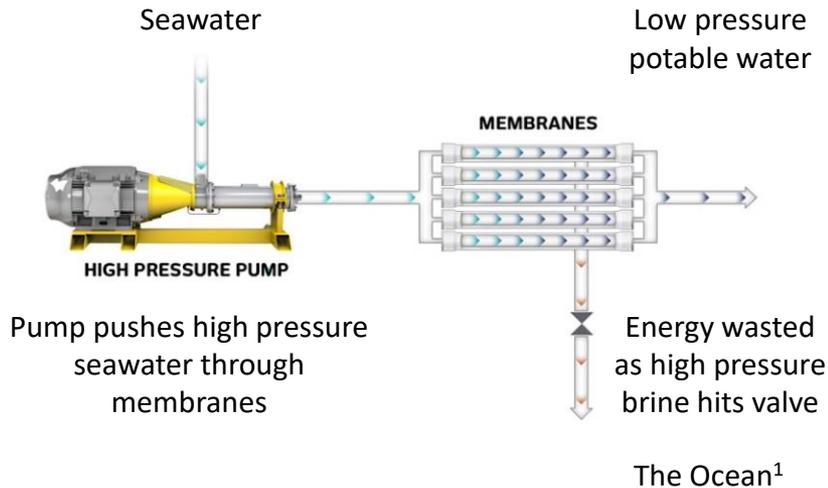
- Cost saving opportunities could accelerate pace of thermal to SWRO retrofits

Desalination Capacity Increases and Percent Market Share by Decade



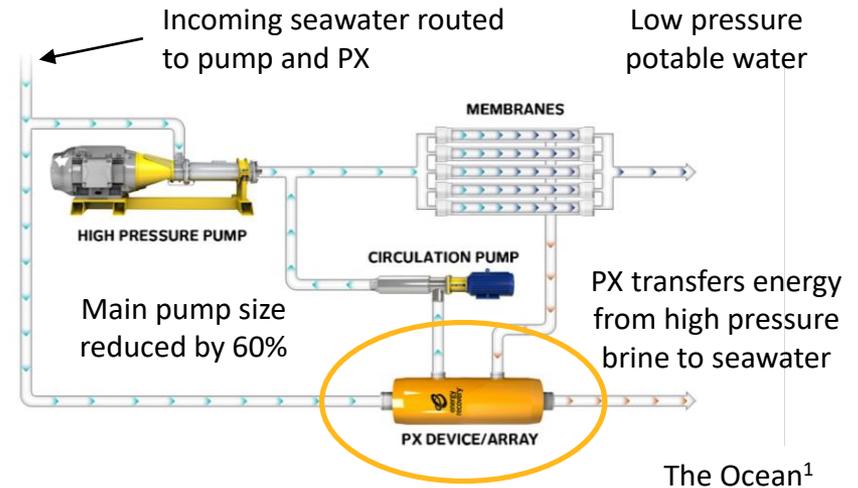
OUR PX PRESSURE EXCHANGER RECYCLES HYDRAULIC ENERGY, REDUCES ENERGY COSTS

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 reduces energy consumption and cost by approx. 60%
- Recycles energy, reduces high pressure pump size making SWRO more economical

¹Ocean or other geological mass

Energy Recovery Devices

PX Pressure Exchanger

- 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



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
- Long life with low maintenance
- Reliable performance in high suction pressure operating environments



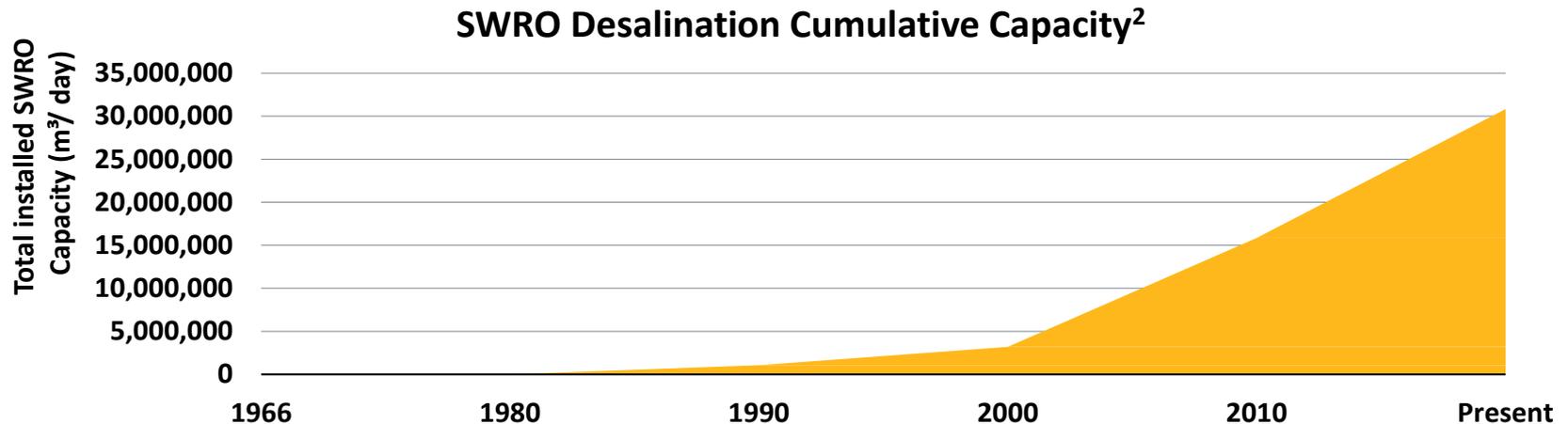
WE MAINTAIN A STRONG MARKET SHARE IN SWRO ENERGY RECOVERY DEVICES

The PX Pressure Exchanger, our flagship desalination solution, delivers meaningful benefits

- Reduces energy costs by up to 60%, delivering nearly \$2B savings/year¹
- Lowers project lifecycle costs due to durability of products
- SWRO plants using PXs produce fresh water daily to 52M people²

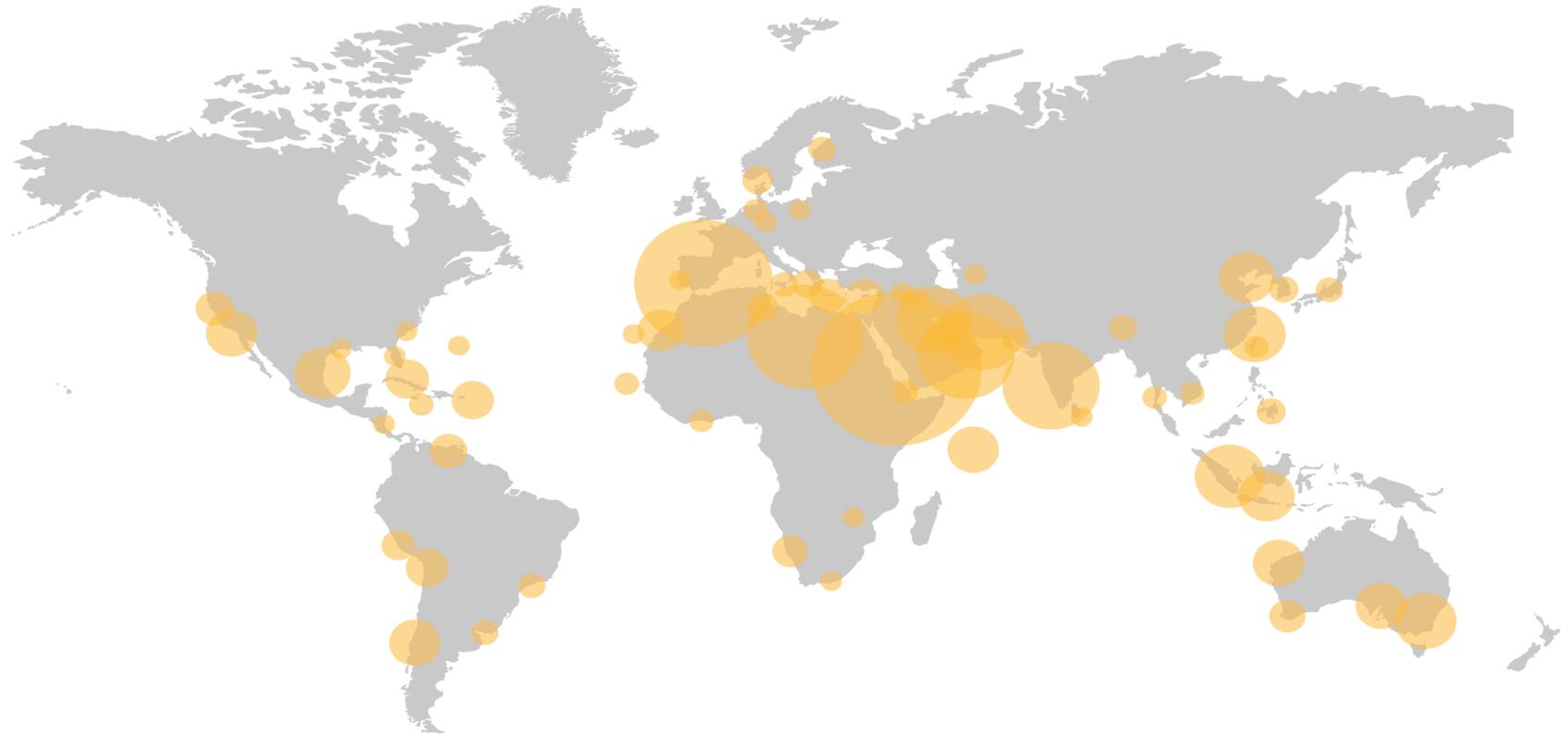
The PX was first introduced in 1997

- SWRO capacity began to grow exponentially around 2000
- Shipped our 20,000th PX in Q1 2019



¹Energy Recovery estimates; ²DesalData Forecasts

GLOBAL REACH OF ENERGY RECOVERY PRODUCTS



~17M cubic meters/day
of potable water
produced¹

~\$2.0B/year saved
for customers²

>11.5M metric tons
CO2 offset/year –
equal to >2.4M cars²

~20,000 devices
installed worldwide¹

¹Assuming all deployed devices are in operation; ²Energy Recovery estimates

OUR IP AND GLOBAL FOOTPRINT HAVE DRIVEN GROWTH AND PROFITABILITY

Consistent revenue growth

- Mega projects continue to drive 2019 revenues
- Owing to our robust pipeline and backlog, we expect strong growth to continue into 2020 and beyond

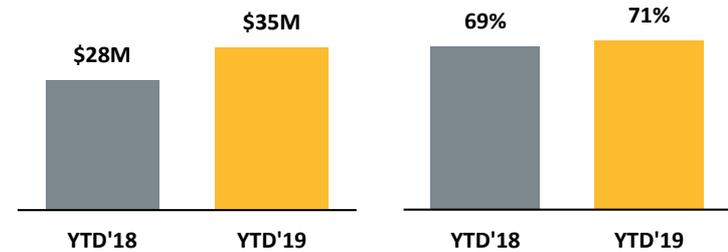
Extended growth cycle

- Upward revenue trend since 2014
- Evidence of extended cycle and upward shift in global demand curve

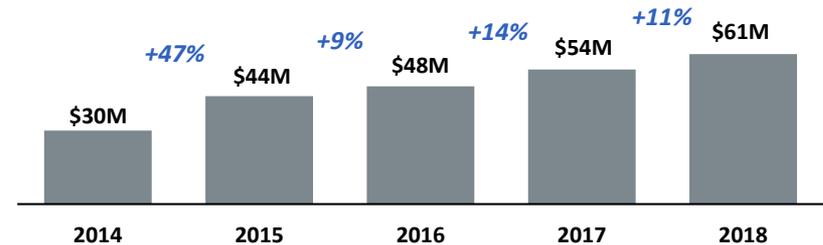
Exceptional margins

- Water gross margins have grown from less than 54% in 2014 to approximately 70% today
- Margin strength provides optionality as growth initiatives are explored

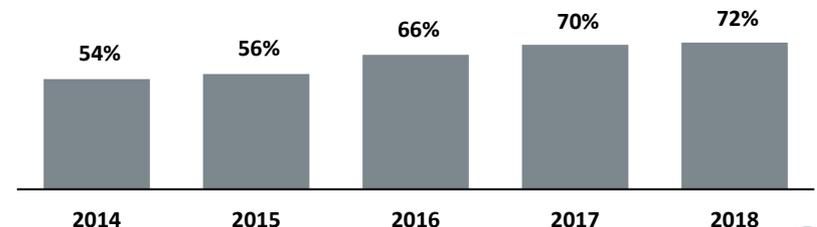
Water Revenue and Gross Margin



Historical Water Revenues



Historical Water Gross Margins



FOCUSED ON EXPANDING OUR WATER BUSINESS

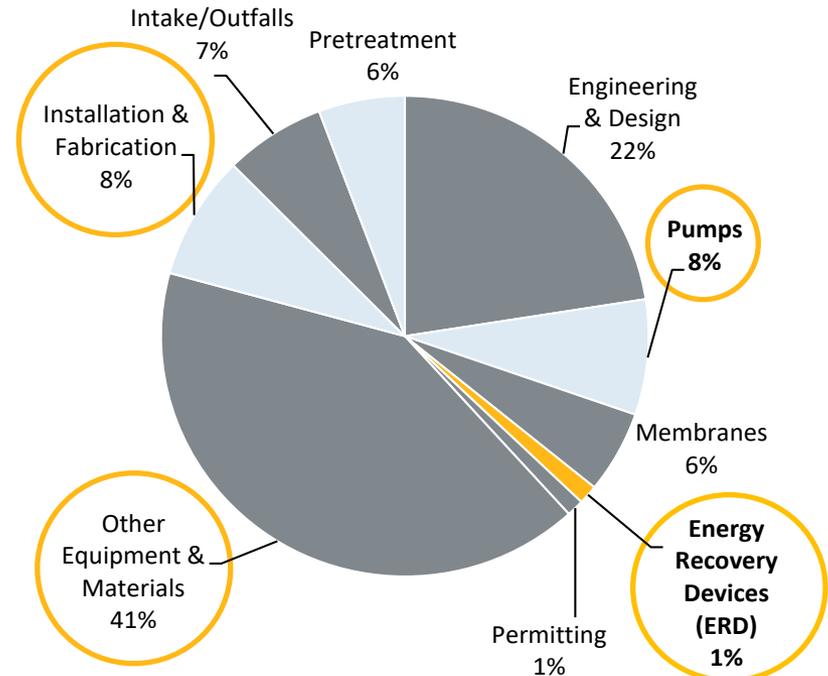
We currently focus on only 1-2% of a project's capital spend

- 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

Average Desal Project Capital Spend¹



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



Oil & Gas

*Material Progress Made on
Path to Commercializing the
VorTeq Technology*



WE ARE APPLYING OUR WATER EXPERTISE TO OIL & GAS

Water and Oil & Gas have similarities

- High pressure fluid environments
- Potential transference of hydraulic energy from a high-pressure fluid to a low-pressure fluid
- Opportunities to eliminate waste in system – increase efficiencies and decrease costs

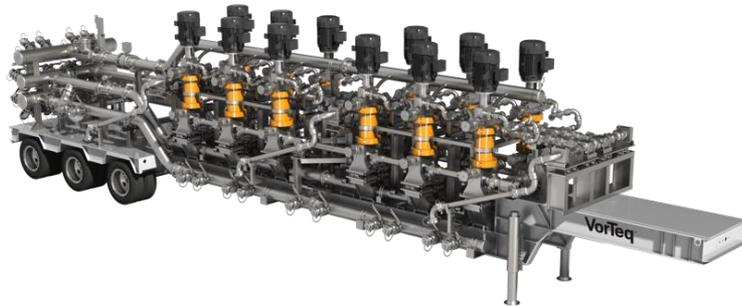
Leveraging Water experience to build core competencies in Oil & Gas

- 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

Pump Preservation

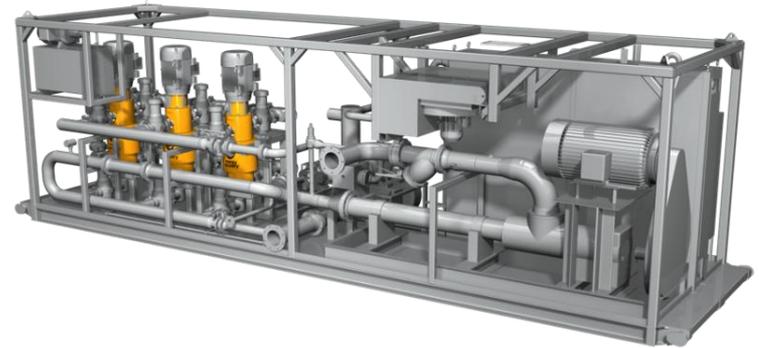


VorTeq



- Hydraulic fracturing technology solution
- Houses 12 PX Pressure Exchangers
- Designed to isolate and save frac pumps
- Addresses pump failure at frac sites
- Re-routes hostile frac fluid away from critical and costly pumps
- Currently in R&D stage

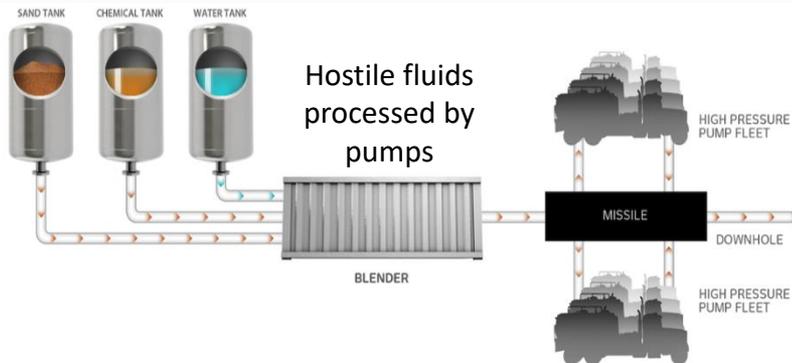
MTeq



- Mud pumping technology solution
- Houses three PX Pressure Exchangers
- Designed to isolate and save mud pumps
- Addresses pump failure at drilling sites
- Re-routes hostile drilling fluid away from critical and costly pumps
- Currently in R&D stage

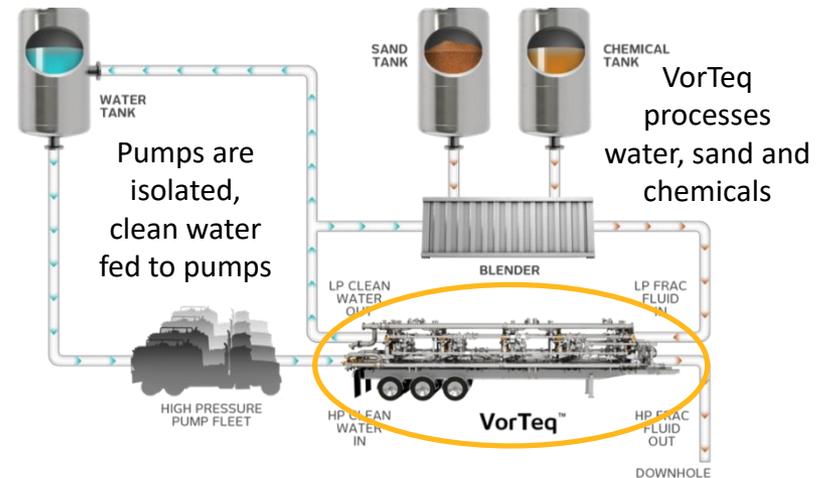
VORTEQ PROTECTS HIGH PRESSURE PUMPS, REDUCES COSTS

Status Quo



- Pumps process water, chemicals and sand
- Pump assets quickly destroyed

With VorTeq



- Maintenance savings (\$3M - \$4M¹)
- Lower pump redundancy and CAPEX (\$1M - \$2M¹)

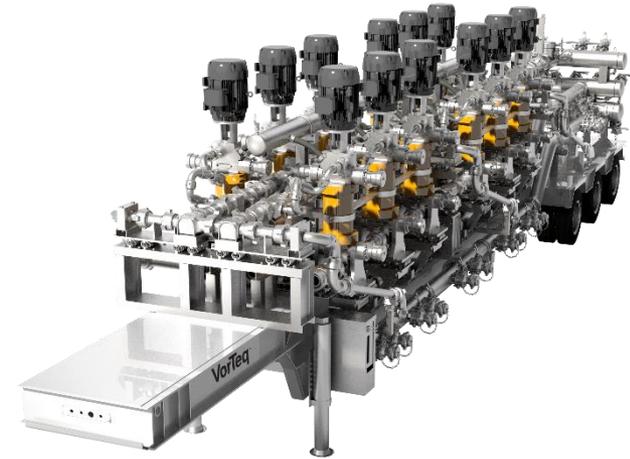
***Longer-term it may be possible to pair VorTeq with centrifugal pumps
Further decreases need for pumps (\$8M to \$12M savings¹)***

¹Energy Recovery Estimates – savings measured in p/y p/fleet

VORTEQ COMMERCIALIZATION REMAINS OUR FOCUS

Materially advancing VorTeq technology

- Confident in core pressure exchanger technology
- Substantial progress in advancing and implementing system level design enhancements
 - Required prior to Milestone 1
 - Critical for technology commercialization
- Technical challenges continue to become less complex in nature



Continual field testing and system run time critical to reach commercialization

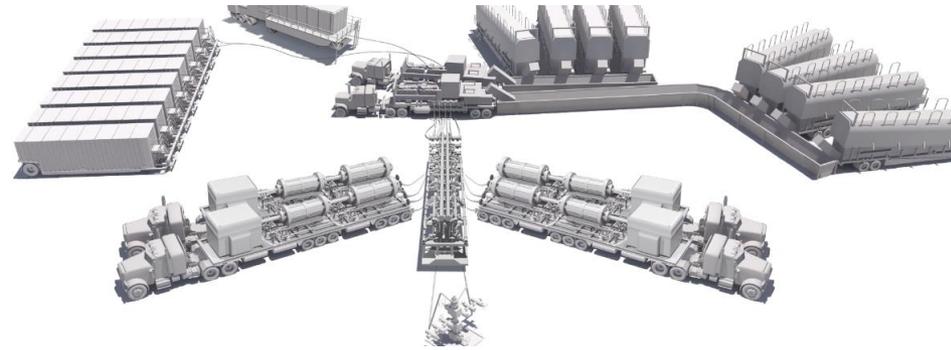
- Confirming system reliability and repeatability in imperfect real-world operating conditions
- Establishing VorTeq operating protocols
 - Integrating pressure exchangers, missile manifold, and controls and automation
 - Understanding interplay of VorTeq technology with standard frac operations
- Identifying any and all failure modes to engineer solutions



OUR COMMERCIAL DEVELOPMENT CENTER IS CRITICAL TO GROWTH

Rigorous VorTeq system testing and validation ongoing

- Facility uses industry standard equipment to simulate the pressures, flow, and operating conditions of a real frac site
- Allows us to confirm system reliability and repeatability in variable 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
- Investing in additional personnel to expand testing capabilities to seven days/week

An investment in the long-term success of our Oil & Gas business

- Will house 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

Entered into a 15-year license agreement with Schlumberger Technology Corporation

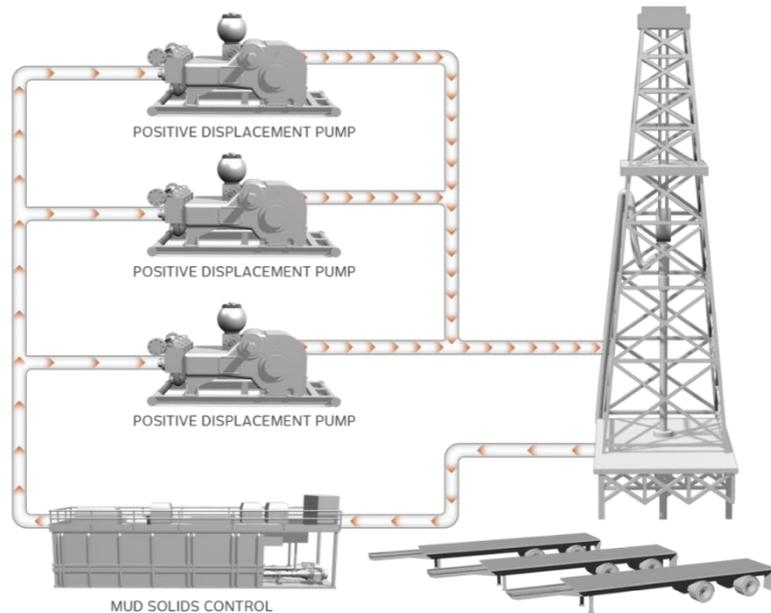
- Exclusive rights to VorTeq for on-shore hydraulic fracturing
 - Upfront **\$75M** exclusivity fee
 - Two separate **\$25M** milestone payments (for a total of **\$50M**) subject to certain KPIs
 - ✓ Milestone 1 (M1): Frac at product licensee test facility
 - ✓ Milestone 2 (M2): Frac at customer exploration & 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

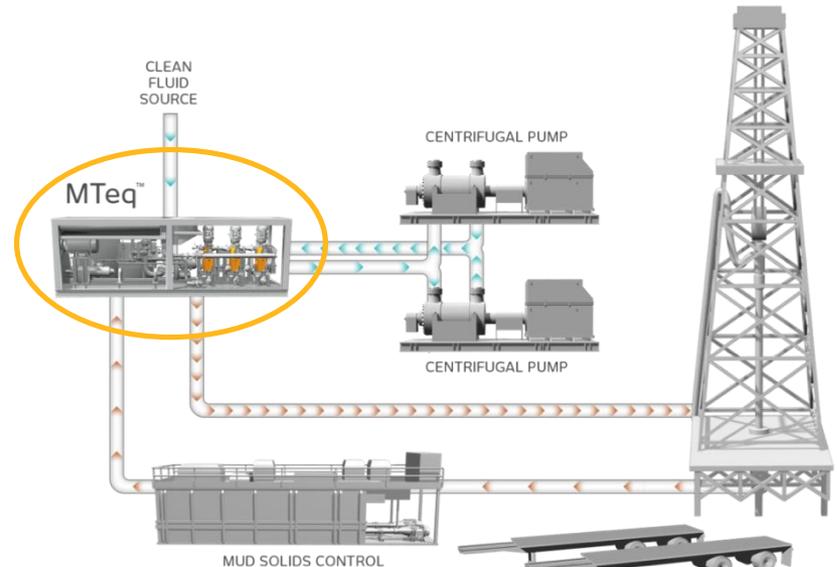
MTEQ REPLACES POSITIVE DISPLACEMENT PUMPS, REDUCES COSTS

Status Quo



- Positive displacement pumps process drilling fluid today, wearing down and destroying pump assets

With MTeq



- Highly efficient centrifugal pumps process clean water, reduce/preserve pump assets, lengthen life and reduce costs

WE ARE PROACTIVELY PREPARING FOR POST COMMERCIALIZATION EXECUTION

Manufacturing

- Construction has begun on manufacturing facility
- Building infrastructure to support testing and commercial production levels
 - Procuring advanced equipment to precision machine, inspect and test tungsten carbide components
 - Enables rigorous testing of tungsten carbide pressure exchangers at scale prior to field deployment
- Training machinists in preparation for opening of facility later this year

Supply Chain

- Sourcing and qualifying multiple suppliers for critical components
- Working through lead time and supplier constraints

Organizational Execution

- Key members of Oil & Gas team relocated to Texas
- Building support organization
- Investing in IT and other necessary infrastructure



Strategic Summary



Water

Steady, Visible Growth

- Global water demand outlook continues to improve and leads to further optimism
- Robust backlog and pipeline driving expected water segment growth in 2019 and beyond
- Thermal to SWRO transition adds to potential long-term demand trends
- Looking to leverage our current desalination position
 - Sales and distribution channel offers product portfolio expansion potential
 - Exploring organic and inorganic growth initiatives

Oil & Gas

Applying PX Pressure Exchanger Expertise to a New Industry

- VorTeq – Focus remains on expediting path towards commercialization and shortening design iteration cycle
- Commercial Development Center yard is operational
 - Accumulating critical runtime at representative scale

Financially Flexible Balance Sheet

- Solid net cash position allows for strategic options

Thank You

