

# Energy Recovery, Inc. Introduces the PX-300 Device

## ERI's Largest Energy Recovery Device Seamlessly Integrates into any SWRO Plant's Infrastructure; Reduces Energy Consumption by up to 60 Percent

SAN LEANDRO, Calif.--(BUSINESS WIRE)-- [Energy Recovery, Inc.](http://www.energyrecovery.com) (NASDAQ: ERII), a leader in the design and development of energy recovery devices for desalination, today introduced the PX-300 device to the company's portfolio of PX Pressure Exchanger(R) (PX) technology. The PX-300 device is the highest-capacity energy recovery device offered by ERI. Designed to reduce energy usage and related costs, this new device handles flow rates of 300 gallons per minute (68 m<sup>3</sup>/hour) per device. The modular, standardized design allows the PX-300 to be used in the world's largest desalination plants.

ERI's PX devices improve the energy efficiency of seawater reverse osmosis (SWRO) by up to 60 percent, making desalination a cost-effective solution for clean water supply. PX devices also reduce the carbon footprint of desalination, saving more than 700 MW of energy and reducing CO<sub>2</sub> emissions by more than 2.3 million tons per year worldwide. More than 6,700 PX devices are currently deployed or under contract to be installed at desalination plants across the globe.

"As SWRO desalination continues to gain global acceptance to address worldwide water shortages, continuous technology advances are required to meet energy efficiency and plant reliability requirements," said Dr. Richard Stover, chief technical officer at ERI. "ERI is leading a global effort to make seawater desalination affordable. Our energy recovery devices are the established market leaders, driven by our engineering, manufacturing expertise and dedication to meeting customer demand. The PX-300 device represents the latest in innovation while maintaining the high performance, elegant design and ease of implementation consistent in all of our products."

Built on the same engineering principles as ERI's standard PX product family--including the PX-220 and the PX-260--the PX-300 device delivers a highly efficient, scalable solution for mid-size and large desalination plants that need premium performance in a larger device. In addition, the PX-300 device features the latest side-port housing technology to provide better unit performance and enhanced corrosion resistance. The PX-300 enhances ERI's leading portfolio of energy recovery products. Benefits include:

- Unmatched Performance--The PX-300 device operates at up to 98 percent efficiency and its performance will not decrease over time. The new product also achieves a significant reduction in mixing compared to the PX-220 and PX-260 devices, enhancing desalination system performance and improving efficiency by reducing membrane feed pressure.
- Smooth Startup and Operation--Like all of ERI's PX devices, the PX-300 operates without the pulsations and water hammer caused by competing

isobaric energy recovery devices. These pulsations have been known to complicate and delay plant startups and may damage plant structures, compromise peripheral desalination equipment and/or adversely affect plant safety. In contrast, hundreds of SWRO plants around the world have started up with PX technology without delays or pulsation-related equipment performance problems.

- Minimal Footprint--The overall footprint associated with installing a PX-300 device is six times smaller than competing isobaric-device installations, saving valuable plant floor space. The PX-300 unit also weighs just over 80 kilograms and does not require any special foundation or other support structure, helping to minimize the overall footprint and installation cost of a desalination plant.
- Virtually Maintenance Free--The PX-300 device, like all of ERI's solutions, has just one moving part and requires no electricity or direct control system. PX rotors float on hydrodynamic bearings that do not exhibit wear over long device lives. With wrought metal ports, the PX-300 device provides optimal corrosion resistance. This simple yet elegant design requires no periodic maintenance, making the PX-300 device constantly available and reducing costly system downtime.
- Highly Scalable Design--Like all of ERI's PX models, the PX-300 device offers a unique modular design that can scale quickly, efficiently and cost-effectively. Unlike competing solutions, PX devices are standard models that require no customization and can be installed in any orientation. This plug-and-play system is ideal for new construction as well as for retrofitting or expanding existing plants.

The PX-300 device is available now. For pricing or other information, send an email to [sales@energyrecovery.com](mailto:sales@energyrecovery.com).

## About ERI

Energy Recovery, Inc. (NASDAQ:ERII) designs and develops energy recovery devices that help make desalination affordable by significantly reducing energy consumption. ERI's PX Pressure Exchanger(TM) (PX(TM)) device is a rotary positive displacement pump that recovers energy from the high pressure reject stream of seawater reverse osmosis systems at up to 98% efficiency. The company is headquartered in the San Francisco Bay Area with offices in key desalination centers worldwide, including Madrid, Shanghai, Florida and the United Arab Emirates. For more information on ERI and PX technology, please visit [www.energyrecovery.com](http://www.energyrecovery.com).

Source: Energy Recovery, Inc.