



A New Paradigm of Energy Efficiency, Energy Recovery and Financial Benefits for the Heating and Cooling Marketplace.



## Overview

**Energy Recovery Systems Inc.** is committed to the conservation of energy and the preservation of our natural resources through significant reductions in energy consumption from within the HVAC marketplace.

We provide significant reductions in capital expenditures compared to legacy equipment (boilers and chillers). This is further met with significant reductions in direct energy and operating costs compared to legacy equipment.

**Captive Energy**, our exclusive product line, offers a scaleable design that allows for wide uses within the commercial, industrial and residential markets.

## Why Captive Energy

- A paradigm shift in methodology regarding energy conservation technology for the heating and cooling industry
- Ground breaking technology that is disruptive to legacy heating and cooling systems
- Integrated heating and cooling design architecture that enables one function such as heating to be provided "without cost" while the other function "cooling" operates with high efficiency
- Technology that offers significant reduction in energy consumption and overall energy costs
- Products that are built with the highest quality materials and are certified for the North American marketplace

The **Captive Energy** product line provides significant cost savings from lower energy usage, reduced operating costs and substantially lower acquisition costs. Combined, this effect lends to a dramatic reduction in fuel consumption, thereby reducing greenhouse gas emissions and lowering the carbon footprint.

**For further information, please contact:**

**Aniello (Nello) Manzo**

*President & Chief Operating Officer*

[amanzo@energyrecovery.ca](mailto:amanzo@energyrecovery.ca)

**Energy Recovery Systems Inc.**

Unit 102 – 4381 Dawson Street

Burnaby BC V5C 4B4 **604.294.8324**

[energyrecovery.ca](http://energyrecovery.ca)



## CAPTIVE ENERGY LINE™

Reducing Harmful Emissions, Creating Re-usable Clean Energy – Improving the Environment

### HEAT RECOVERY WATER HEATERS

#### KEY UNIT FEATURES

- Designed to use waste heat created from cooling loads to satisfy heating loads in a building
- Waste heat energy can be used to satisfy potable water heating for human consumption or space heating loads up to 140°F
- Energy is captured, therefore greatly reducing the fossil fuel consumption of the boiler
- This unit is suitable for new installations and as additions to buildings with existing water-cooled water chillers

### WATER CHILLERS WITH HEAT RECOVERY

#### KEY UNIT FEATURES

- Designed to simultaneously meet a building's cooling and heating loads
- Removes heat from a water source and transfers it to a space heating water loop or to potable water for human consumption with water temperatures up to 140°F
- Capturing waste heat can eliminate the need for additional heat supplied by burning fossil fuels in a boiler
- Units can operate primarily as either a water chiller or as a heat recovery unit
- Operator is able to change the current operating mode at any time to best suit the current demands
- When operating as a water chiller the cooling load will be satisfied and heat recovery occurs without any additional power consumption
- When operating as a heat recovery unit the full heating load will be satisfied with some additional compressor power, however the savings in fossil fuel costs more than offset the cost of additional electrical power to run the compressor

### WATER-COOLED WATER CHILLERS

#### KEY UNIT FEATURES

- Designed to remove heat from a building's chilled water loop and provide space temperature (air) conditioning or dehumidification
- Equipped with an evaporator hydraulically connected to the cooling load, heat is transferred to the single water-cooled condenser during the refrigeration cycle and then rejected to the cooling loop
- A building's cooling loop typically absorbs the heat from the condenser and rejects it to the ambient air through a rooftop cooling tower



**ENERGY RECOVERY**  
SYSTEMS INC.