



## Nearly every hour, of every day, buildings abandon free energy

Building ventilation systems are vital to occupant comfort and efficient HVAC performance. Yet, virtually every single day they literally throw away energy – costing you thousands of dollars a year!

ICT designs and installs Thermal Energy Recovery systems that recapture and reuse the wasted energy from building ventilation.

### Waste Heat Energy Recovery (WHER)

Every building exhausts and replenishes high volumes of air to maintain proper indoor air quality. ASHRAE recommends 20 cubic feet/hour of fresh air for each building occupant.

Whether cooling in the summer or heating in the winter, your building exhausts large volumes of air at a relatively constant 74 - 76°F.

ICT's Waste Heat Recovery (WHR) systems are designed to recapture and reuse the massive amount of energy being wasted through building ventilation.

Using simple, yet highly efficient and reliable, equipment and methods *ICT's WHR solution recovers the energy equivalent of billions of Btu's per year*. This energy can be used to:

- pre-cool the building makeup air
- dehumidify the building makeup air
- pre-heat the building makeup air
- heat domestic hot water

Unlike passive heat recovery alternatives (i.e. heat wheels and run-around-loops) ICT's WHR system augments the temperature difference ( $\Delta T$ ) across the heat recovery coil resulting in dramatically higher performance and efficiency.

### Thermal Energy Recovery

- Free Heat
- Improved Cooling Efficiency
- Reduced Gas Consumption
- Conserve Electricity
- Conserve Water
- Lower Energy Costs
- Reduced CO<sub>2</sub> Emissions
- LEED/BOMA Go Green points

### ICT's WHR System

- Extremely energy efficient – typical COP of 6.0<sup>1</sup> (Coefficient of Performance)
- Rack-mounted heat pump modules producing simultaneous hot and cold fluids in separate circuits
- High performance fin-tube coils in exhaust & makeup air units
- Energy Star pumps, filters, etc.

<sup>1</sup> COP = 6 means that 6 units of energy output are delivered for every 1 unit of energy input.