

National Energy Technologies

Presents

Advanced Conservation Strategies for Hotels



Scott Milne BPI RESNET LEED GA

Thank You
Boston Green Tourism

Advanced Retrofit Conservation Strategies

Will

Provide the fastest ROI

Protect building systems and extend system life

Reduce utilities, cost of labor, liability and multiple other recurring expenses

Dramatically reduce your organizations carbon footprint and can serve as a basis for green marketing platform

Upside down Energy Audit

Comprehensive Retrofit Conservation?

[con-serve] *To prevent injury, decay, waste or loss of performance*

Retrofit Means Affordable

Comprehensive means impartiality

Establish an energy plan

Locate your solutions provider

Think outside the box

Efficiency One System at a Time

Building Power

Building Water

HVAC / Chiller

Lighting

Laundry

Gas Heating

Refrigeration

Ventilation

Irrigation

Exit Signs

Cooking Ventilation

Pools

Building Envelope / Roof / Windows



Room Energy Management



10,313 Hotels in the United States
Over 100 in Boston alone

Room Energy Management



Totally Wireless Integration

World Class Occupancy Sensing

Intelligent Recovery Time Technology

Control HVAC, lights, plugs, drapes

Window and Sliding Door Sensors

Works with P-Tac's and Mini Splits

125 Custom Management Settings

Cloud Based Controllable Dashboard

Virtual Engineer

Unparalleled Reporting

Case Study Crowne Plaza Times Square

795 Rooms “Eco Smart ” Room Energy System

November 2011 Documented 23% Runtime savings

Annual Saving Proven \$94,325

Reduction of 277,710 KWH

Saved 11,266 Therms

Unit run time reduction 315,918

“we wanted functionality, legible displays, easy to understand controls all in addition to the substantial financial returns from the eco-smart system”

Stephen Pletcher
Senior VP of Asset Management
and Operations



Case Study Sheraton Dallas Hotel

1840 Rooms “Eco Smart ” Room Energy System

April 2009

Annual Run Time Saving Proven 45.3%

Winner of 4 of 5 green keys award

Saved 19,200 Therms

Sold occupied rooms is 40%

“We selected Eco Smart because they allow us to guarantee a comfortable consistent temperature in each room. We replace our previous system to achieve accurate occupancy sensing along with Recovery time technologies”.

David Reyes
Director of Engineering



Laundry Ozone Injection



Laundry Ozone Injection

Kills 99.99% of deadly super bugs in cold water

Eliminate or reduce detergent by 75%

Reduce wash and rinse and dry cycles

Saves on, water, gas, electric, soap and linen

Introduce much less chemical into the waste stream

Higher quality laundered product

Cooler laundry rooms

Extends equipment life and reduces maintenance



Water, Natural Gas & Electrical Savings:



Because the system works best in cold water, it can effectively cut water usage by 5-25 percent! It eliminates or dramatically reduces hot water usage and natural gas for heating the water by 85+% while significantly cutting wastewater and sewage. Any wastewater that is produced is much cleaner, containing fewer contaminants.

According to Sergeant Schmidt of Missouri State Prison. “The Corona Discharge Ozone System was piloted at several prisons one of which processes 35,000 pounds of laundry daily. The savings will be around \$236,000 in that one facility alone”.

Boost Laundry Productivity:

Using the system, laundries boost laundry productivity by shortening or eliminating rinses during the wash process. In addition, the system effectively shortens dry-time by up to 20 percent - improving laundry production and increasing linen life!

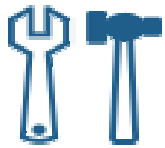


Eliminate Super Bugs



The System is the *only* system on the market that's *clinically* proven by two independent laboratories to eliminate more than 99 percent of super bugs in the wash with use of patented Interfusor. Super bugs are bacteria that are resistant to the antibiotics used to treat them. As a result, the system helps prevent the spread of infections caused by super-bug bacteria and many harmful viruses, including but not limited to Hepatitis, C.diff, aspergillus niger, HIV and MRSA. While chlorine bleach can only be utilized in one step of the wash cycle, ozone's oxidation power is utilized whenever water is present. It is a powerful and natural biocide - destroying bacteria, deactivating viruses and controlling odors.

Installation is Simple



Ozone is an infuser system that automatically injects the correct amount of ozone into the washer sump. The system features a 25 x 22-inch footprint and can sit on the floor or be mounted to a wall under normal conditions. Installation takes about 15 minutes per washer and does not require special plumbing or electrical configurations

Not sure? try it at home

Introducing the Pure Wash Residential System, Powerful sanitation at an affordable price



Return on Investment



What's remarkable about the system are the results. Not only do laundries gain productivity using less hot water, water, gas and potential chemical savings, they cut utility costs, processing time, extend linen and laundry equipment life, eliminate super bugs, and improve wash quality! In most cases, laundry operations see a return on investment of less than two years and as short as 3 months!



Affordable LED Tubes

Machine Made LED bulbs By Integrated Lighting

4' tube gets 1735 lumens from 288 quality SMD diodes

5 year 50,000 hour guarantee

Remove ballast and use existing fixtures

Superior heat sink technology

Incentives available DLC Approved

Saves energy and reduces maintenance

Fully dimmable and works well with lighting controls



Cost and Savings Estimate - LED Lighting

Green Hill Condominium

Wynwood PA

610-649-5800

Barry Bauman

Current Bulb / watt ea T-8 32

Ave. use in Days Per Mo 30

Energy Rate ? 0.086

Hours in use 24

Cost of each fixture \$32.69

		Current Condition		LED option 1 18 watt (40k)		LED Option 2 18 watt (40k)		LED Option 3 15 watt (40k)
Count 4'		400		400		350		400
Watts each bulb		32		18		18		15
hours on time		24		24		24		24
days in use / month		30		30		30		30
Total Watts used/mo		9,216,000		5,184,000		4,536,000		4,320,000
Convert to KWH		9216		5184		4,536		4,320
Lighting cost /mo @	0.086	\$793		\$446		\$390		\$372
Project Cost				\$11,116.00		\$9,726.50		\$10,696.00
LED Savings / mo				\$346		\$402		\$420
Watt reduction per bulb				14		14		17
Rebate/ watt reduced	\$0.35			\$1,960		\$1,715		\$2,380

Return on Investment ROI (Monthly)	32	24	25
------------------------------------	----	----	----

Savings after 3 years	36	\$1,337.08	\$4,734.90	\$4,433.10
Savings after 5 years	60	\$9,639.13	\$14,375.84	\$14,519.17
Savings after 8 years	72	\$24,906.15	\$28,922.81	\$30,258.21

Walk In Refrigeration Efficiency

Comprehensive Food Preservation Efficiency a powerful combination

Electronic Commutation Motors
Refrigeration Desiccant
Food Temperature Simulator
Curtains and door closers
LED lighting

Extends Equipment Life

Reduce short cycling

Cut defrost cycles

Dry out insulation

Reduce Liability

Passive solution that removes moisture and ethylene gas

Remove odor, bacteria, acid, mold spores, fungal spores



Satisfied Customers

"Since we have installed the Filters, our produce lasts longer. The greatest difference, however, is in the meat locker odors. The smell used to be really bad, and now is much better!"

John Glenn The Melting Pot

"I know how the filters make our flowers last longer and smell better. Recently, I had your panels installed in my reach-in refrigerators. The filters keeps them running cool and dry."

Danny Sexton, President, Florida Florists Assoc

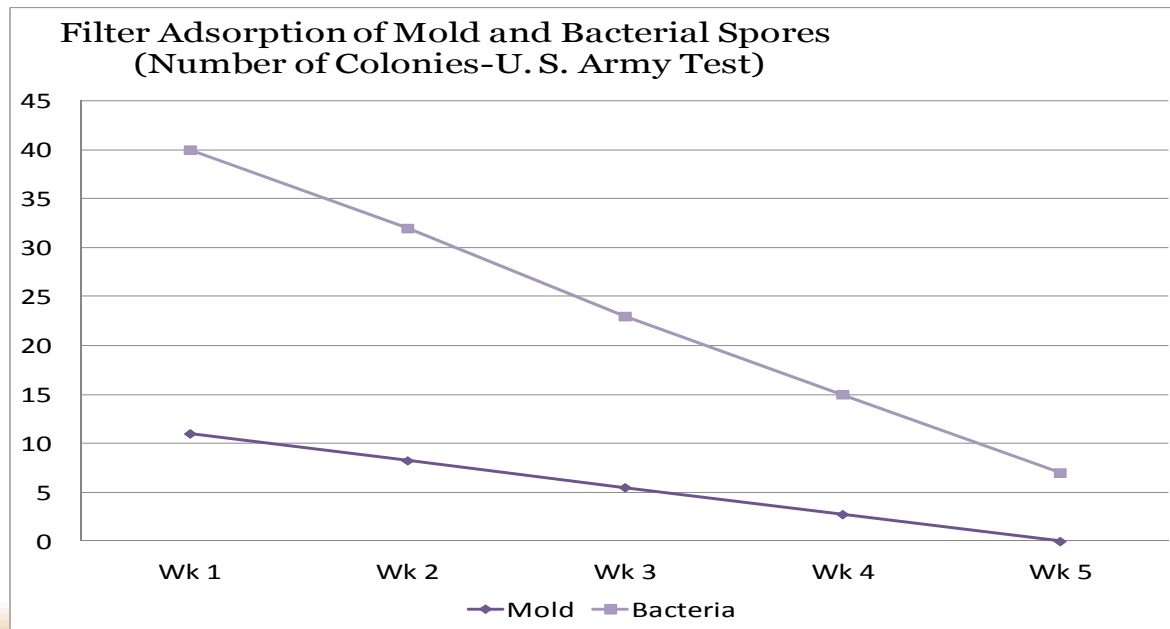
Since installing the food temperature Simulator, the amount of cycling on and off of the units has fallen by 30%, which will no doubt improve the life of the condenser units. Energy savings have been measured at 18%.

Andy Bunce Holiday Inn London



Reduce and Eliminate Mold

Eliminate the spores and moisture and eliminate mold



Display Case before Filtrate 100% Humidity



Display Case After a one
pound application Clean and Fresh

Filtirite Reduces the moisture that causes Freezer Icing



Gradually reduce your defrost cycles



Data logging confirms Daily 100% humidity Geco's Restaurant

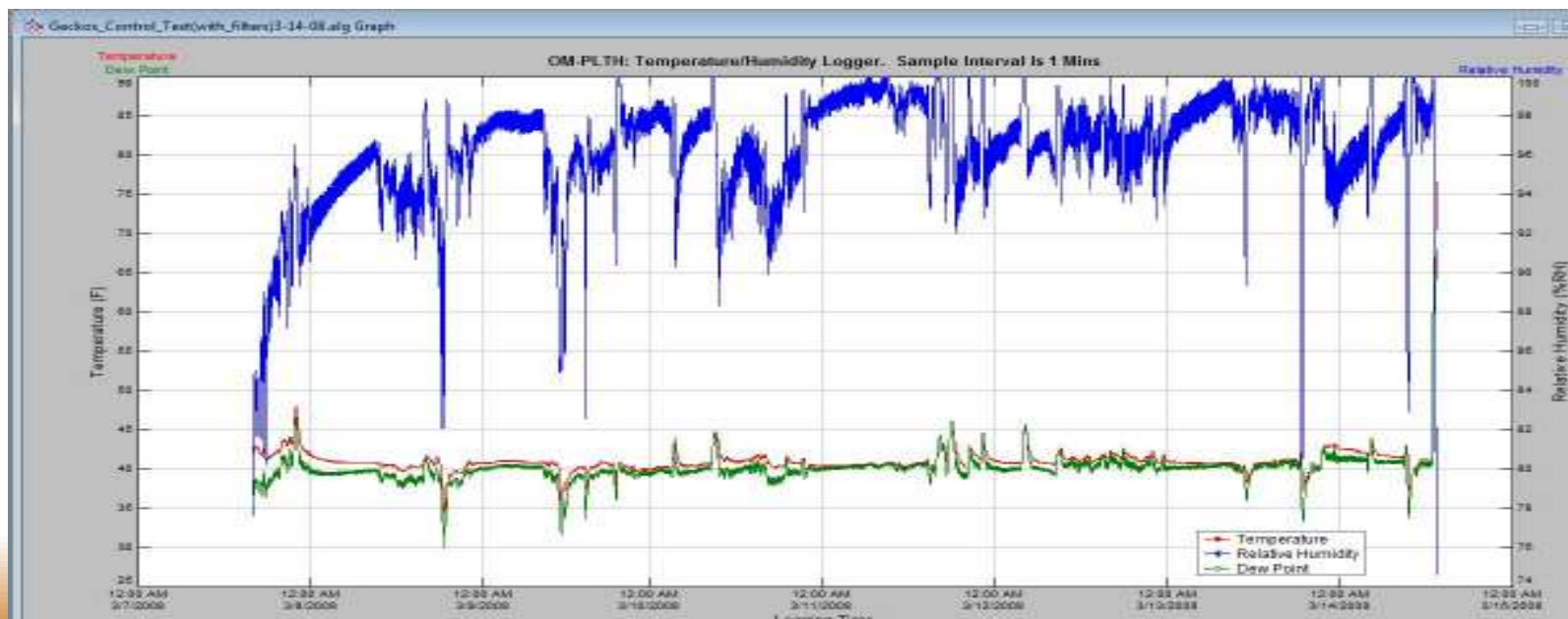
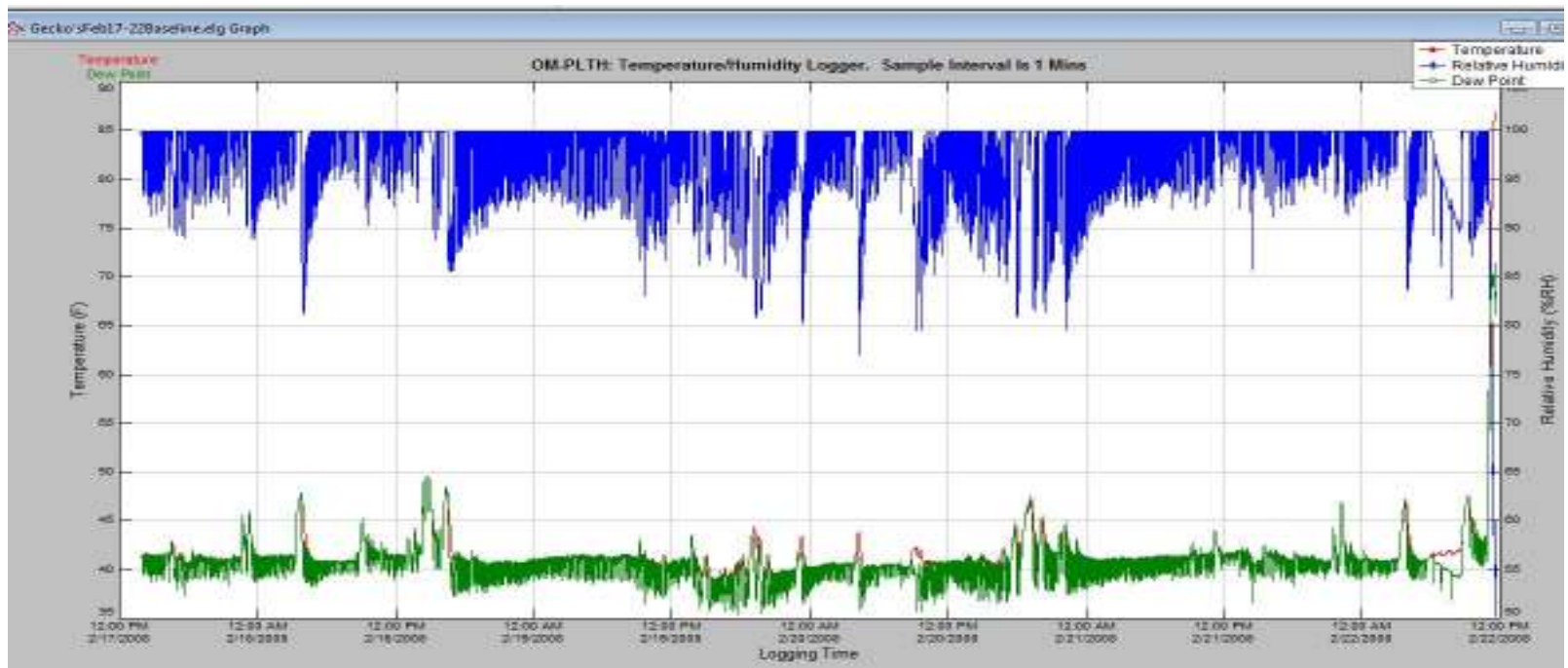


Photo-Luminescent Exit Signs

No energy, no radiation, glows bright for 30 hours



Evaporative Tower Water Purity

HVAC Towers can “blow down” a Million gal per year

Water treatment, electrolyte bromine, wetting agents

Reduce determination with galvanic corrosion inhibitors



Weather Based Irrigation

Conserves water with on site weather stations

Eliminates loss and damage from rupture

Cloud based



Window Tinting

Reduces solar gain

Decreases Thermal Loss

Low-e Without the Iridescence Beautifies Building



Thank You



National Energy Technologies

800-984-0332

www.NationalEnergyTech.com

