Smart Buildings

Dumbed Down to Proactive Building Management

Presented by:
Jerritt Gluck, Founder & CEO
Here’s the problem...

**OBsolescence**

- **Old Technology** Is newer better?
- **Lack** of information to act on – the tenant calls to say “there is no heat”
- **It still works**... so why get rid of it? kick the can down the road but how far?
- **If it ain’t broke**...
- **When is your equipment OBSOLETE?**

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1 R.W. Leigh and E. Guerra presentation at the NYSERDA Multifamily Building Conference, Tales from the AMP Database (2006)
Who has the problem?
or as you may have asked yourself at some point...

Repair or Replace

• 65% of Heated Buildings in NYC are still using steam as a source for heat
• 15% of Heated Buildings Worldwide
• US: 2.5 million steam heated\(^1\)

$55 billion market in US

\(^1\) energy.gov
So how long is my equipment meant to last?

• Furnaces for forced-air systems last an average of 15-20 years*
• Hot water boilers last 13 – 21 years*
• Remember that a 25- or even 30-year-old system that’s been maintained may still work fine.

* 2007 Study by National Association of Home Builders & Bank of America
What to Do?
Bring old equipment into the 21st Century

Internet connectivity...  Knowledge...  Power...  =  Profits
Bonded Energy’s Solution...

Unique login
Operations Data
Knowledge

Power to make Decisions
Energy Management Systems

Profits
# Current options:

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<th>Bonded Energy Solutions</th>
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<th>Radiator Labs</th>
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*Based on U.S. Department of Energy’s Building America Program device evaluation criteria*
## Bonded’s solution...

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*Based on U.S. Department of Energy’s Building America Program device evaluation criteria*
Bonded Energy delivers solutions to provide system integration...from the boiler room to the C Suite...Actionable information at your fingertips.
Emissions Reduced by 20%+

Annual Greenhouse Gas Emissions:
- **Before**
  - EQUIVALENT TO 71 CARS
  - EQUIVALENT TO 38,000 GALLONS OF GASOLINE
- **After**
  - EQUIVALENT TO 57 CARS
  - EQUIVALENT TO 30,000 GALLONS OF GASOLINE

Annual CO₂ Emissions:

Introducing Strategic Asset Management

Before
- Proactive, Predictive Monitoring & Control

After

- In yr1, ~2,000 cars,
- Over the next five years... ~32,000 cars.

*Based on U.S. EPA Greenhouse Gas Equivalencies Calculator & reported 2014 Heating usage of 63,366 therms at 2609 Aqueduct Ave., Bronx NY*
Emissions Reduced by 20%+

The EPA & The Clean Air Act

Compatibility and the future – Open API
Conclusion

Retrofitting is the answer!

Existing Buildings lack “Eyes on the Equipment”, are Costly to Operate, Negatively Impact the Environment, and are Inefficient

Building owners are frustrated and so are residents!

Bonded Energy Solutions
Experts in Existing System Integration