

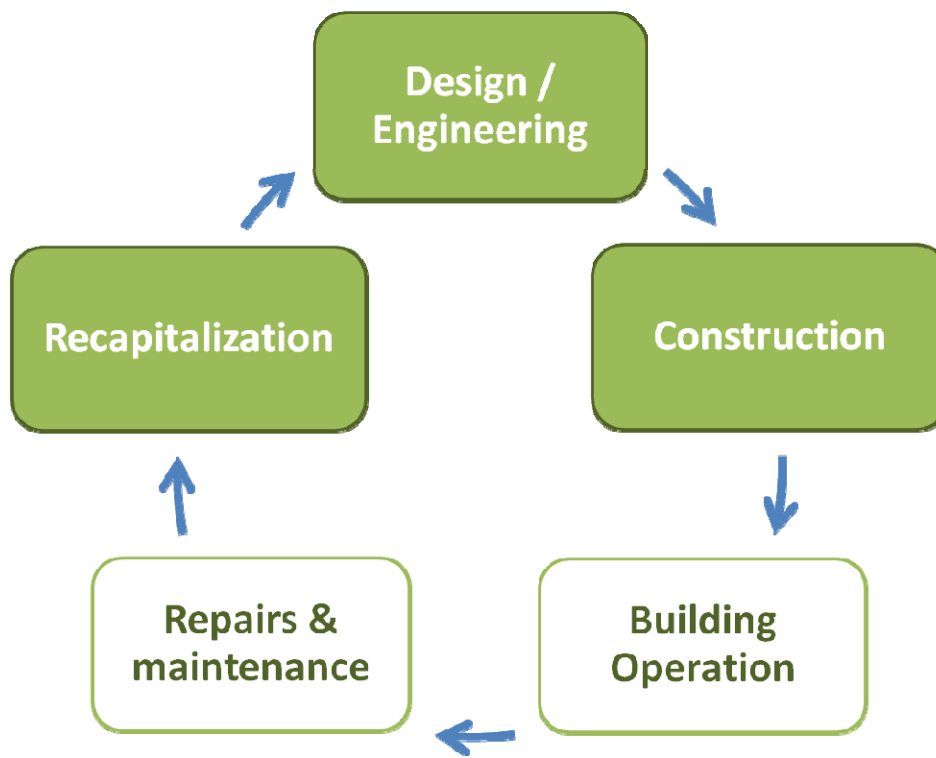


SHNNY Conference 6/72012
Energy Efficiency in Supportive Housing:
The Long View

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ONE: Focus on the FULL Project Life Cycle



TWO: Get the data, Analyze the Data Act on the Data



A BRONX BUILDING Energy Indices	May '10 - May '11	May '11 - May '12	Change	Median NYC Sample*	Diff.
Overall Energy (kBTU/SF/yr)	104	89	-15%	71	+25%
Cooling (BTU/SF/CDD)	4.7	3.9	-16%	0	+∞%
Heating (BTU/SF/HDD)	15.4	12.1	-22%	9.4	+29%
Non-Seasonal Electric (kWh/unit/yr)	2,275	2,520	+11%	1,342	+88%
Non-Seasonal Fuel (mmBTU/bdrm/yr)	13.2	12.4	-6%	13.4	-7%
Water Consumption (gal/bdrm/day)	131	230.5	+76%	120	+92%

*Median Values from 189 affordable housing buildings in NYC pulled from Energy Scorecards, a subsidiary of Bright Power



TWO: Get the data, Analyze the Data Act on the Data

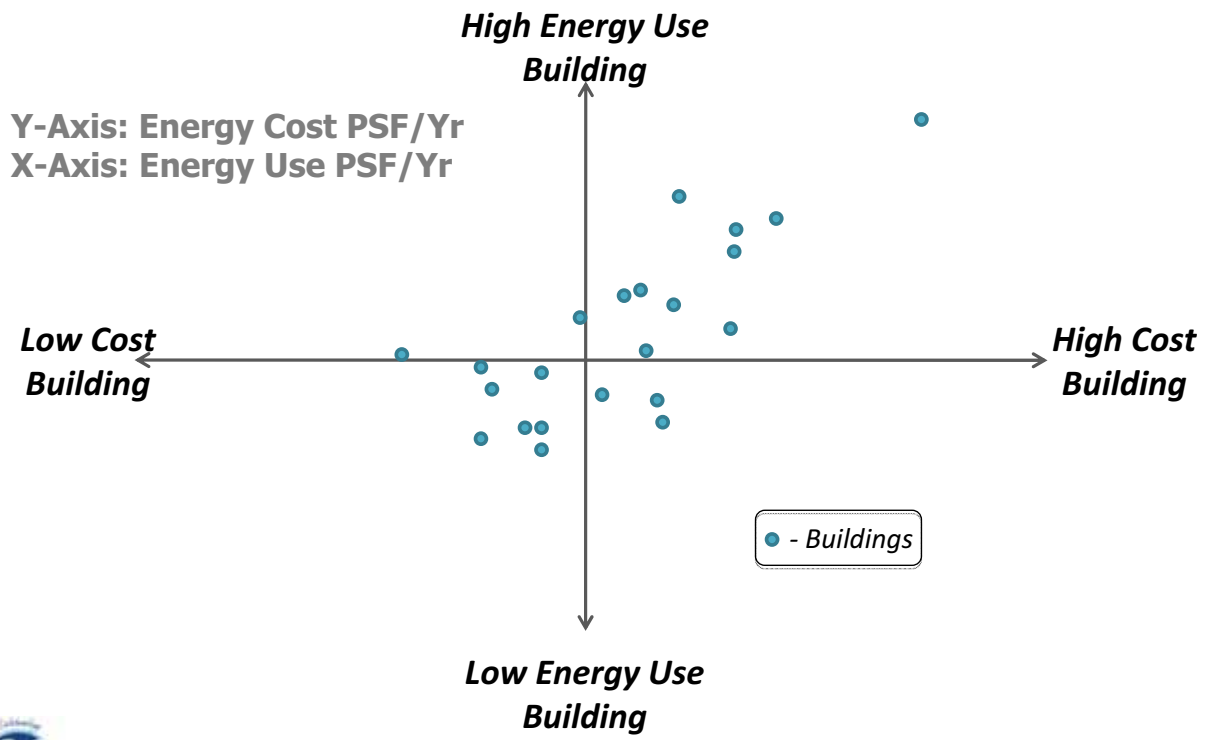


Most Recent Year Benchmark Result	A BRONX BUILDING	Median NYC Sample*	Difference
Energy Cost (\$/Unit)	\$1,848	\$1,339	+38%
Energy Cost (\$/SF)	\$1.96	\$1.24	+58%
Heating Cost (\$/Unit)	\$789	\$753	+5%
Heating Cost (\$/SF)	\$0.84	\$0.69	+22%
Natural Gas Rate (\$/mmBTU)	\$1.50	\$1.29	+16%
NS Electric Cost (\$/Unit)	\$642	\$343	+87%
NS Electric Cost (\$/SF)	\$0.68	\$0.31	+119%
NS Electric Rate (\$/kWh)	\$0.26	\$0.22	+18%
Water Cost (\$/Unit)	\$1,825	\$880	+107%



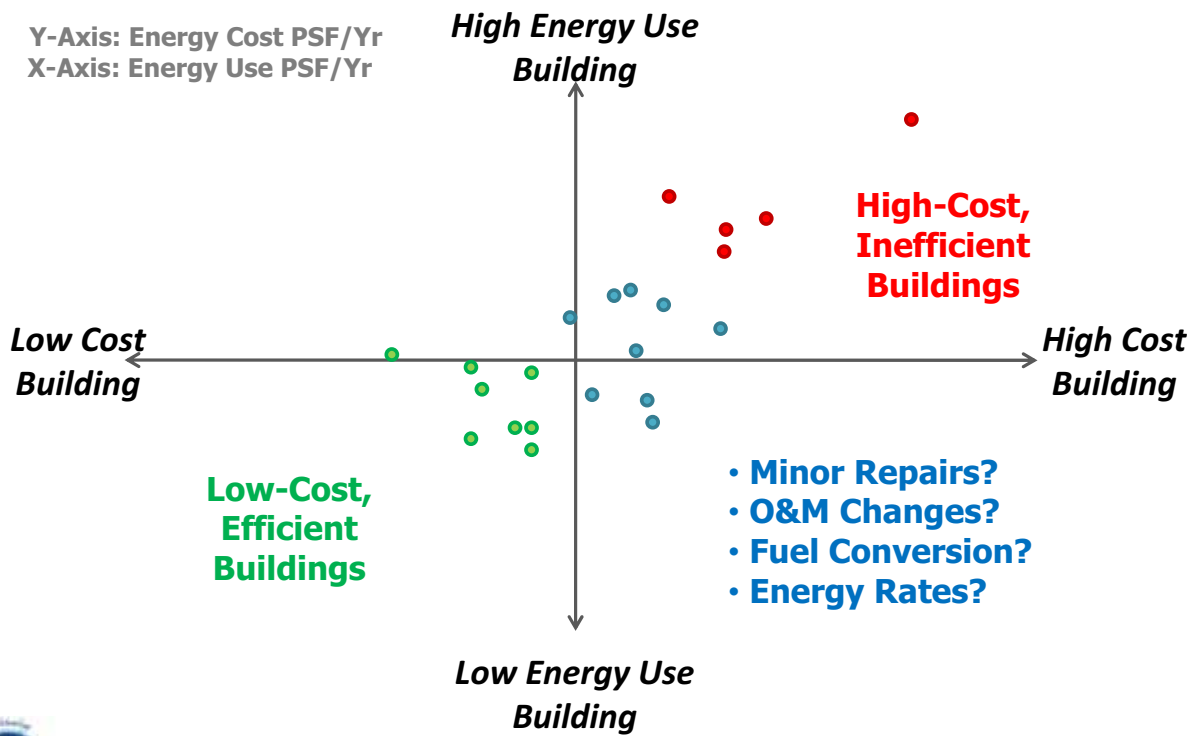
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THREE: Look at the whole Portfolio

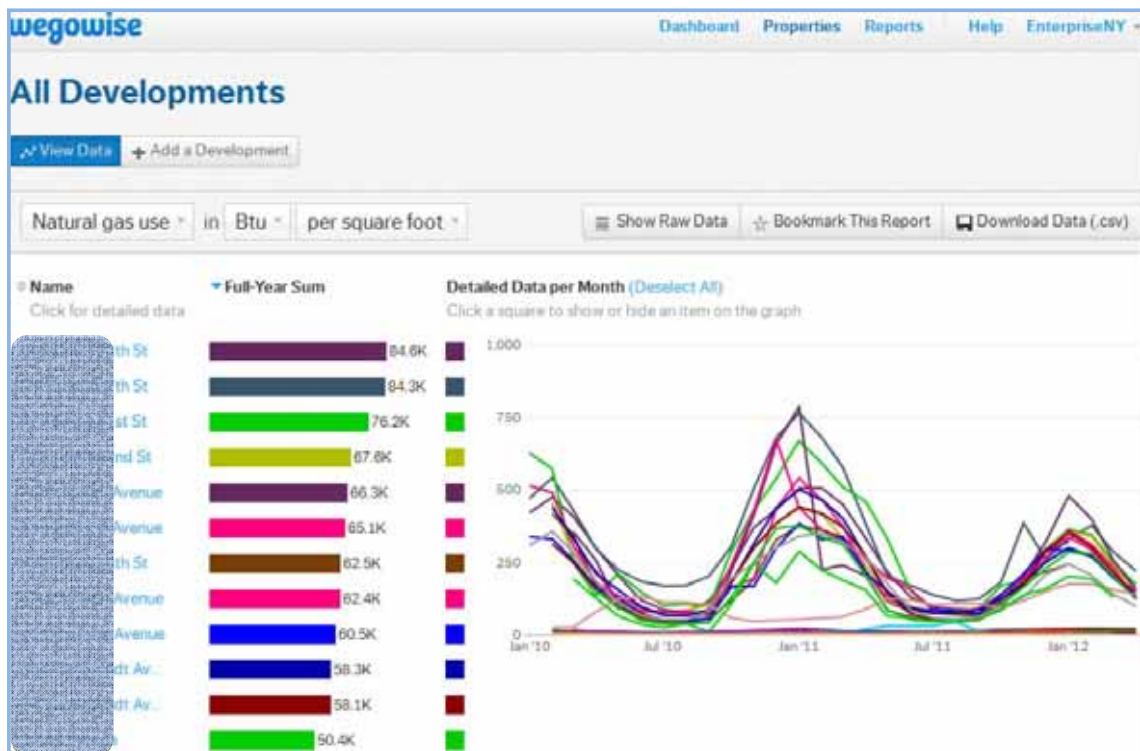


FOUR: Strategic Planning for the Portfolio

Y-Axis: Energy Cost PSF/Yr
X-Axis: Energy Use PSF/Yr



FIVE: Organizational Capacity Building



Courtesy of WegoWise: www.wegowise.com

FIVE: Organizational Capacity Building



ENERGYSCORECARDS Beta Welcome, Enterprise NYC

Portfolio Property Help Feedback Logout

Portfolio Dashboard List Reports Alerts Add Property

Portfolio Comparison - Annual Spend

Current Group Selection: CWP-Enterprise (56 in this group)
 Showing Properties with both scorecards: 41
 Total # Units: 1,648
 Total Square Footage: 1,503,228

Annual Spend	Full Year 2010	Most Recent Year	Difference
Owner Energy Spend	\$2,417,680	\$2,188,483	-9%
Cooling Spend	\$23,419	\$27,468	17%
Heating Spend	\$1,182,021	\$1,061,331	-10%
Non-Seasonal Electric Spend	\$567,955	\$440,924	-22%
Non-Seasonal Fossil Fuel Spend	\$644,285	\$658,760	2%



Courtesy of Bright Power's EnergyScorecards: www.energyscorecards.com

FIVE: Organizational Capacity Building



Bottom 5 Worst Buildings with the Cost Increases

Properties - ☉ Owner Energy Spend						
Portfolio	Property	Payment Code	# Units	Full Year 2010	Most Recent Year	Delta
		(T) X00	9	\$18,278	\$40,631	122%
		(T) T00	52	\$55,151	\$74,592	35%
		(T) T00	42	\$67,990	\$84,874	25%
		(T) T00	46	\$53,022	\$61,452	16%
		(T) T00	91	\$48,963	\$56,668	16%

Top 5 Best Buildings with the Greatest Savings

		(T) T00	18	\$46,959	\$33,527	-29%
		(T) T00	19	\$31,960	\$22,745	-29%
		(O) 000	70	\$110,163	\$76,373	-31%
		(T) T00	16	\$33,526	\$22,371	-33%
		AVE.	39	\$81,111	\$49,061	-40%

Courtesy of EnergyScorecards: www.energyscorecards.com



FIVE: Organizational Capacity Building



Photo: Bright Power

VS.



Photo: Steven Winter Associates



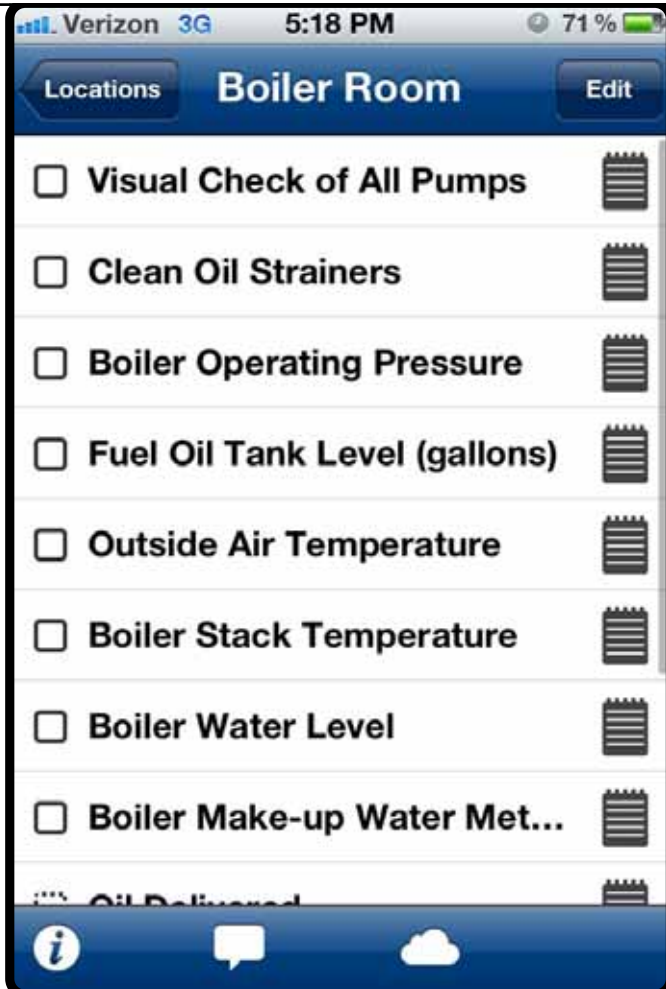
Courtesy of LogCheck:
www.logcheckapp.com





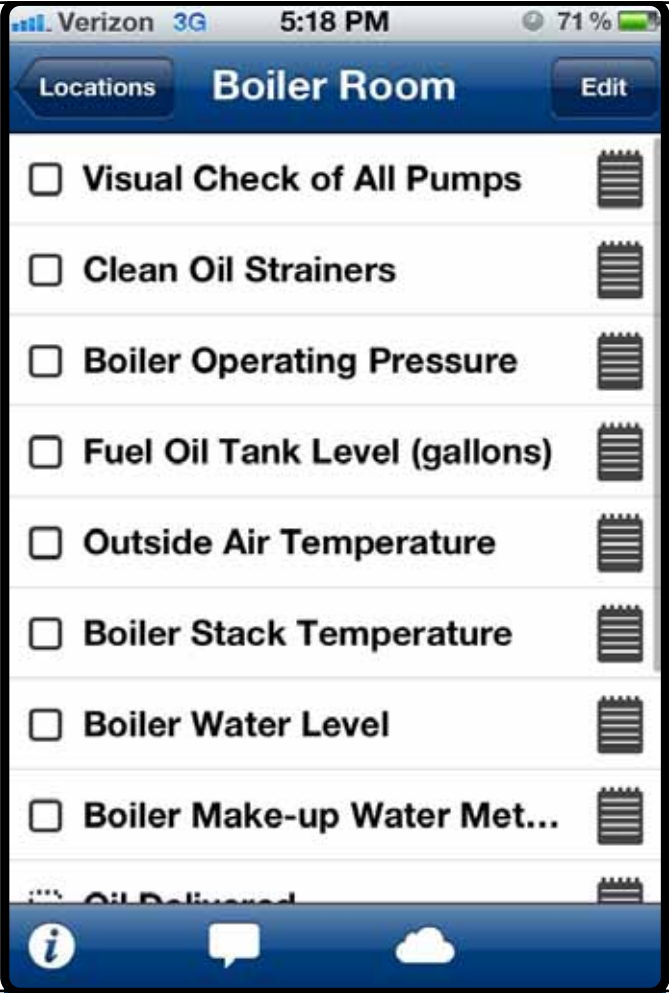
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Verizon 3G 5:18 PM 71%

Cancel 5/31/12 5:18 PM Save

Boiler Room
Boiler Stack Temperature ⓘ

550°F

Note

1	2	3	
4	5	6	
7	8	9	
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Courtesy of LogCheck:
www.logcheckapp.com



Verizon 3G 5:19 PM 71%

Boiler Room **Boiler Stack...** Edit

2012 May

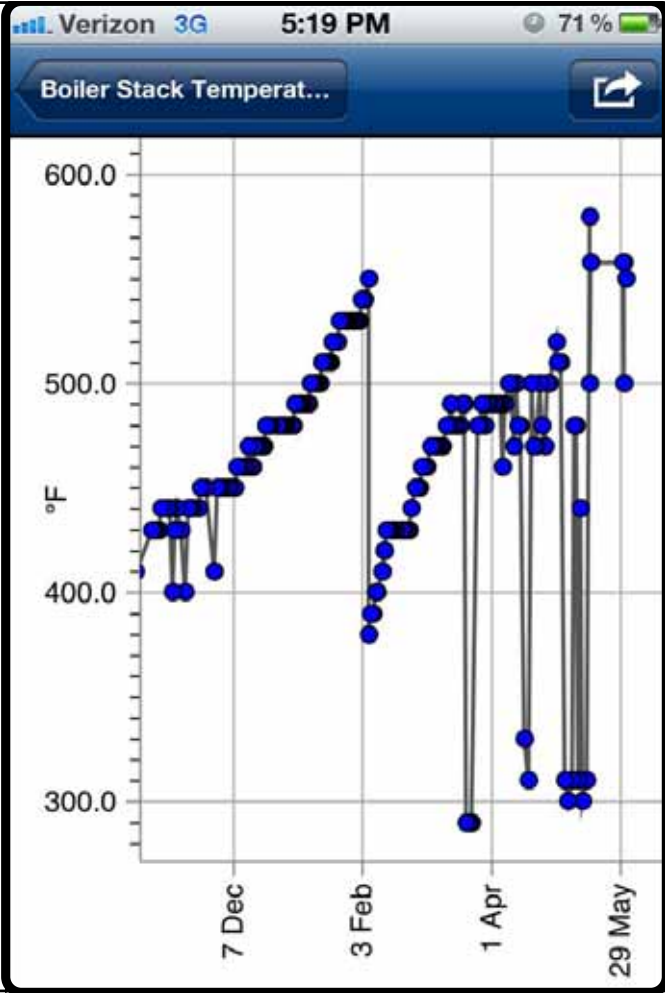
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Wed 30 9:16 PM	558°F	>
Wed 30 5:30 PM	500°F	>
Wed 30 11:46 AM	558°F	>
Tue 15 8:31 PM	558°F	>
Tue 15 12:24 PM	500°F	>
Tue 15 9:42 AM	580°F	>
Mon 14 8:29 AM	310°F	>

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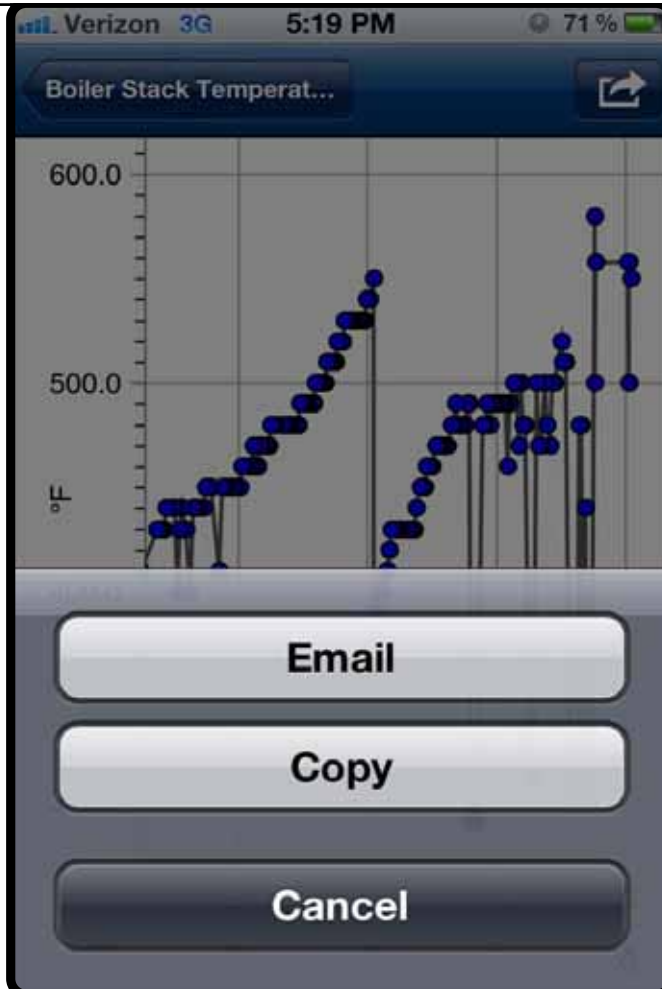
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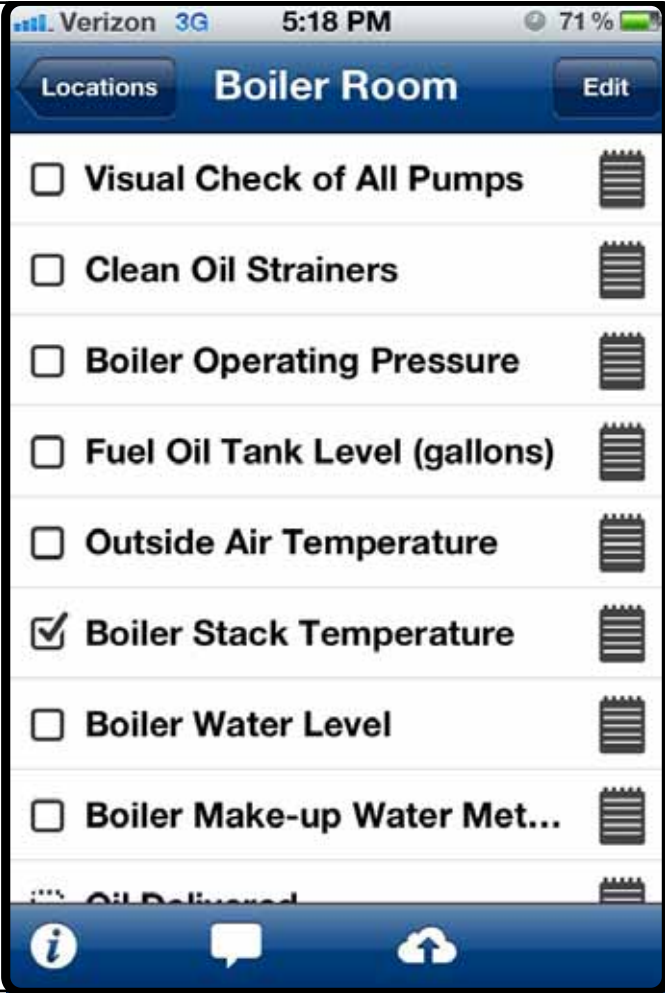
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Verizon 3G 5:18 PM 71%

Locations **Boiler Room** Edit

- Visual Check of All Pumps
- Clean Oil Strainers
- Boiler Operating Pressure
- Fuel Oil Tank Level (gallons)
- Outside Air Temperature
- Boiler Stack Temperature
- Boiler Water Level
- Boiler Make-up Water Met...
- Oil Delivered

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Courtesy of LogCheck:
www.logcheckapp.com





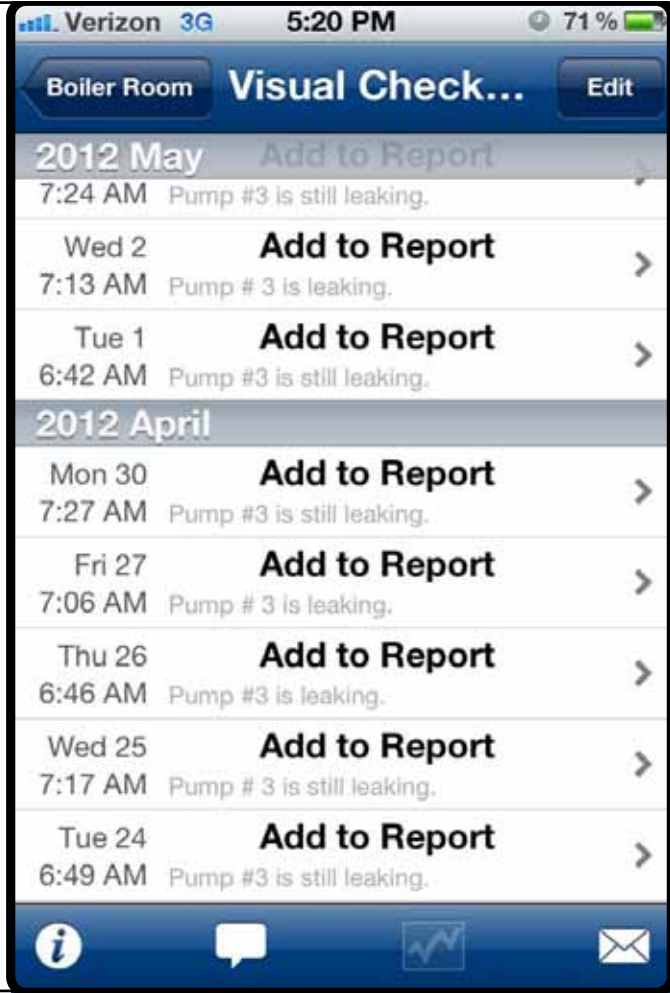
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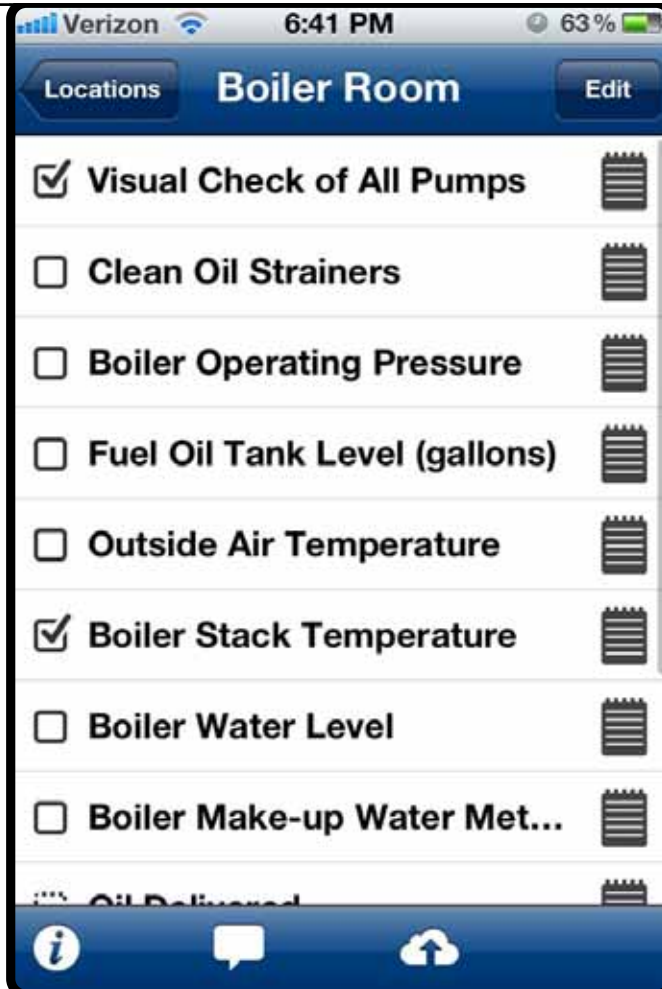
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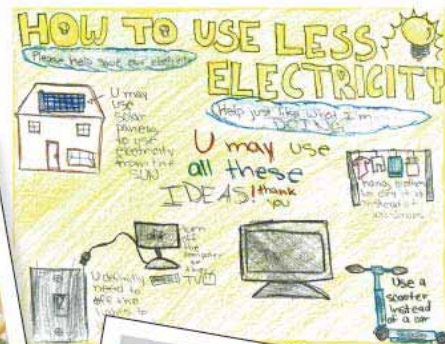
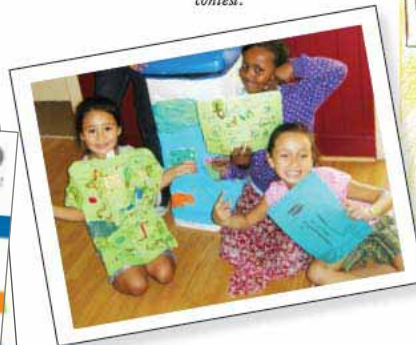
SIX: Resident Engagement



SIX: Resident Engagement



Poster contest.



Community clean up.



A visit to the recycling plant

www.enterprisecommunity.org



What does it all mean?

1. **Energy goals and outcomes tracked year to year**
2. **Strategic decision-making using portfolio-level metrics on energy and costs**
3. **Reduced incidences of emergency breakdowns and extended useful life of equipment**
4. **Enhanced productivity of housing service staff**
5. **Improved resident health, comfort, and safety**



What does it all mean?



FOUND MONEY!

Summary of Recommendations

1. Focus on the Project Life Cycle
2. Get the data, analyze the data, and act on the data
3. Look at the whole Portfolio, not just individual projects
4. Incorporate strategic planning for the Portfolio
5. Build the organization's capacity for impact
6. Resident Engagement

PartnerPREP

Partner Portfolio Retrofit Engagement
Platform

*Enterprise's newest green initiative to help
transform affordable housing portfolios!*

THE NEW YORK
COMMUNITY TRUST



Morgan Stanley



PartnerPREP: A One-Stop Shop for Portfolios



- **Fee-for-Service Initiative that is Market Driven**
- **Non-Profit & For-Profit affordable housing groups**
- **2-Year Engagement with Enterprise**
- **Comprehensive Capacity Building for Organizations**
- **Comprehensive Owner's Rep Services**
- **Building Science Expertise & Asset Management Focus**
- **Financing Opportunities (PLP, HPD, HUD)**



What are we really talking about?



10%/25%





THANK YOU!

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