



Using Energy Information Services Strategically

**ENERGY STAR Monthly Partner
Web Conference**

July 26, 2006

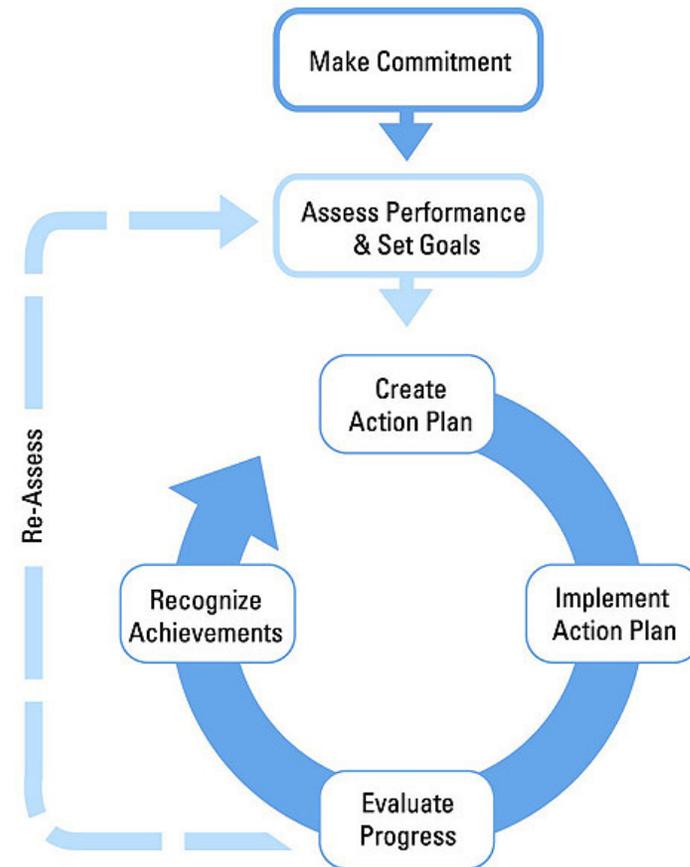
Call-in Number: 1-866-299-3188

Conference Code: 202 343 9965

About The Web Conferences



- Monthly
- Topics are structured on a strategic approach to energy management
- Opportunity to share ideas with others
- Slides are a starting point for discussion
- Open & Interactive
- Supports the **ENERGY STAR Challenge** to build a better world, 10% at time



Web Conference Tips



- Mute phone when listening! Improves sound quality for everyone.
Use * 6 – to mute and # 6 to un-mute
- Hold & Music – If your phone system has music-on-hold, please don't put the web conference on hold!
- Presentation slides will be sent by email to all participants following the web conference.

Today's Web Conference



“Information is power”

Timely and high quality energy information is more important than ever.

Need for greater accountability for energy use at site and sub-site levels increasing.

But...

Getting good site data can be a challenge

Organizing, analyzing and communicating energy information can be time consuming.

Today's Web Conference



Presenters:

- Richard Beam - Providence Health and Services
- Philip Kercher - Sacred Heart Medical Center
- Ed Schlect – Advantage IQ

- John Schinter - Jones Lang LaSalle
- Barry Abramson - Servidyne Systems, LLC



Using Energy Information Services Strategically

ENERGY STAR® Web Networking Session

July 26, 2006



Using Energy Information Services Strategically

ENERGY STAR® Web Networking Session –July 26, 2006

- Richard Beam
 - Corporate Director for Energy Management
 - Providence Health & Services
- Philip Kercher, FASHE
 - Manager of Facilities
 - Sacred Heart Medical Center
- Ed Schlect, PE
 - VP Consulting Services
 - Advantage IQ, Inc.



Providence Health & Services



Providence Health & Services

Energy Management Vision

The Preferred Future

Providence Health & Services' energy management vision is to institutionalize energy management in to our Corporate policies and procedures to ensure that energy will be used efficiently throughout its facilities.

The Overall Purpose of Energy Management

The purpose of Providence Health & Services' energy management activities are to promote and sustain the efficient use of energy in keeping with our Core Values of Stewardship and Excellence.



Use of Natural Resources

- PHS spends over \$60 million per year on energy consumption
 - Natural gas, water, & electricity
 - Energy rates continue to increase (natural gas at double-digit)
- Effective energy programs can save 10-30% on these recurring and increasing costs
- Facilities are compared for energy efficiency using Facility IQ, an on-line Energy Information Service



Use of Natural Resources

- ENERGY STAR Program compares facility energy use to a national database of hospitals by area and service type.
- PHS received ENERGY STAR Partner of the Year Award in 2004. Awarded 2004 Power Player award from Dept of Energy and Bonneville Power
- Providence Portland (2003), Seaside (2003), St. Vincent (2004), St. Peter Hospital (2003 & 2004), and Sacred Heart Medical Center (2003, 2005) have been awarded ENERGY STAR labels
- Ten office buildings pending label qualification



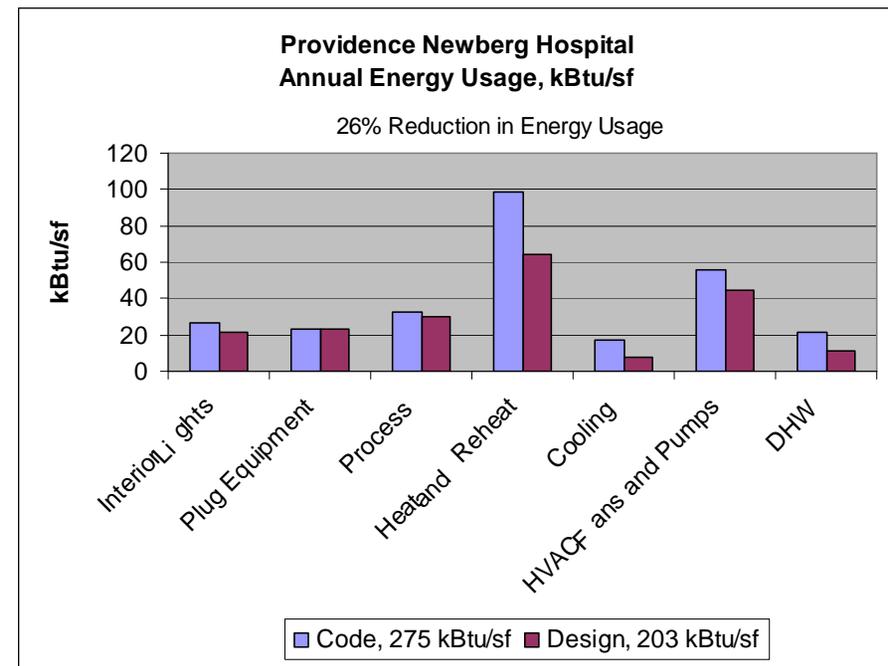
Overview of Energy Management Program (EMP)

Proactive Leadership

- Program actively seeks cost reduction measures system-wide.
- National & regional program recognition

Success Stories

- U.S. EPA named PHS its ENERGY STAR Partner of the Year for 2004.
- Richard Beam named 2003 Energy Manager of the Year for the Oregon Association of Professional Energy Managers.
- PHS Newberg Energy Management Intervention
 - 26% Reduction in Energy Usage
 - \$178,000 in annual savings
 - \$199,585 in grants
 - \$141,969 in tax credits
 - IRR of 88%



Before & After



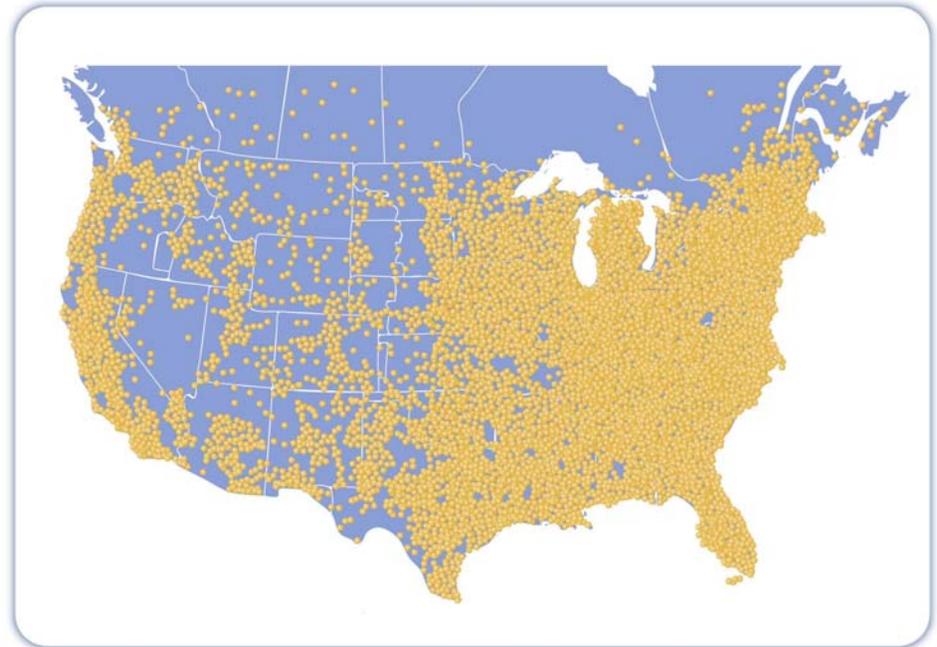
About Advantage IQ, Inc...

We are the leading supplier of comprehensive facility intelligence and cost management services via FACILITY IQSM (our Web-based reporting tool). Our services are designed to provide multi-site companies with critical, yet *easy-to-access information* that enables them to reduce their facility-related expenses for utilities telecom and waste. Our reputation and experience in the industry is unrivaled, as evidenced by our client portfolio and our 95% retention rate. More information is available on our web site at www.advantageIQ.com



Advantage IQ, Inc. Corporate Overview

- We currently manage over \$9.3B in expenses for 350+ clients
- In the last two years, we have saved our clients more than \$85 million in expenses
- We currently process and pay over 500,000 bills/month supporting over 190,000 sites nationwide
- We are a complete solution—Our management services include electricity, natural gas, water/sewer, waste, and telecom expenses
- Our state of the art facility in Spokane, WA employs 350+ people, housed in a 70,000 square foot office...incorporating a 24/7 secure data management center
- We are a profitable, wholly owned affiliate of Avista Corp. (AVA on the NYSE; \$1.2B revenue)



Advantage IQ & ENERGY STAR

ENERGY STAR Partner of the Year 2005 and 2006

- Handled more than 90% of all automated building ratings during 2005
- Over 10x the total volume in total buildings rated of any other ENERGY STAR partner

Advantage IQ's scope with PH&S

- Full Energy Information Management for 230 locations
- Web-based reporting across 5 portfolios
- ENERGY STAR automated benchmarking
- Utility and telecom services





Our Advantage: A Complete Solution

**Information and Expense
Management Services for:**
Utilities · Telecom · Waste



3

Strategic Services

Post payment analysis, leverage data and develop executive strategies.

2

Audit & Reporting

Validate invoices, identify and resolve errors, optimize services.

1

Process & Pay

Receive, enter, and scan invoices, cost allocate, issue vendor payments.

Energy Management at PH&S Before Energy Information Services

- Energy “managed” at the site level
- Data collection manual and sporadic
- No portfolio strategy
- No central database
- Projects prioritized by access, not value
- Budget nightmares



Energy Management at PH&S After Energy Information Services

- Central repository of data began in 1998
- Data collection consistent
- Baseline for Corporate program established
- Allowed expansion across business units
- Enabled project identification and prioritization to best corporate value
- Budget and Supply management simplified and centralized



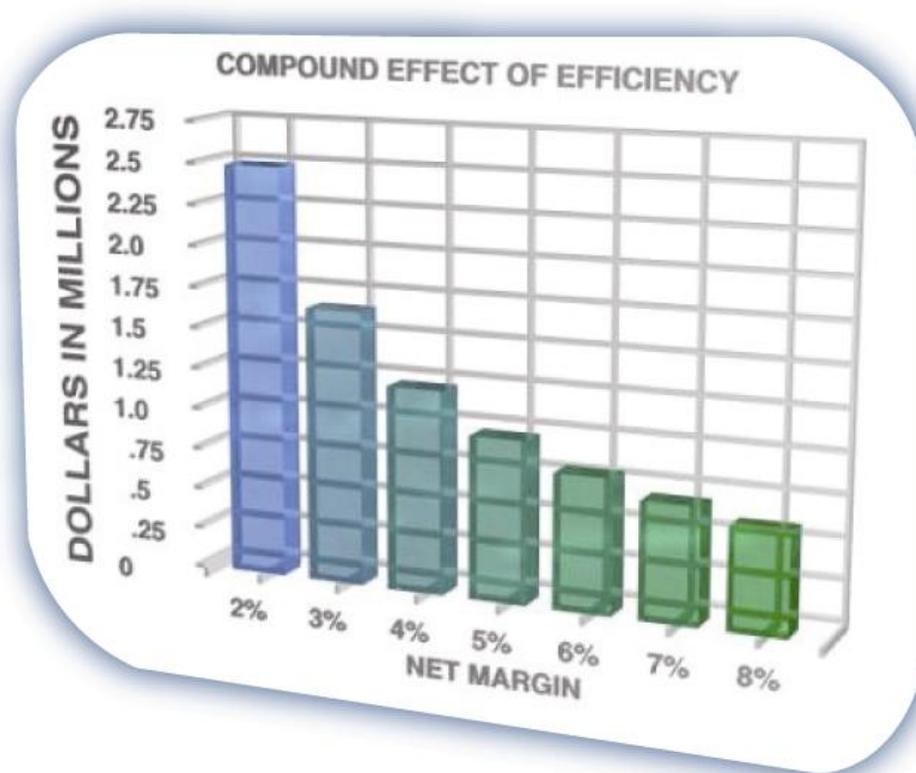
Energy Management at PH&S After Energy Information Services

- ENERGY STAR ratings accelerated corporate commitment...
- Results quantified in 2003
- POY award wins internally!
 - Result: \$60MM allocation available for 20% ROI projects
 - New Corporate Energy Manager role
 - Organization began to value energy differently...



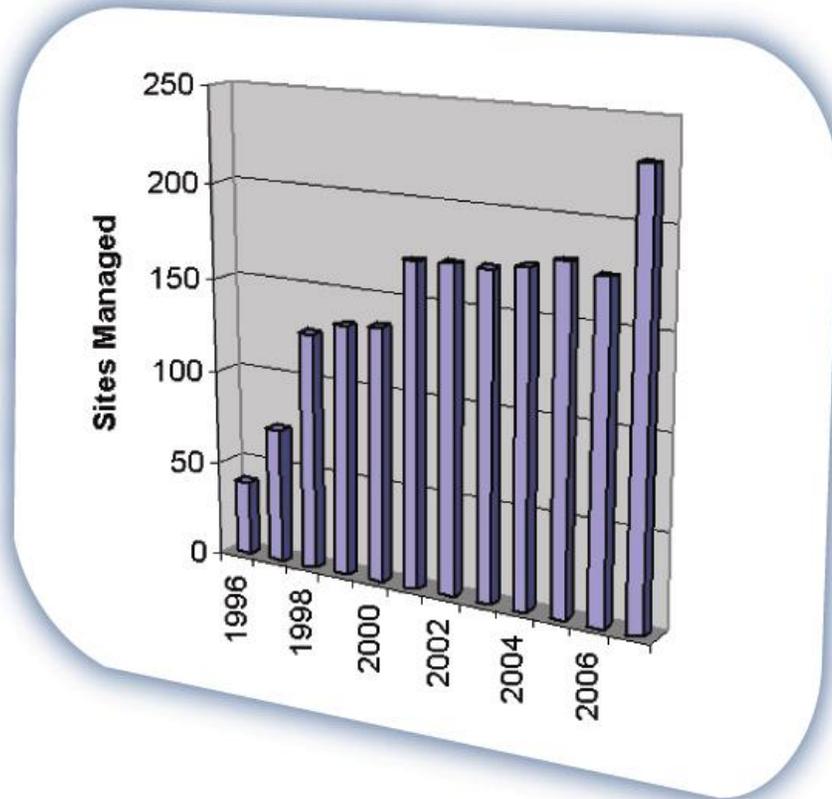
Valuing An Energy Dollar Saved

It could take up to \$50 in revenue to obtain the same \$1 in margin contribution. The chart shows how much revenue is needed to have the same bottom line impact as \$50,000 in operating cost savings given our different hospital net operating margins.



Expanding the EIS Program across Multiple Business Units

- Additional business units agreed to participate based on documented results
- Energy Information and ENERGY STAR became BEST PRACTICES



Portfolio results: selection of best sites for retrofit

- Review of energy intensity in Facility IQ to rank sites
 - Confirmed by ENERGY STAR scores
- Region had 3 sites at bottom of the list
 - Led to \$4.5MM retrofit at 2 sites
- Upgrade process
 - Corporate funding commitment
 - Investment grade energy audit
 - Projects now under way...

Portfolio Results: New site in Newberg, OR

- First greenfield project for PH&S in 35 years
 - Replacing another hospital
- Used ENERGY STAR target finder to predict design ENERGY STAR score
- Facility IQ is providing information services to:
 - track performance vs. model
 - feed data to ENERGY STAR
 - and provide support the LEED application process



Portfolio Results: Sacred Heart Hospital, Spokane WA



Sacred Heart Hospital, Spokane WA

- 2.08 Million Square feet
- ENERGY STAR label earned 2003, 2005
- Building profile available at <http://www.energystar.gov> under 'find labeled buildings'
- Goal: reduce consumption 5% per year
- ...and we're on track!

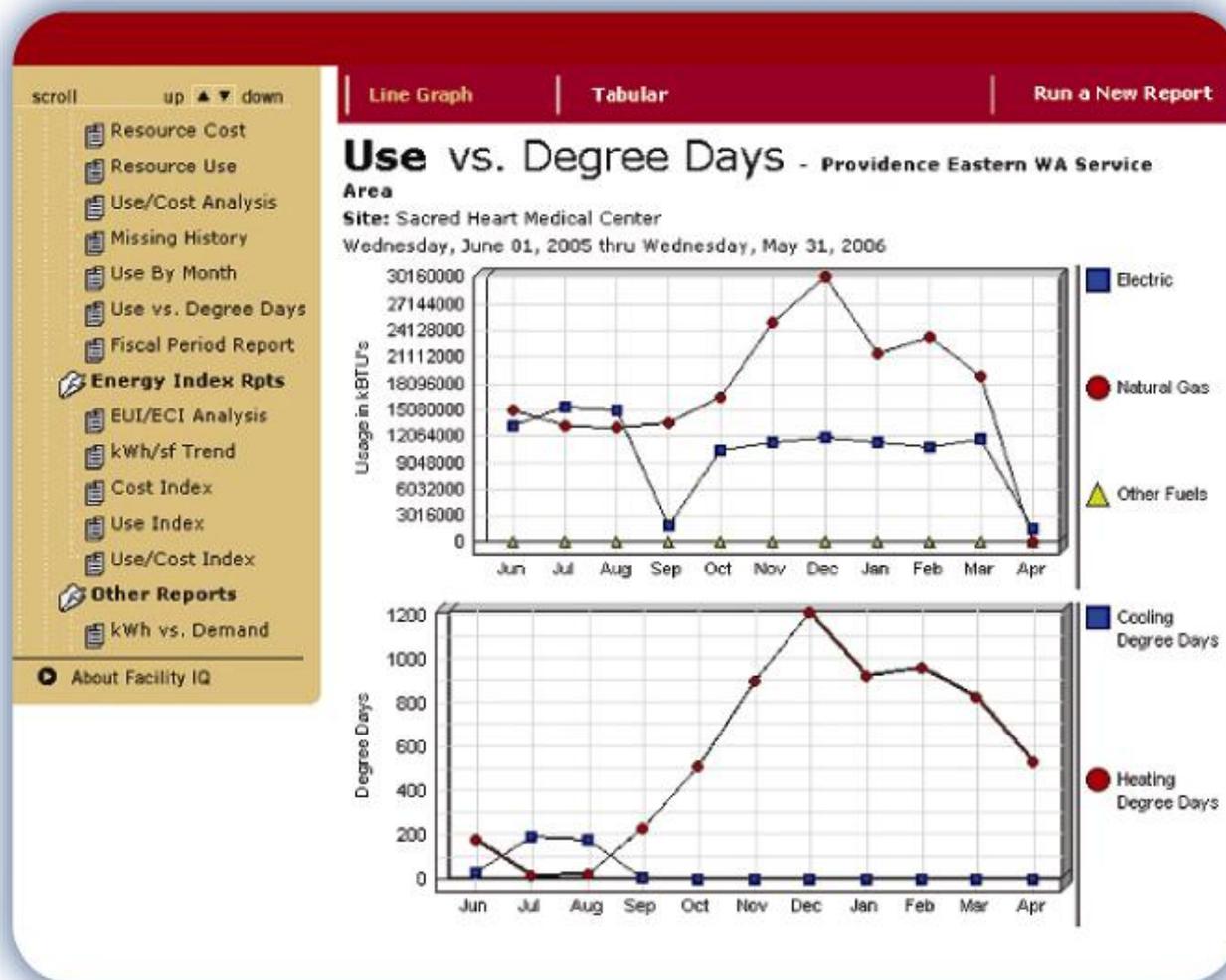


Sacred Heart Hospital, Spokane WA

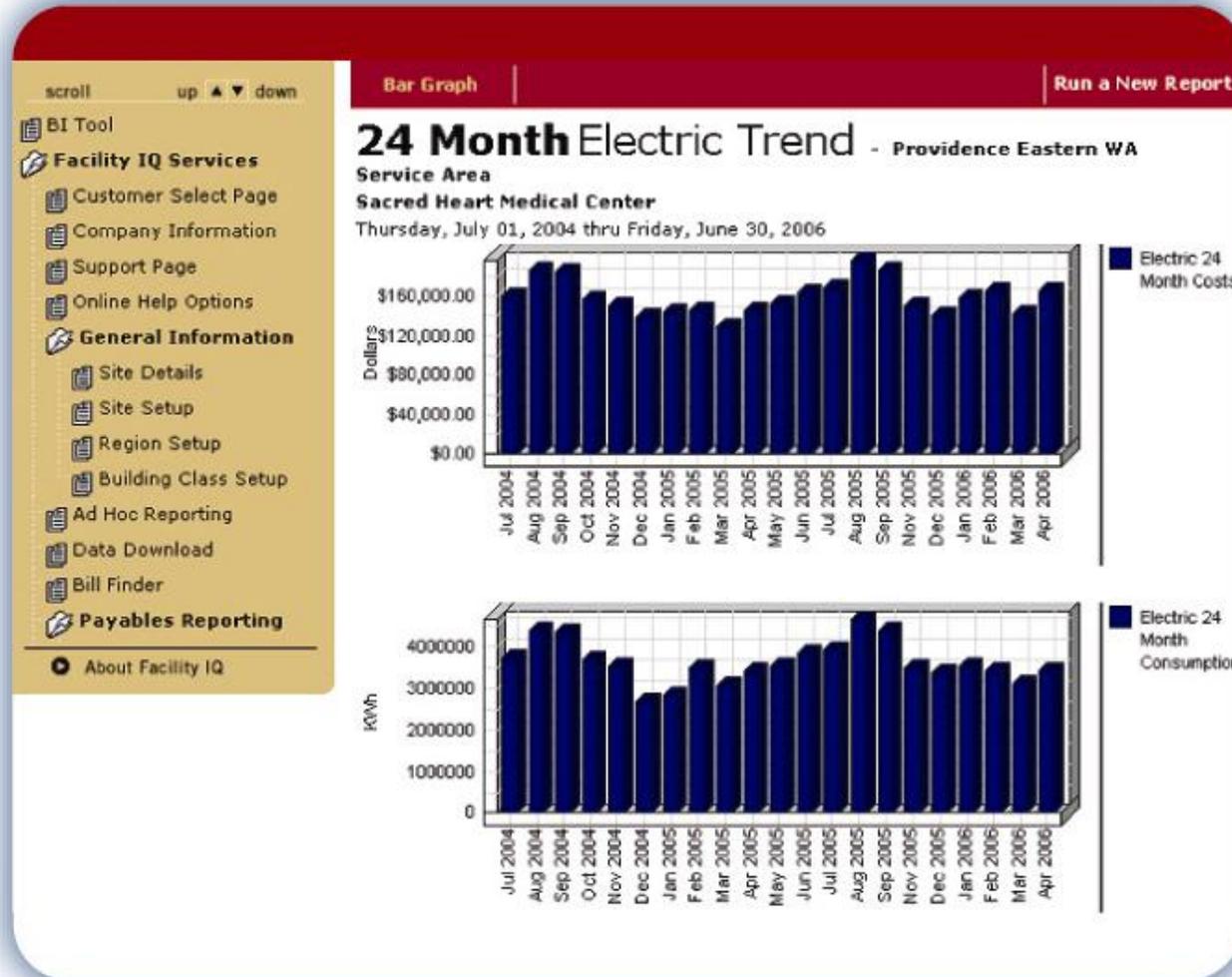
- Strategies:
 - Regional team sharing best practices
 - Energy Information Services provide benchmarking and trend reporting
 - Key project implementation
 - Quarterly reviews...continuous improvement!
- Benefits:
 - Corporate support
 - Senior Management visibility and credibility
 - Personal ownership in facility results



Sacred Heart Hospital, Trend Reporting



Sacred Heart Hospital, Trend Reporting



Energy Information Services Provide

A solid foundation

- Data integrity
- Accurate baseline measurement
- Effective prioritization

Management tools for a large portfolio

- Site to site comparisons
- Ongoing trend analysis

A platform to communicate

- Financial messaging
- Overall performance management

...and accessible 24/7...from anywhere in the company



You Have Two Patients....

“Providence Health & Services has two patients—the medical patient and the earth. To heal one without the other will not last.”

--*Janine Benyus*

(author of book, *Biomimicry – Innovation Inspired by Nature* in conversation with Richard Beam at the 2005 Inland NW Sustainability Conference, Boise, Idaho)





Providence is making it happen in environmental stewardship, with Energy Information Services as a program foundation.



Using Energy Information Services Strategically

John Schinter, P.E.
Director, Global Energy Services
Engineering and Operations
Jones Lang LaSalle

Barry Abramson, P.E.
Senior Vice President
Servidyne

July 26, 2006

Agenda

- JLL and Servidyne Introduction
- Levels of Energy Information
- Portfolio Benchmarking
- Tracking and Reporting
- Conclusion

JLL Portfolio Description

- The world's leading real estate management firm, operating in 50 countries.
- Includes a Real Estate portfolio of approximately 902 million square feet under management worldwide.



JONES LANG
LASALLE®

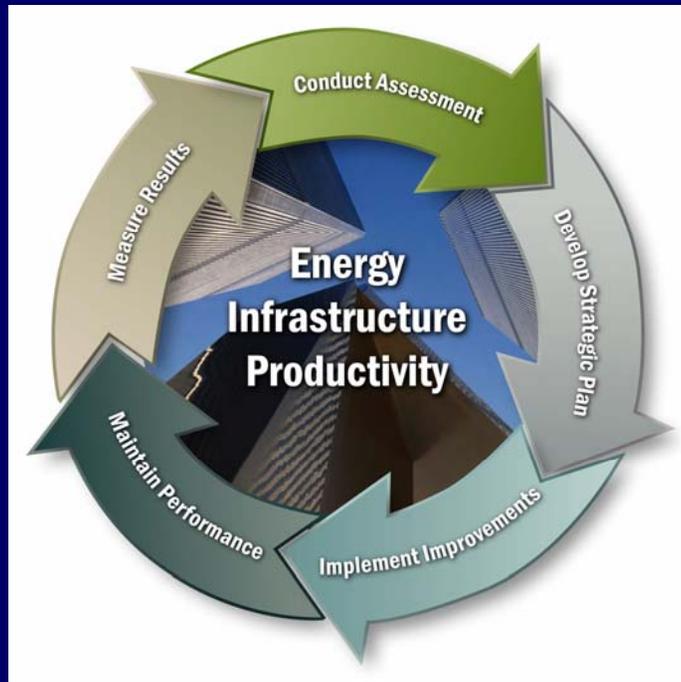
JLL Energy Strategy

- Jones Lang LaSalle is committed to energy management leadership that supports sustainable global environmental objectives, while achieving the lowest reasonable operating expense.



Servidyne Overview

“Your Building Performance Expert”



Servidyne has over 30 years of experience in optimizing facility performance at every stage of the building lifecycle. Our customers view us as building performance experts, key to their efforts to maximize the value of their portfolios.



Levels of Energy Information

- Invoice Data
 - Bill processing and payment, bill auditing
 - Portfolio data aggregation
- Benchmarking/Performance Tracking
 - Portfolio Comparison Analysis
 - Reporting of Key Performance Metrics
- Interval/Meter Data
 - “Real-Time” Trend and Load Profile Analysis
 - Automated Response

Levels of Energy Information

- The Dilemma: Not Enough Detail or Too Much Detail

- Cost
- Time
- Complexity



Levels of Energy Information

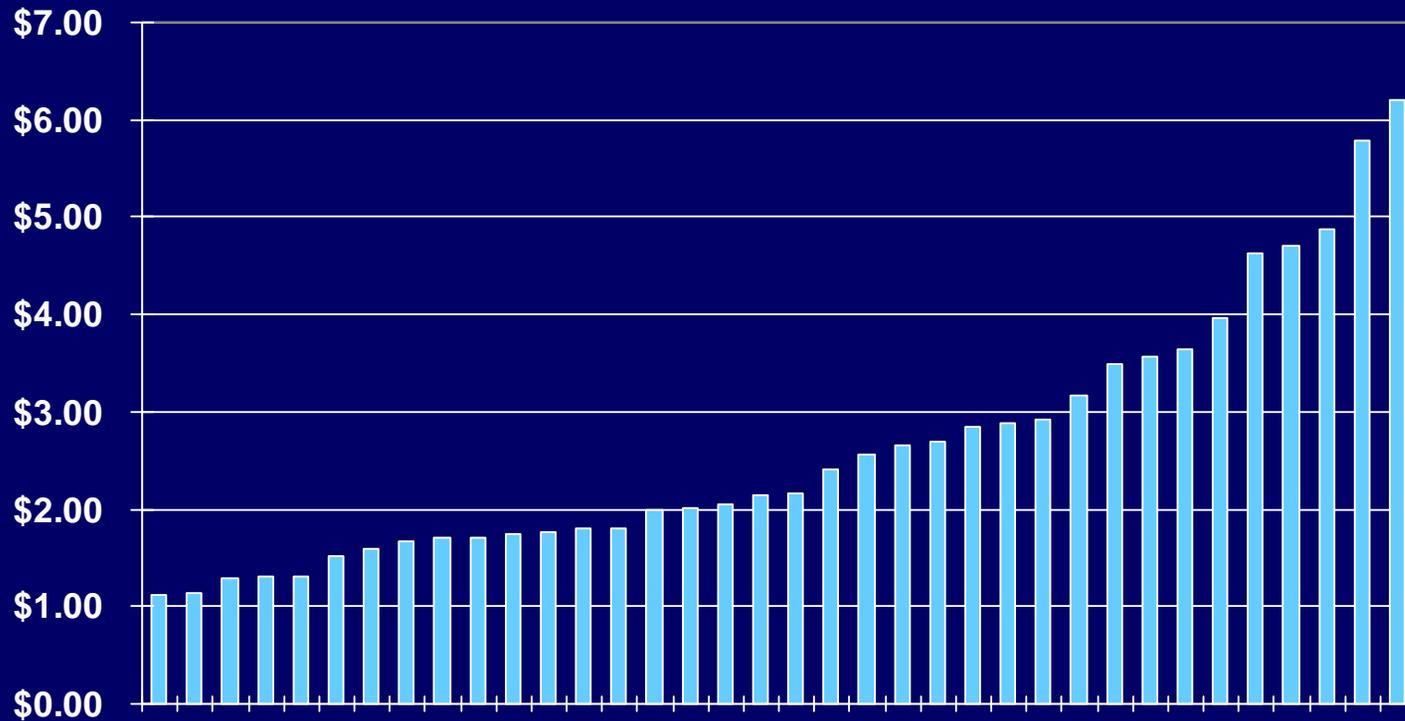
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 - “Real-Time” Trend and Load Profile Analysis
 - Automated Response

Portfolio Benchmarking

- Cost per Sq. Ft.
- Energy Usage per Sq. Ft.
- ENERGY STAR[®] Rating
- Energy Performance Target

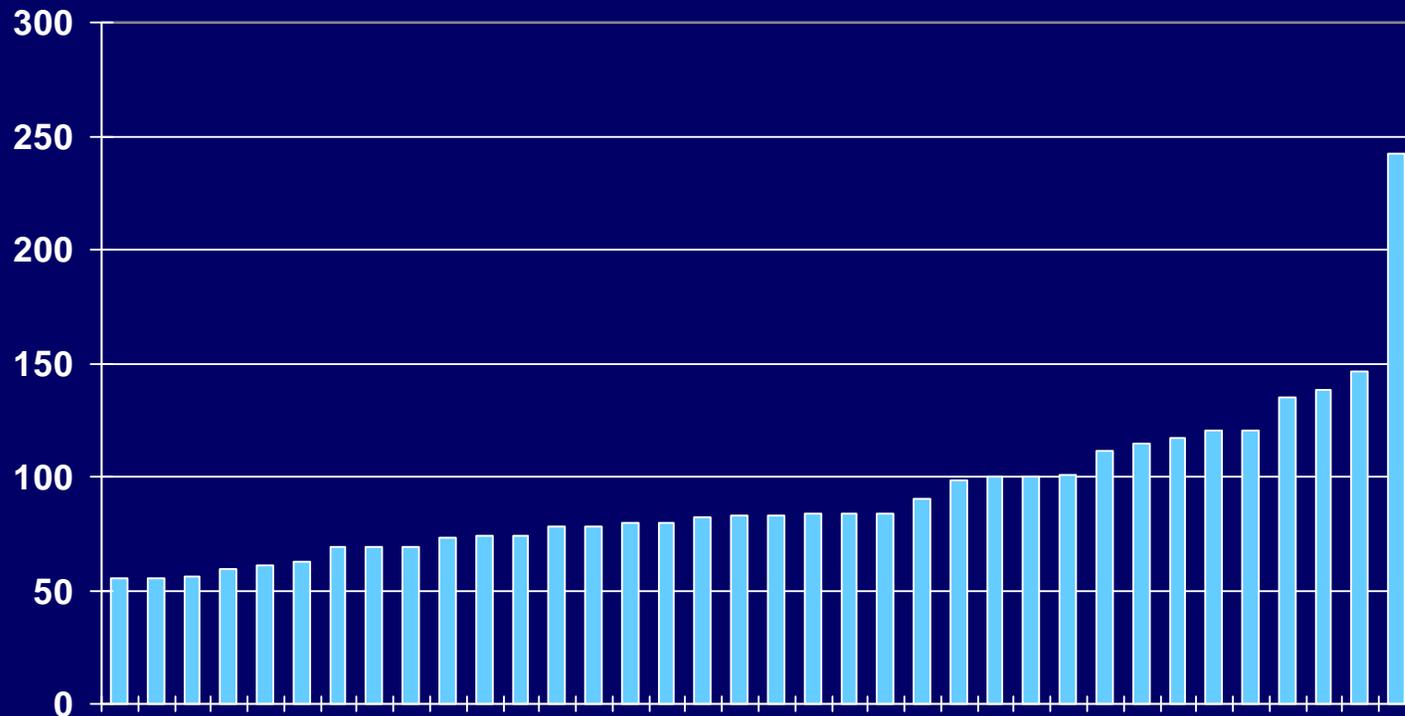
Cost/SF Benchmarking

\$/RSF/Yr



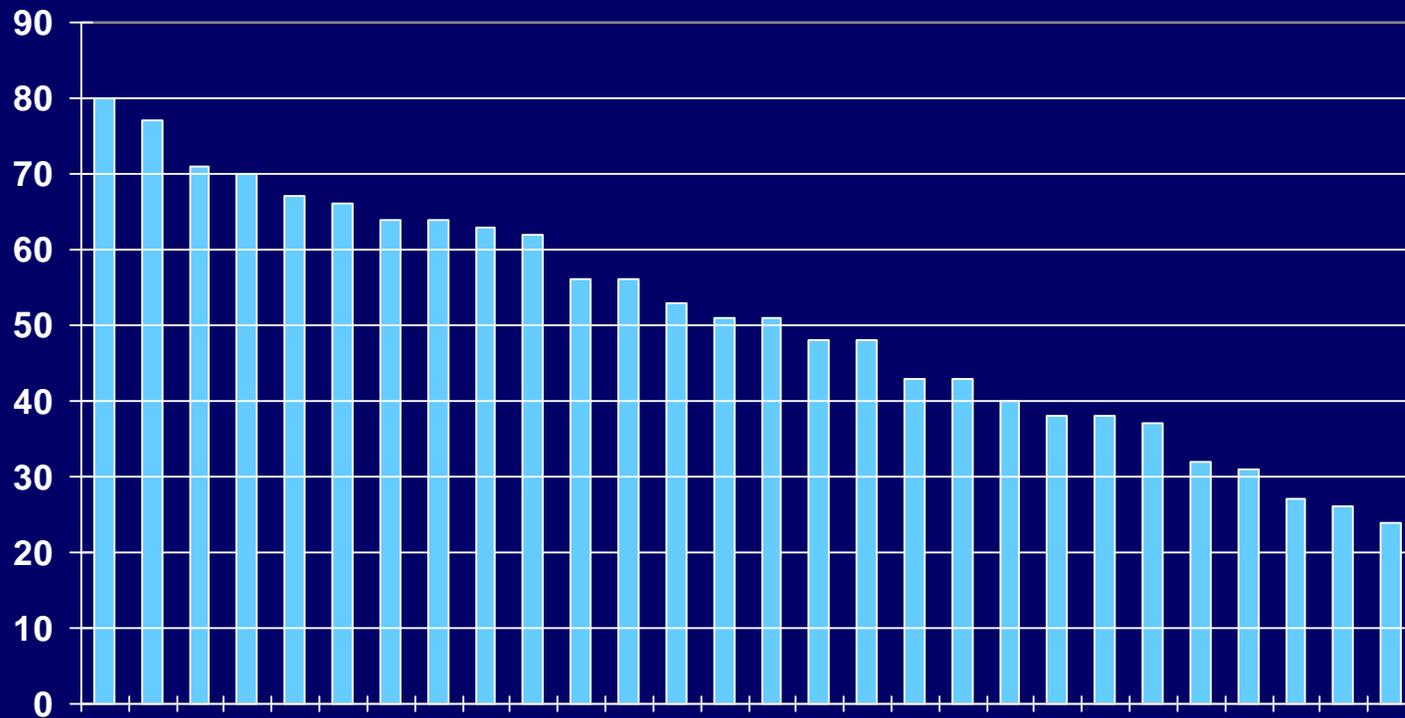
BTU/SF Benchmarking

KBTU/RSF/Yr



ENERGY STAR® Benchmarking

ENERGY STAR Rating



Portfolio Benchmarking

- Cost per Sq. Ft. – Very Limited
- Energy Usage per Sq. Ft. – Limited
- ENERGY STAR Rating
 - Assessment of Where You Are
- Energy Performance Target
 - Assessment of Where You Could/Should Be
 - Identifies Savings Potential

Portfolio Benchmarking

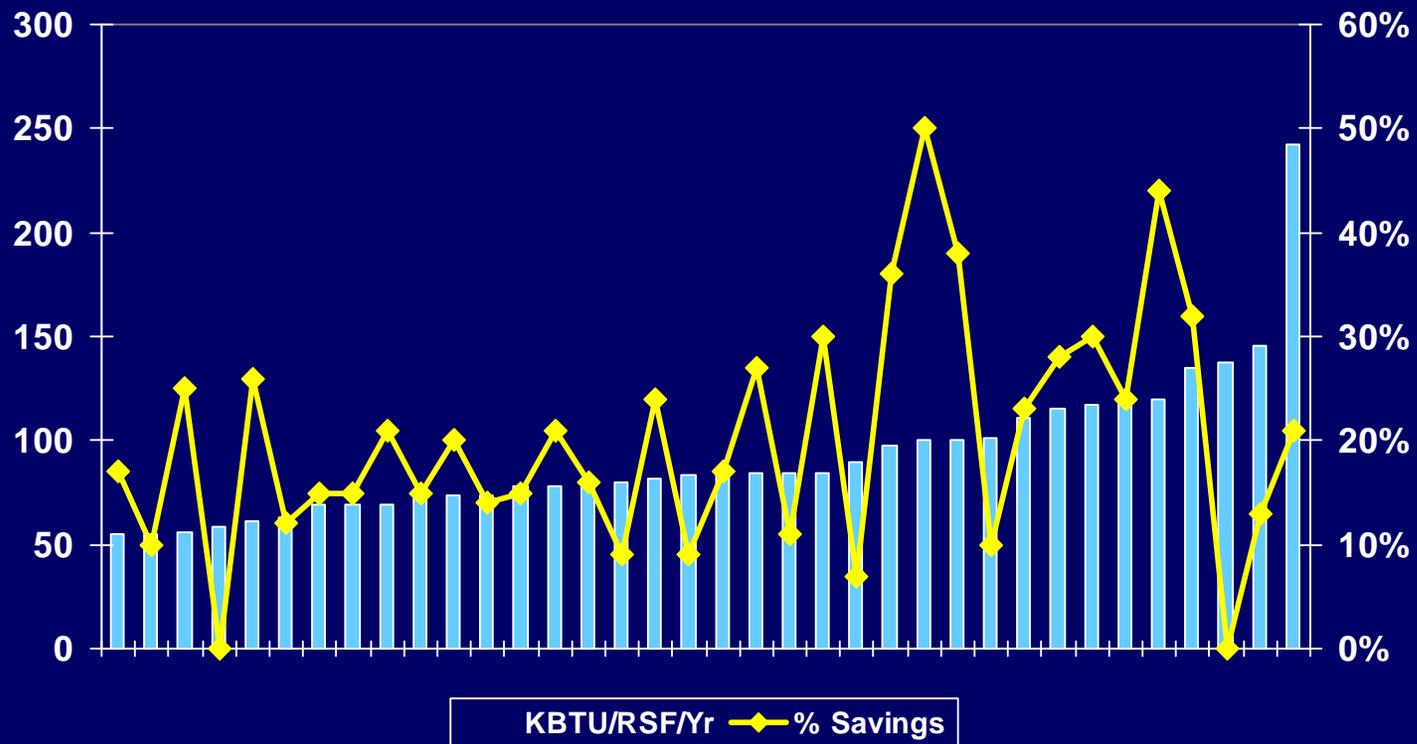
- ENERGY STAR Benchmarking
 - Comparison to Building Stock
 - Normalizes for Location and Occupancy Parameters
- Next Step: Assess Savings Potential for Particular Buildings
 - High Level Analysis, Not In-Depth Audit
 - Enables Realistic Savings Goals
 - Allows Efforts to be Prioritized in a Portfolio

Portfolio Benchmarking

- Energy Performance Benchmarking
 - Normalizes for Location, Occupancy Parameters and:
 - Building Geometry
 - Building Envelope
 - Heating and Cooling Plant Types/Capacities
 - Air Distribution System Configuration/Capacity

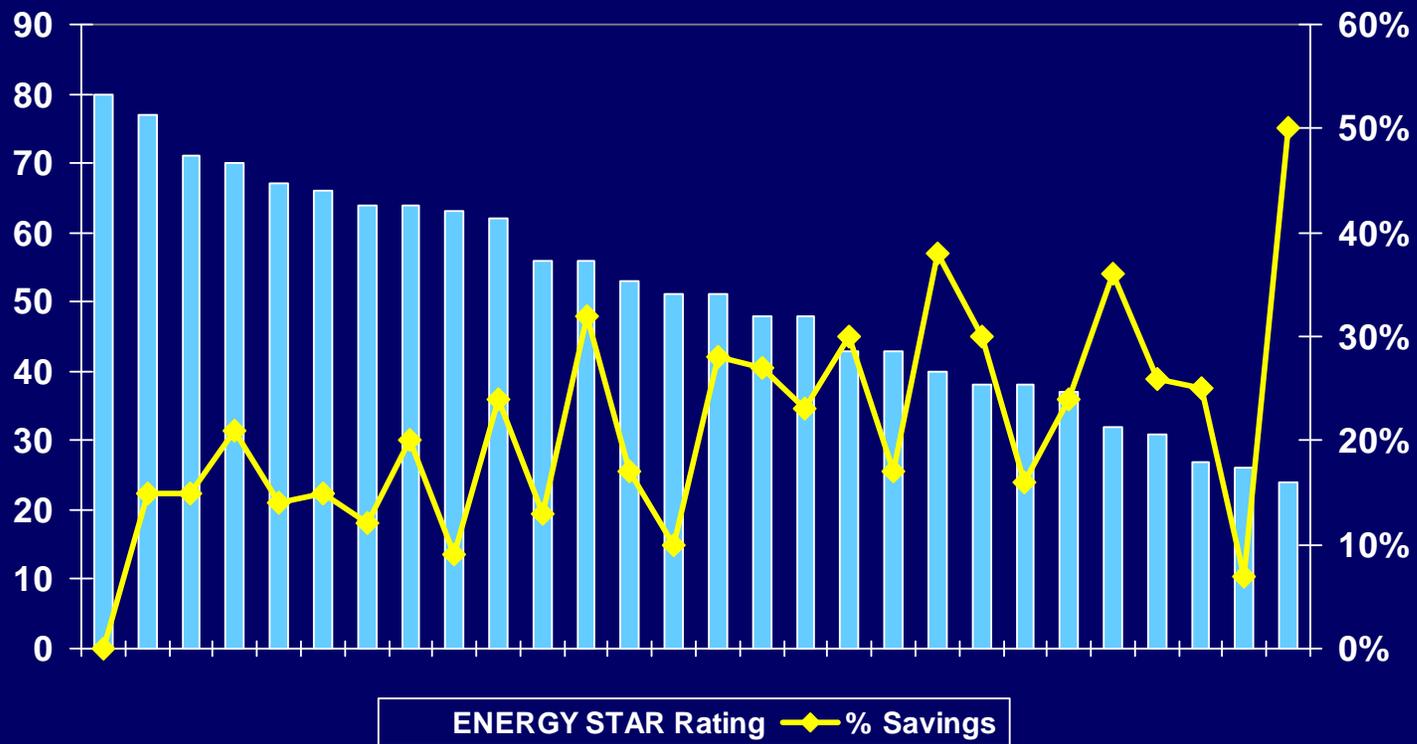
BTU/SF Benchmarking

KBTU/RSF/Yr vs. Savings Potential



ENERGY STAR Benchmarking

ENERGY STAR Rating vs. Savings Potential



Tracking and Reporting

- High Level Reports for Quick Overview
- Detail Reports to Drill Down for Action

Property	SqFt	2005 Btu/SqFt	2006 Btu/SqFt	% Variance	% Variance
	897,320	26,110	21,723	-16.8%	
	494,487	34,218	28,755	-16.0%	
	200,327	35,732	30,837	-13.7%	
	92,289	36,881	32,475	-11.9%	
	80,961	27,932	25,036	-10.4%	
	127,167	45,058	40,516	-10.1%	
	480,000	58,586	53,258	-9.1%	
	2,637,444	42,898	39,408	-8.1%	
	216,927	34,863	32,087	-8.0%	
	269,152	32,573	30,063	-7.7%	
	965,414	32,416	30,017	-7.4%	
	423,634	47,498	44,329	-6.7%	
	404,541	36,108	33,757	-6.5%	
	279,180	45,366	43,032	-5.1%	
	198,196	67,763	64,377	-5.0%	
	1,202,740	68,420	67,138	-3.3%	
	724,000	32,448	31,468	-3.0%	
	1,737,595	53,583	51,970	-3.0%	
	433,942	35,266	34,346	-2.6%	
	128,670	26,001	25,346	-2.5%	
	1,415,668	46,935	48,012	2.3%	
	266,214	40,760	42,309	3.8%	
	151,696	39,935	41,456	3.8%	
	666,653	24,709	25,697	4.0%	
	251,943	23,714	24,667	4.0%	
	241,211	35,201	36,693	4.2%	
	195,022	33,778	35,605	5.4%	
	301,000	34,213	36,516	6.7%	
	365,868	27,578	29,662	7.6%	
	92,670	31,283	33,690	7.7%	
	452,821	23,641	25,963	9.8%	
	795,115	91,687	100,970	10.1%	
	213,637	27,992	31,434	12.3%	
	221,538	45,611	51,523	13.0%	
	209,956	29,055	34,470	18.6%	
	750,000	34,958	48,087	37.6%	
Totals	18,585,198	43,233	42,825	-0.9%	(-)

Tracking and Reporting

- Key Performance Metrics
 - Energy Usage vs. Goal
 - Year over Year Usage and Costs
 - Actual Cost vs. Budget
 - Weather and Occupancy Variances
 - Unit Cost Trends
 - Distinct Cost Impacts from Rates and Usage

Portfolio/Region Summary

SERVIDYNE[®]
An Abrams Company

What's this ?



Americas

Choose Region

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◀ Energy Use Summary - Past 12 Months ▶							
Property	SqFt	Target Btu/SqFt	Actual Btu/SqFt	Index	2005 Cost/SqFt	2006 Cost/SqFt	2006 Cost/SqFt
	269,152	64,000	74,413	116	\$ 1.63	\$ 1.60	
	216,927	73,000	80,295	110	\$ 1.73	\$ 1.70	
	433,942	75,000	84,080	112	\$ 1.74	\$ 1.70	
	452,821	55,000	62,660	114	\$ 1.81	\$ 1.99	
	221,538	67,000	120,450	180	\$ 1.94	\$ 2.04	
	92,289	67,000	79,826	119	\$ 2.70	\$ 2.66	
	92,670	69,000	82,967	120	\$ 2.59	\$ 2.69	
	200,327	75,000	82,778	110	\$ 2.83	\$ 2.88	
	151,696	63,000	98,097	156	\$ 3.06	\$ 3.16	
Totals	2,131,362	66,865	82,346	123	\$ 2.04	\$ 2.08	

The Energy Use Summary allows comparisons of energy cost and building efficiency across a portfolio. Energy Use numbers are based on a rolling total of the previous 12 month's data.

The Index value shows a building's performance against a calculated target value. For example, an Index of 120 indicates that the building is consuming 20% more than its calculated target.

Servidyne Systems, LLC

Portfolio/Region Yr over Yr

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An Abrams Company

What's this ?



Americas

Choose Region

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- ▶ New York
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- ▶ St. Louis
- ▶ Texas
- ▶ Contact Us
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◀ Energy Use Summary - YTD (May 2006) ▶						
Property	SqFt	2005 Btu/SqFt	2006 Btu/SqFt	% Variance	% Variance	
	221,538	45,611	51,523	13.0%		
	452,821	23,641	25,963	9.8%		
	92,670	31,283	33,690	7.7%		
	151,696	39,935	41,456	3.8%		
	433,942	35,266	34,346	-2.6%		
	269,152	32,573	30,063	-7.7%		
	216,927	34,863	32,087	-8.0%		
	92,289	36,881	32,475	-11.9%		
	200,327	35,732	30,837	-13.7%		
Totals	2,131,362	33,763	33,646	-0.3%	(-)	(+)

Building Summary



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 (800) 241-8996
 © 2002-2004



Size: 724,000 SqFt

PM: [Lance Carille](#) ✉

DOE: [Ed McManus](#) ✉

Submit monthly EnergyCheck® data

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Property Summary

EnergyCheck®	2005	2006	% Variance
Energy Target (Btu/SqFt/Yr)	62,000	62,000	0.0%
Actual Energy Use (Btu/SqFt/Yr)	73,553	72,573	-1.3%
Performance Index	119	117	-1.3%
Cost Per Square Foot	\$ 3.21	\$ 3.33	3.9%
2006			
Impact from Rates - YTD	\$ 75,848		
Impact from Use - YTD	\$ -23,147		
			
Current Score	77		

Building Detail

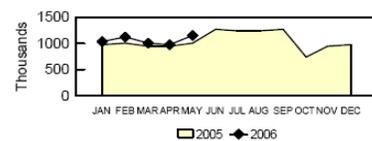
Utility Use Summary

	May 2005	May 2006	Variance	YTD 2005	YTD 2006	Variance
Energy Use	5,224	5,995	14.8%	32,448	31,468	-3.0%
Electricity (kWh)	994,400	1,150,400	15.7%	4,827,200	5,223,200	8.2%
Steam (mlbs)	388	414	6.7%	7,017	4,956	-29.4%
Water (MGal)	1,461	1,150	-21.3%	6,873	6,264	-8.9%

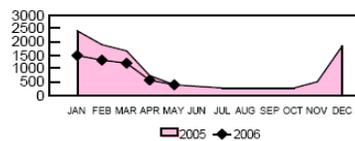
Occupancy & Weather Detail

Month	Occupancy		Cooling Degree Days		Variance	Heating Degree Days		Variance
	2005	2006	2005	2006		2005	2006	
Jan	98.0%	98.0%	0	0	0.0%	1,056	722	-31.6%
Feb	98.0%	99.0%	0	0	0.0%	815	786	-3.6%
Mar	98.0%	99.0%	0	0	0.0%	810	645	-20.4%
Apr	98.0%	99.0%	6	6	0.0%	321	264	-17.8%
May	98.0%	99.0%	17	67	294.1%	204	95	-53.4%
Jun	98.0%		303			10		
Jul	98.0%		424			1		
Aug	98.0%		500			0		
Sep	98.0%		304			5		
Oct	98.0%		42			194		
Nov	98.0%		0			413		
Dec	98.0%		0			878		
YTD	98.0%	98.8%	23	73	217.4%	3,206	2,512	-21.6%

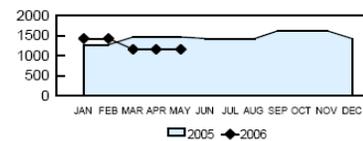
Electricity Use (kWh)



Steam Use (mlbs)

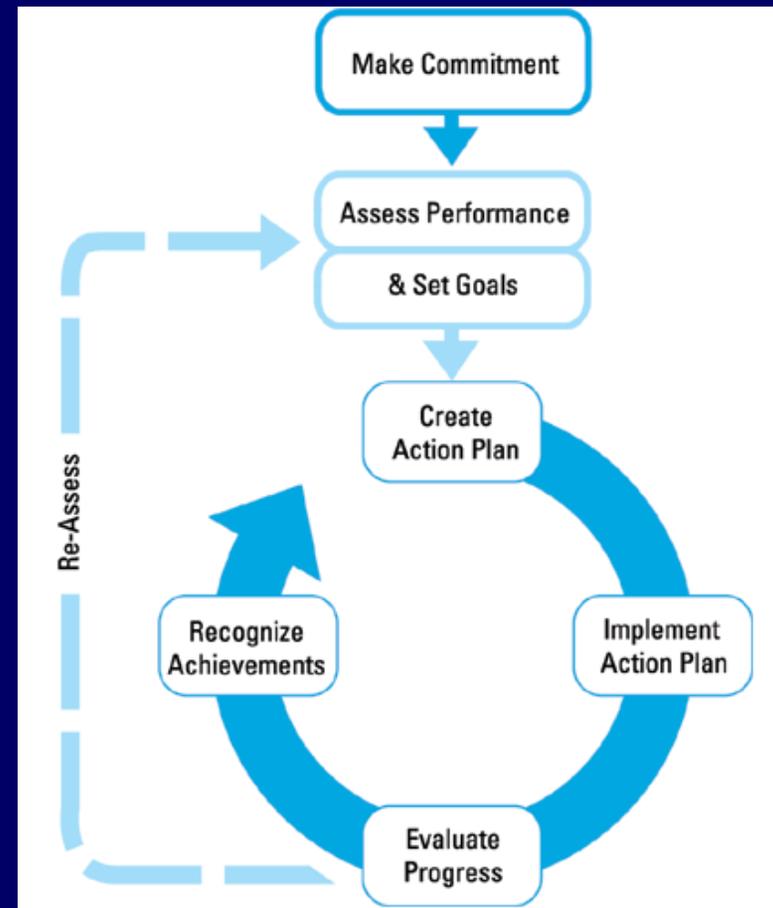


Water Use (MGal)



Conclusion

ENERGY STAR Guidelines for Energy Management





Questions & Discussion

Announcements



Summer Energy Savings ideas and guidance – on the web

- www.energystar.gov/buildings
- www.energystar.gov/industry

Take the ENERGY STAR Challenge

- www.energystar.gov/challenge

Upcoming Web Conferences



August 16 – State-of-the-art Sub Metering

September 20 – Remote Monitoring and Control
System

October 19 – Energy and Climate Risk
Management

Download past web conference presentations at:

www.energystar.gov/networking

Questions or comments? Contact: tunnessen.walt@epa.gov



Thank You!