# ASSESSMENT

# **Energy Assessment Services**

IDENTIFYING OPPORTUNITIES TO REDUCE ENERGY USE AND COSTS IN EXISTING BUILDINGS

Today, every organization is looking more critically at how it uses energy – and how it might reduce that consumption. Whether the ultimate goal is cost savings, emissions reductions or greener operations, understanding current energy use and potential savings opportunities is essential.

Facilities and major building systems such as HVAC and lighting are typically the largest contributors to an organization's overall energy consumption. Charged with mandates to reduce energy use, many organizations have already implemented conservation programs targeting relatively low-cost, short-payback initiatives, from installing lighting controls to improving insulation.

Where does your organization go from here? How do you determine which additional energy conservation initiatives will deliver the greatest reduction in consumption or cost? And, having identified potential energy efficiency initiatives, how do you make the case for funding them?

### **VFA ENERGY ASSESSMENT SERVICES**

VFA Energy Assessment Services help organizations identify opportunities to save energy and reduce energy costs – for one building or an entire real estate portfolio. Our solutions are designed to enable your organization to:

- Understand the return on potential energy efficiency investments
- Establish baseline metrics for tracking energy reductions

- Make the case for funding energy efficiency projects
- Integrate energy efficiency programs into your overall capital plan

We focus on the key information your organization needs to make decisions about energy efficiency investments in existing buildings: recommended measures for reducing energy consumption and related costs, and justification for project implementation including detailed project costs, estimated savings and payback periods.

Our assessment services, coupled with VFA's award-winning software, provide you with the insight you need to answer such questions as:

- What energy efficiency updates will result in the greatest reduction in energy consumption and costs?
- What is the payback period for each potential energy efficiency investment?
- What energy conservation programs should we implement to meet mandates for energy savings?
- How should we integrate energy efficiency programs into our overall capital plan and budget?
- What progress are we making in reducing energy consumption and costs?

### VFA ENERGY ASSESS-MENT SERVICES HELP YOUR ORGANIZATION:

- Understand which energy conservation measures will provide the greatest impact on energy consumption
- Justify project implementation with objective thirdparty recommendations for energy conservation measures, including costs, savings and simple payback from each
- Integrate energy conservation programs into your overall capital plan as part of a comprehensive VFA capital planning solution



# VFA Energy Assessment Services

### EVALUATING ENERGY CONSERVATION OPPORTUNITIES

A VFA Energy Assessment collects information about facility operation and energy usage through both information provided by the customer and on-site inspection.

Prior to any field inspection, VFA assessors collect and review information relevant to evaluating current energy usage, including utility invoices, equipment lists, and building schematics. VFA assessors establish baseline energy consumption data for each facility to be evaluated. Interviews with facility operating personnel may be conducted to provide a better understanding of major energy consuming systems, variations in daily and annual energy consumption and demand, and previously completed conservation measures.

VFA Energy Assessments are offered either as a standalone service, or as part of a Green Building Assessment or Facility Condition Assessment, enabling organizations to integrate energy savings initiatives into their capital and operating plans, and understand how energy cost savings can be used to fund needed improvements and renewals over time.

### **The Energy Assessment Process**

### 1. COLLECT AND REVIEW OPERATIONAL DATA

 Establish baseline energy consumption and assessment plan for each facility to be evaluated, based on utility invoices, equipment lists, building schematics, etc.

#### 2. CONDUCT BUILDING ASSESSMENTS

 Perform physical building inspections, including creation of inventory of equipment and lighting, and inspection of major building systems.

### 3. EVALUATE ENERGY CONSERVATION OPPORTUNITIES

 Evaluate Energy Conservation Measures based on cost, savings, payback period and other desired criteria.

### 4. RECOMMEND ACTIONS

 Prepare final report, including findings, recommendations, budgetary pricing for Energy Conservation Measures, and payback calculations. The VFA Energy Assessment Report provides ECM costs, estimated savings and payback periods at various levels of detail

### **A** Summary for All Assessed Facilities

Total Energy Conservation Measure Costs and Savings for Assessed Properties						
Total ECM Cost	\$200,000 - \$220,000					
Annual Cost Savings	\$50,000 - \$60,000					
Annual Energy Savings	330,000 - 400,000 kWh / Year					
Payback	3.8 Years (average for all ECMs)					

### **B** Totals for Each Assessed Facility

Total Energy Conservation Measure Costs and Savings by Building									
				Annual			Annual		
			Annual	Energy			Cost		
	Square	Total ECM	Cost	Savings	Payback	ECM Cost	Savings		
Building	Feet	Cost	Savings	(kWh / year)	(Years)	per SF	per SF		
А	250,000	\$118,000	\$28,988	193,250	4.1	\$.47	\$.12		
В	100,000	\$62,000	\$18,750	125,000	3.3	\$.62	\$.19		
С	50,000	\$29,900	\$7,725	51,500	3.9	\$.60	\$.15		

### • Recommended Projects for an Individual Facility

Building A: Recommended Energy Conservation Measures for Mixed Use Building									
			Annual	Annual Energy	Day da a al				
			Cost	Savings	Payback				
Finding	ECM	ECM Cost	Savings	(kWh / year)	(Years)				
Standard Efficiency Motors	Premium Efficiency Motors w/ VFD Control	\$1,600	\$788	5,250	2.0				
T12 Lighting System	T8 Lighting System	\$61,000	\$18,450	123,000	3.3				
Antiquated Chiller	Modern Chiller	\$55,400	\$9,750	65,000	5.7				
Total - Building A		\$118,000	\$28,988	193,250	4.1				

#### THE VFA ADVANTAGE

VFA Energy Assessment Services give your organization several advantages:

- Receive objective, third-party recommendations for energy conservation measures for a fraction of the cost of a detailed energy audit
- Get actionable information: the best options for reducing energy consumption and related operating costs, and associated cost/benefit analysis, including payback periods.
- Integrate energy savings initiatives into your overall capital plan and understand how energy cost savings can be used to fund capital improvements and renewals over time

VFA is the industry leader in facilities capital planning and asset evaluation. Our team of dedicated facility assessment professionals is among the largest and most experienced in North America. Our expert assessment services, coupled with VFA's award-winning facilities capital planning software, provide your organization with the expertise and tools you need to understand facility needs and create plans and budgets that support your energy conservation and other organizational goals.

#### **LEARN MORE**

Find out how VFA can help your organization identify opportunities to reduce energy consumption and costs and integrated energy conservation programs in to your capital plans and budgets. Contact any VFA office or email us at info@vfa.com.

### About VFA, Inc.

VFA helps organizations strategically manage their facility portfolios with Capital Planning and Management Solutions (CPMS™) that combine software, assessment services and business process consulting. Organizations in the corporate, education, healthcare and government sectors use VFA solutions to manage over two billion square feet of real estate.

Contact us to learn how VFA can help your organization to optimize its facilities investment.

US: (800) 693-3132 Canada: (888) 685-3757 UK: +44 (0)118 900 1695

Web: www.vfa.com
Email: info@vfa.com

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