

# **ENERGY STAR Partners of the Year**

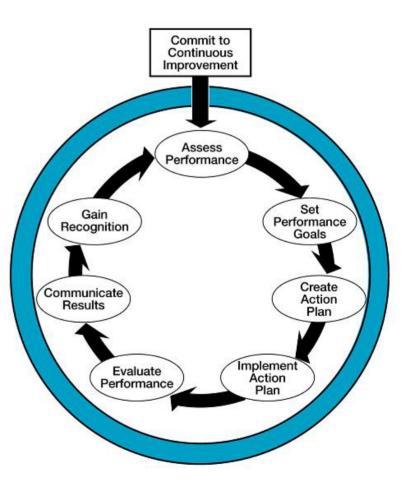
May 21, 2003



### **ENERGY STAR**

## **About the Web Conferences**

- Monthly
- Topics are structured on a strategic approach to energy management
- Help you continually improvement energy performance
- Opportunity to share ideas with others
- Slides are a starting point for discussion
- Open & Interactive





## **Today's Web Conference**

- Introductions
- About the Awards
- USAA Realty Company
- Starwood Hotels
- Questions



## **ENERGY STAR Awards**

- Across all partnership categories
- Large and small organizations
- Public Institutions and corporations
- Over 100 award winners for corporate energy management since 1993.



## **ENERGY STAR Awards**

### Gives partners an opportunity to:

- Be distinguished as an environmental leader
- Gain public recognition
- Create momentum at high levels of organization
- Secure additional resources to leverage their programs
- Recognize employees



## **ENERGY STAR Awards**

### Gives EPA an opportunity to:

- Identify leadership characteristics
- Learn from partners
- Create incentives for energy efficiency upgrades
- Reward environmental protection
- Reinforce achievements of voluntary approach



**ENERGY STAR** 

### 2003 Awards

### Categories

- Leadership in Energy Management
- Excellence in Business & Institutional Outreach
- Energy Efficiency Excellence for ENERGY STAR (Corporate Commitment)



## **2003 Awards Criteria**

- Organizational Commitment
- Energy Tracking
- Energy Benchmarking
- Achievements
- Communications
- Involvement across ENERGY STAR



## **Characteristics Of Winners**

- Energy manager with authority across
   organization
- Solid senior management support
- Measured performance and sustained reductions
- Unique efforts to motivate and train employees
- Internal educational and incentive programs
- External communication with customers, tenants, community



**ENERGY STAR** 

## **2003 Awards Winners**

### Leadership in Energy Management:

- Dutchess Community College
- Food Lion
- Hines
- Poudre School District
- Raytheon
- Starwood Hotels & Resorts
- USAA Real Estate Co.



**ENERGY STAR** 

## **2003 Awards Winners**

Excellence in Business & Institutional Outreach:

- American Society for Healthcare Engineering of the American Hospital Association
- Energy Efficiency Excellence
- Eastman Kodak

## **PSA in Major Magazines**





Appellant facility for Exceptions Transmission Serio Martic Cover U.S.A. Vo. ConstRain Charge Gerar Pinto In: Databass School La Dation Records Fund Conyony Energy Storm Poel tim, UK Gerovite Piles Sear Patients - Mex. he. Fin \$10,565, Inc. Security Contract Comp. Lanna aduction for Unarily Not all more surgers. Maryhenese, Name Property of 2 dans, longy filming Alarma My Nachta hory Course and Presidentary Authority Its Event Story Billion, Albin. and second dates, thread Repfit Recard Descriptions E-TRANC Perfectioned August 201001 (2000) Aug Relation between Son Core Car an General Annere Genere U.C. Enten Odiani (d.o. States of Section 2016 Comparison hours mailtimer sitelling Saturd failures No. Your Never In 167.6 15 Department of this of No utoca Devergener

Setters Kinner - Manual Averages, Stational Antonio Silipport of West Average 111 USEL Reel States Carriery Weeking mene Lighting Destantation When we prove Concernsion Contraction

WHOLEH'S ENTREY SUP HORESPEED ON THICK

ENERGY STAR

Optoretaistiens to she 2000 ENDREY GRAR! Award Winners. for relate American protection and prochases are enforced and protection of about the matter care and the weather by the environment for the re-generations. Method 5:265 is a valutary program achimistered by the U.S. Studior's entait evolution's agoing a source U.S. Department of Charge, designed to help bus scatter and inductive is a year, the earlier meretheough supprise cronge of Source



### **ENERGY STAR**



Today we thank

Some day your great great grandkids will too.





- Applications will be due in mid-November
- Categories remain the same
- Award ceremony on March 2, 2004.



### USAA REAL ESTATE COMPANY ENERGY STAR Overview

May 21<sup>st</sup>, 2003





#### Agenda

- 1. Background on USAA Real Estate Company
- 2. Overview of energy management program
- 3. How our program works & why it was successful
- 4. Key lessons learned
- 5. Questions





#### **Background on USAA Real Estate Company**





#### **Background on USAA Real Estate Company**

USAA Real Estate Company is the investor, owner and manager of real estate for our parent organization, USAA, a worldwide insurance and diversified financial services firm.

USAA Real Estate Company (which includes USAA Realty Company) has a combined portfolio of approximately 30 million square feet located through out the US and Europe.

USAA has committed to a "continuous improvement philosophy" to maximize the value of its real estate through hands on, creative and service oriented property management. To this end, as part of our strategic planning, we've committed to energy performance and ENERGY STAR.





#### Background on USAA Real Estate Company

- Became an ENERGY STAR Partner in November 2000
- Created and updated strategic energy plan in 2001 and revised it in 2002
- Benchmarked all of investment commercial office buildings by early 2002 – IRE portfolio
- Benchmarked all of the corporate facilities by fourth quarter 2002

   CRE portfolio





#### Background on USAA Real Estate Company – Accomplishments

- ENERGY STAR and related initiatives garnered \$1.5 million more in sales price value for a property in Southern California.
- Our energy initiatives will save an estimated three quarters of a million dollars annually – from power procurement, operating changes and energy efficiency retrofits.
- 2002 vs. 2001 we saved 5% or 5,155,066 kWh of annual consumption, which is equivalent to 7.5 million in pounds of carbon dioxide eliminated.





#### Background on USAA Real Estate Company – Accomplishments

- Suburban Office Building Case Study originally scored a 57 on ENERGY STAR'S Statement of Energy Performance; after American Energy audit, procuring power and retrofitting systems, Dupont Centre is now a "best in class" ENERGY STAR Labeled Building.
- Our average Statement of Energy Performance score has improved 13% per year since 2000.
- USAA Corporate Real Estate received training on using ENERGY STAR Platform in 2002 and has benchmarked USAA Corporate Facilities.
- USAA World Headquarters building, representing just under 6 million rentable square feet, has been certified by PE and will be largest facility with ENERGY STAR Label.



#### **Overview of Energy Management Program**





#### **Overview of Energy Management Program**

- Began with simple announcement to all property managers nationally
- Then fully began developing a strategic energy plan written document that ENERGY STAR has samples of on the website
- Next step was to develop training process and tools with ENERGY STAR representatives – and then simply start training via conference calls, annual management conference, etc.
- Then pushed for greater support with our service provider partners – ABM Engineering, American Energy, Siemens and others.





#### **Overview of Energy Management Program**

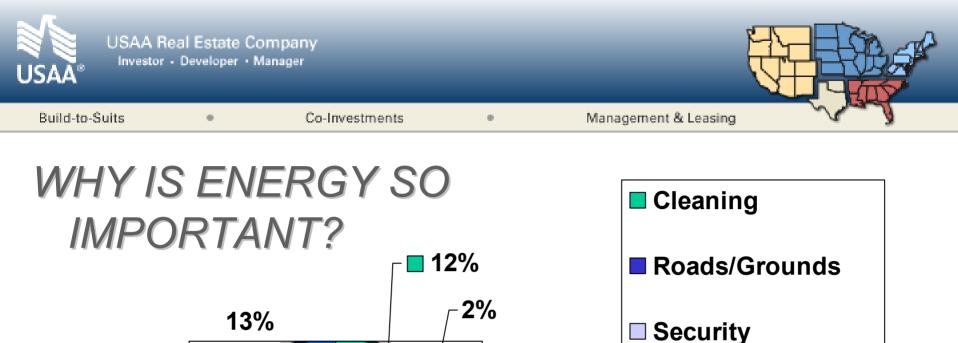
- We support the ENERGY STAR program internally by training and requirement that all managers and engineers use the system to track, monitor energy performance.
- We provide internal ENERGY STAR updates and information on USAA Realco Intranet, InSites (internal company newsletter) and through manager and engineer recognition.
- Support the program externally through inclusion on the Realco website, publicizing to our tenants and potential clients, public speaking and news articles on ENERGY STAR (e.g. Building Operating Management Magazine – September 2002)

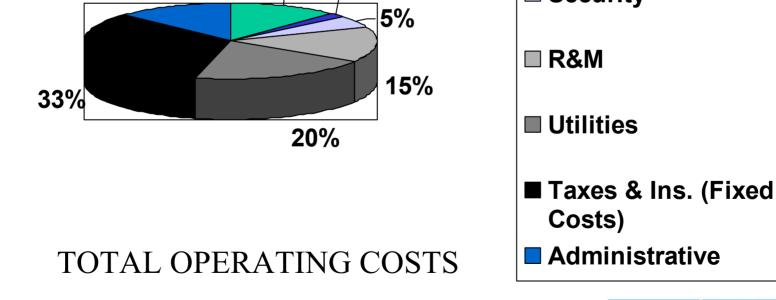




#### How our program works & why it was successful







DATA from BOMA 2002 Experience Exchange Report





### WHY IS ENERGY SO IMPORTANT?

- Downtown, Class A, High-rise Office Building Story San Diego, California
  - 1999 Total Utilities Costs \$736,721
  - 2000 Total Utility Costs \$1,182,411

Note: Occupancy did not fluctuate more than 2% during this time frame and weather was equally consistent





#### How our program works and why it's successful

- Helps to get program started if you can show results and compelling reasons why a focus on energy, ENERGY STAR
- In our case, we were already ENERGY STAR partners, but when we started seeing huge increases to our energy costs, we needed to be able to assure our tenants as well as ownership that we were doing everything possible to address energy related concerns
- ENERGY STAR then became an objective, quantifiable resource for not only measuring our performance, but also for identifying new ways to drive value with respect to energy
- Leadership from top down supports ENERGY STAR





#### How our program works and why it's successful

- Leader/Executive took ownership of the platform to communicate strategy, ENERGY STAR benefits and push for results – ENERGY STAR has to be a priority for some key leader within an organization
- Aligned with key service provider partners ABM Engineering and American Energy
- Publicized success stories internally to peers and executives
- Included ENERGY STAR objectives within team member MBO's & evaluations
- Ongoing process of focusing on results, to promote internally and externally, and find new ways to drive value
- Another positive driver for us... we felt ENERGY STAR and the ultimate benefits to the environment, were just the "right thing to do."



#### **Key Lessons Learned**





#### Key Lessons Learned

- Need to make a commitment nothing of value is easy, and this platform doesn't just "happen" without effort
- Training is essential in maximizing the benefits ENERGY STAR thanks to Dr. Sherri, John & Deb!
- Make sure to have a leader not necessarily an executive to sheppard the program and take ownership
- Learn to look at energy differently not just in terms of costs or \$/sf – e.g. BTU's, energy performance score





#### Key Lessons Learned

- Communication is also critical need to continuously let people know about the good, the bad and the accomplishments
- Need to have a plan written strategic energy plan and then tactical implementation plan
- While there is effort, once you get started implementing, you'll find that progress and success gets easier and easier.





#### Questions





## **Energy Initiatives \* Proven Results \***





### Starwood Hotels & Resorts Worldwide, Inc.

#### Starwood Has 750 Hotels in 80 Countries

Sheraton 381 Properties 64 Countries 127,934 Rooms

St. Regis/Luxury Collection 57 Properties 20 Countries 11,473 Rooms

W Hotels 1**6 Propertie**s 2 Co**untrie**s 4,9**86 Roo**ms Westin

112 Properties 27 Countries 44,965 Rooms

Four Points 148 Properties 12 Countries 27,631 Rooms

Other

29 Properties 2 Countries 7,478 Rooms

Timeshare 15 Resorts



### Starwood's Comprehensive Energy Program

- Starwood NAD 452 Properties
- Starwood Owns Over 40 Million SQFT of Hotel Space in North America
- 113 Owned Properties account for 42,335 Rooms in North America
- Every Hotel Has a Food & Beverage Department of Varying Degrees
- Almost All Properties Have Meeting Space
- Most Properties Heated Have Pools



### Starwood's Comprehensive Energy Program







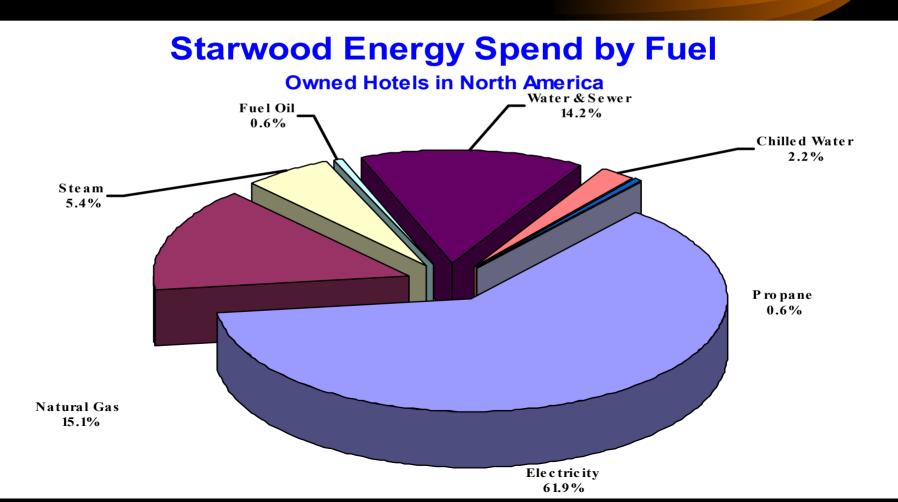




- Starwood's Owned Hotels Estimated Annual Energy Bill is \$80,000,000
- Estimated Starwood Owned Energy Usage by Type
  - \* Electric \$49,600,000
  - \* Steam \$4,320,000
  - \* Fuel Oil \$480,000

- \* Gas \$12, 000,000
- \* Propane \$480,000
- \* Chilled Water \$1,760,000
- \* Sewer & Water \$11,360,000







#### Starwood's Commitment to Energy Management

- 1. Create an Energy Department
- 2. Develop Energy Incentives at Both the Corporate and Hotel Level
- 3. Educate Every Employee About Energy Conservation
- 4. Educate our Guests about Energy Conservation Through In-Room Advertisement (i.e. water conservation)



#### Track and Review Energy Usage

- 1. Identify all Commodities and Suppliers
- 2. Employ a Data Collection and Reporting Agency
- 3. Have Every Chief Engineer Monitor Consumption and Identify Potential Reduction Efforts
- 4. Develop Reports for Hotel and Corporate Use



#### Share Best Operating Practices and Tips

- 1. Identify and Collect Best Practices From All Facilities
- 2. Post Best Practices on Company Intranet
- 3. Standardize on Operating and Maintenance Procedures
- 4. Create a Place on the Company Intranet for Facility Interaction and Energy Reduction Suggestions
- 5. Post Energy Savings Tips for All Employees to See



#### New Builds and Upgrades

- 1. Have Energy Engineers Review Final Designs
- 2. Create a Work Flow Procedure Between the Construction and Energy Departments
- 3. Understand That "Value Engineering" Might Save Money at the Time of Construction, but Could Cost the Company Much More in O&M Over the Course of Time
- 4. Utilize Energy efficient ENERGY STAR Products



#### Equipment Purchasing and Leasing

- 1. Purchase or Lease the Most Efficient ENERGY STAR Products Without Sacrificing Quality
- 2. Re-evaluate Procurement Contracts for Efficiency Standards
- 3. Prior to Equipment Replacement, Evaluate Equipment Operation for Potential Downsizing



#### Technology

- 1. Through Seminars, Publications, Trade Journals, and Colleagues, Stay Abreast of New and Emerging Technologies
- 2. Identify Technologies That Have Potential Applications to Your Industry and Facility Operation
- 3. Don't be Afraid to be the First Guy on the Block (i.e. Fuel Cells)
- 4. Track Performance of New Technologies on a Trial and Evaluation Basis Before a Large Scale Implementation



#### Commodity Usage & Procurement

- 1. Investigate Lower Commodity costs in Deregulated States
- 2. Have Suppliers Provide a Comparison Between Market and Local Utility Pricing
- 3. Hedge Costs by Investigating Caps, Collars, and Firm Price Contracts
- 4. Investigate Utility Load Reduction Programs
- 5. Investigate Reverse Auction Procurement
- 6. Develop Your Own Commodity Contract
- 7. Develop Relationships With Several Suppliers and Have Legal Review Their Contracts Prior to Going to Bid



#### Generation and Co-Generation

- 1. Investigate High Utility Cost Areas for the Feasibility of Co-Generation, to Lower Electric and Thermal Costs
- 2. Seek Opportunities for Base Load and Full Load Co-Generation
- 3. Identify Utility Rate Structures, Where Adequate Back-up Generation Would Allow For Lower Utility Rates
- 4. Pinpoint Properties Where Power Quality and Reliability are a Problem, and Investigate the Possibility of Some Sort of Generation



#### Starwood Results 2001

- Projects Complete 60
- Program Cost (Including Rebates) \$8,090,296
- Program Annual Savings \$3,594,960
- IRR 79.95%
- ROI 2.25 Years
- Rebates Received \$232,075
- \* 90% Completed Without Enron



- 2001 Projects Completed 60
  - Lighting Retrofits 9
  - VFD Installations 6
  - Controls (i.e. InnCom Guestroom Controls) 5
  - Evaporative Cooler 1
  - Generation 2
  - Voltage Upgrade (Tariff Change) 7
  - Boiler Conversion 1
  - Ozone Laundry 29



#### Starwood Results 2002

- Projects Complete 38
- Program Cost (Excluding Rebates) \$4,494,027
- Program Annual Savings \$1,309,388
- IRR 28%
- ROI 3.43 Years
- Rebates Received ~ \$524,000
- \* Late Start Due to Enron Bankruptcy Negotiations



#### 2002 Projects Completed - 38

- Lighting Retrofits 6
- Controls (i.e. InnCom Guestroom Controls) 6
- Economizer & Chiller Replacement 1
- Generation (i.e. Fuel Cells) 2
- Voltage Upgrade (Tariff Change) 3
- Boiler Heat Recovery 1
- Ozone Laundry 15
- Window Tinting 1
- Central Plant Optimization 1
- High Efficiency Motor Replacement 2



- Other Initiatives
  - Fuel Cell Installations in NYC and Stamford
  - Co-Generation in Hawaii
  - Solar Power in Hawaii and Parsippany, NJ
  - Laundry Heat Recovery ROTOTHERM
  - EMACX Demand Limiting and Management
  - Remote Building Monitoring and Control
  - Real Time Commodity Pricing



#### Involvement in ENERY STAR:

- 100% Benchmarking of portfolio
- Commitment to continuously improving energy performance through strong energy management:
  - Dedicated staff, including accountant, for energy team
  - Engage staff "Make Energy Management Everyone's Business"
  - Strong staff incentives
  - Promote energy efficiency through communications
  - Strong financial cases for energy upgrades



#### Questions



**ENERGY STAR** 

# Upcoming Web Conferences

July 16, 2003 Lev

Leveraging Energy Management Through Investor Relations

August 20, 2003 Submetering for strategic energy management



## Thank you for participating!