

# Environmental Challenge

## *C&W Environmental Challenge 2009*



**National Awards Webinar**  
*May 26<sup>th</sup>, 2010*

# Agenda

- Introductory Remarks:
  - Facilities Management – Frank Freda
  - Investor Services – Jim Arce
  - EPA ENERGY STAR – Alyssa Quarforth
- C&W Environmental Challenge Overview & Results
- Award Winner Presentations:
  - Overview of environmental achievements
  - Discussion of property best practices

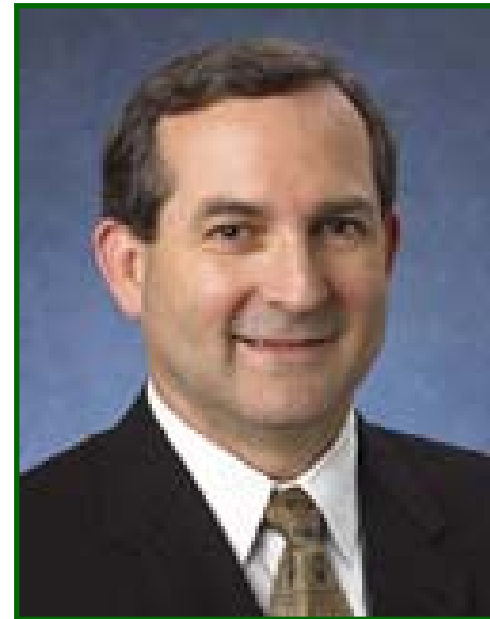


# **C&W Environmental Challenge**

## **Introductory Remarks**

# Client Solutions Business Leaders

- Frank Freda
  - Global Head of Facilities Management
- Jim Arce
  - Global Head of Investor Services



# EPA ENERGY STAR Partner

- C&W became an ENERGY STAR Partner in 1999
- ENERGY STAR is a voluntary partnership program:
  - Focused on climate protection
  - Provides strategic approach to energy management, promoting energy efficient practices
  - Helps organizations save money and protect the environment
- C&W property management and building operations teams use Portfolio Manager to measure and track energy and water use
  - 394 properties under management have shared their individual PM account info with the C&W Corporate Master Account





# WasteWise

- Pursuant to the C&W-EPA MOU announced in January 2009, C&W joined the WasteWise Program in September 2009
- WasteWise is a voluntary EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes, benefiting their bottom line and the environment.





# **C&W Environmental Challenge**

## **Overview & Results**

# About the C&W *Environmental Challenge*

## EC Fact Sheet



The graphic is a fact sheet for the Cushman & Wakefield Environmental Challenge. It features a green leaf with water droplets on the left. The Cushman & Wakefield logo and 'CLIENT SOLUTIONS' are at the top right. The title 'Environmental Challenge' is in large blue letters. Below it, a subtitle reads 'A CALL TO ACTION TO IMPROVE THE ENVIRONMENTAL EFFICIENCY OF CUSHMAN & WAKEFIELD'S MANAGED PROPERTIES'. A date stamp says 'OCTOBER 2009 Updated January 2010'. The main text is divided into sections: 'Take the C&W Environmental Challenge and help us find out:' with three bullet points; 'WHY PARTICIPATE?' with 'IMPROVE YOUR BOTTOM LINE' and 'DO YOUR PART TO ADDRESS CLIMATE CHANGE'; 'WHAT IS THE C&W ENVIRONMENTAL CHALLENGE?' with a description of the challenge and a list of four steps; and 'WHAT ARE THE BENEFITS OF PARTICIPATION?' with details on awards and certificates. A footer line reads 'C&W ENVIRONMENTAL CHALLENGE A call-to-action to improve the environmental efficiency of C&W's managed properties'.

**CUSHMAN & WAKEFIELD**  
CLIENT SOLUTIONS

OCTOBER 2009  
Updated January 2010

### Environmental Challenge

A CALL TO ACTION TO IMPROVE THE ENVIRONMENTAL EFFICIENCY OF CUSHMAN & WAKEFIELD'S MANAGED PROPERTIES

Take the *C&W Environmental Challenge* and help us find out:

- Who can quantify improvements in environmental performance over time?
- Who can take environmental performance to the next level?
- Which buildings are the highest performers across C&W's managed portfolio?

**WHY PARTICIPATE?**

**IMPROVE YOUR BOTTOM LINE:**  
Increased energy and water efficiency, and reduced waste in commercial real estate can reduce operating expenses and increase property asset value.

**DO YOUR PART TO ADDRESS CLIMATE CHANGE:**  
Commercial buildings generate about 17% of total greenhouse gas emissions. Energy efficiency is the single largest way for a building to reduce its "carbon footprint", and conserving raw materials also reduces emissions.

**BE RECOGNIZED FOR YOUR ACHIEVEMENTS:**  
The Challenge acknowledges environmental achievements through C&W's recognition and awards program.

**WHAT IS THE C&W ENVIRONMENTAL CHALLENGE?**  
Cushman & Wakefield (C&W) challenges its portfolio of managed properties in the US to reduce energy and water consumption, and waste disposal by 10% by 2012, compared to a 2008 baseline.  
The Challenge supports C&W's commitment to promote the efficient use of natural resources and the reduction of greenhouse gas emissions associated with building operations as outlined in the C&W-EPA Memorandum of Understanding (MoU) executed in December 2008.

Take the following steps:

1. Benchmark your building's energy use and water consumption with Portfolio Manager, EPA ENERGY STAR's free online benchmarking tool.
2. Report waste disposal in Re-TRAC, EPA Waste Wise's free online tool.
3. Make improvements over the Challenge period leveraging the strategies outlined in C&W's Green Practice Policies.
4. Share your data with the C&W corporate accounts in Portfolio Manager and Re-TRAC.

**WHAT ARE THE BENEFITS OF PARTICIPATION?**  
The most efficient buildings and the buildings making the greatest environmental improvements adhering to the Challenge's rules will receive awards. Certificates of recognition will be issued to qualifying buildings achieving one or more Challenge targets or meeting one or more of the Challenge's high performance criteria.  
All qualifying buildings taking part in the Challenge will receive a Certificate of Participation for striving to improve the environmental performance of C&W's managed portfolio.

C&W ENVIRONMENTAL CHALLENGE A call-to-action to improve the environmental efficiency of C&W's managed properties

- Participating properties must report monthly energy, water, and waste data
- Environmental achievements recognized through a C&W recognition & awards program

### WHAT IS THE *C&W ENVIRONMENTAL CHALLENGE*?

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The *Challenge* supports C&W's commitment to promote the efficient use of natural resources and the reduction of greenhouse gas emissions associated with building operations as outlined in the C&W-EPA Memorandum of Understanding (MoU) executed in December 2008.



# Environmental Challenge Timeline

December 18, 2009	<p><b>Report Baseline Year (2008) Data</b></p> <p>Enter baseline year energy and water (indoor and outdoor) consumption data into Portfolio Manager using utility data from January 2008 to December 2008.</p> <p>Enter baseline year waste (disposed and recycled) data into Re-TRAC using vendor invoices from January 2008 to December 2008.</p>
February 12, 2010	<p><b>Report Calendar Year 2009 Data</b></p> <p>Enter 2009 energy and water (indoor and outdoor) consumption data into Portfolio Manager using utility data from January 2009 to December 2009.</p> <p>Enter 2009 waste (disposed and recycled) data into Re-TRAC using vendor invoices from January 2009 to December 2009.</p> <p><b>Apply for Certificate of Participation or Recognition</b> Properties meeting Program terms and rules complete a <i>C&amp;W EC Application Form</i> on the Program's FUSION portal.</p>
February 26, 2010	<p><b>Submit Application for Certificate of Participation or Recognition</b> Deadline for properties to complete the <i>C&amp;W EC Application Form</i> on the Program's FUSION portal.</p>
March 2010	<p><b>Certificates of Participation &amp; Recognition Issued</b> C&amp;W Corporate issues certificates to qualifying properties.</p>
April 2010	<p><b>Awards Announced</b> <i>C&amp;W Environmental Challenge</i> Awards Committee announces award recipients. Ceremonies held at properties receiving an award in conjunction with Earth Day events.</p>

# Why Participate?

- Improve your bottom line
  - Reduce operating expenses
  - Potential for increased net operating income and property asset value
- Do your part to address climate change
  - Commercial buildings generate about 17% of total greenhouse gas emissions
  - Energy efficiency is the single largest way for a building to reduce its “carbon footprint”
  - Conserving raw materials reduces emissions
- Be recognized for your achievements
  - Receive C&W recognition for participation in the *Challenge*

# How do I Participate?

- Benchmark energy use and water consumption
  - *Tool: Portfolio Manager, EPA ENERGY STAR's free online benchmarking tool*
- Report waste disposal
  - *Tool: Re-TRAC, EPA WasteWise's free online tool*
- Share data with the C&W corporate accounts in Portfolio Manager and Re-TRAC
  - *Tool: C&W Corporate Master Accounts*
- Utilize strategies in C&W's Green Practice Policies (GPPs) to make improvements over the Challenge period
  - *Tool: C&W's GPPs*

# Certificates of Achievement

- **Certificate of Participation**

- Properly completed a C&W Environmental Challenge Application Form in the EC FUSION portal in February 2010
- Report data in accordance with Program terms & rules

- **Certificates of Recognition**

- Environmental Improvements

- Meet one or more of the *Challenge* targets during 2009 (10% reduction in energy, water or waste over 2008 baseline).

- High Performance

- Demonstrate superior environmental performance, as evidenced by meeting one or more of the following achievements during 2009:
  - (1) earned the ENERGY STAR label; or
  - (2) indoor water consumption of 15 gallons per gross square foot per annum or less; or
  - (3) solid waste diversion of 50% or more, or
  - (4) achieved LEED EB certification.



# Environmental Challenge Results

- Certificates of Participation – 74 Properties
- Certificates of Recognition
  - Environmental Improvement
    - 10% Energy Reduction – 21 Properties
    - 10% Water Reduction – 37 Properties
    - 10% Waste Reduction – 32 Properties
  - High Performance
    - LEED Certified - 18 Properties
    - Earned ENERGYSTAR Label – 32 Properties
    - Indoor Water Consumption <15 gal/sf -19 Properties
    - Waste Diversion Rate > 50% - 16 Properties



# Environmental Challenge Results

- Average EC Reductions
  - Energy– 5.31%
  - Water – 8.38%
  - Waste – 6.79%
- LEED Certified Properties
  - Platinum – 4      ➤ Silver – 6
  - Gold – 6      ➤ Certified – 2
- Average ENERGY STAR score improved 10%
  - 2008 – 65      ➤ 2009 - 72
  - ENERGY STAR Label > 90 – 11 Properties
- Average Waste Diversion Rate improved 6.67%
  - 2008 – 36.71%   ➤ 2009 – 39.16%



# **C&W Environmental Challenge Awards**

# Best Overall Performance in Environmental Excellence

- Demonstrates both most significant environmental improvement in reduction of energy, water and waste over the 2008 baseline year and high environmental performance, as evidenced by achievement of the ENERGY STAR label, LEED EB certification, high diversion rate and reduced indoor water use.



Cushman & Wakefield is proud to be a partner in EPA's ENERGY STAR program



Preserving Resources,  
Preventing Waste

Cushman & Wakefield is proud to be a partner in EPA's WasteWise program

# Best Overall Performance in Environmental Excellence



600 Highway 169 South  
St. Louis Park, MN



# 600 Highway 169 South St. Louis Park, MN

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-16.6%
Water use	-23.83%
Waste disposed	-19.7%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	97
2009 Diversion Rate	17%
Indoor Water Consumption (gallons/SF)	11.04
LEED Certification Level	Certified

## Occupancy Rate:

Year	Occupancy Rate
2008	91.25%
2009	93.64%

## Top Best Practices

- Utility Company Communication
- LEED Portfolio Program – cost effective and efficient
- Direct Tenant/Management Dialogue





# Environmental Improvement Awards

- *Greatest Overall Improvement*
  - Demonstrates highest level of improvement in energy, water and waste reduction over the 2008 baseline year.
- *Environmental Improvement Recognition*
  - Demonstrates high levels of improvement in energy, water and waste reduction over the 2008 baseline year.

# Greatest Overall Environmental Improvement



**1301 Dove Street  
Newport Beach, CA**

# 1301 Dove Street Newport Beach, CA

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-18.3%
Water use	-13.99%
Waste disposed	-31.6%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	94
2009 Diversion Rate	43.9%
Indoor Water Consumption (gallons/SF)	15.76
LEED Certification Level	Gold

## Occupancy Rate:

Year	Occupancy Rate
2008	77%
2009	91%

## Top Best Practices

### ● Energy

- Installation of motion sensors in suites, common areas and stairwells as well as LED lighting in common areas and 28 watt building standard lighting.

### ● Water

- Installation of low flow fixtures and automatic faucets as well as installation of smart controller and native/adaptive plant material.

### ● Waste

- Implementation of recycling and E-Waste program.



# Recognition in Environmental Improvement



**1851 Harbor Bay Parkway  
Alameda, CA**

# 1851 Harbor Bay Parkway Alameda, CA

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-30.3%
Water use	-1.42%
Waste disposed	-10.9%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	50
2009 Diversion Rate	27.7%

## Occupancy Rate:

Year	Occupancy Rate
2008	72%
2009	82%

## Top Best Practice

- **Lighting Retrofits**

- Awning & Bollard Lights (exterior)  
Cost: \$5,957 (\$14,114 less utility rebate of \$ 8,157)

Payback period: less than one yr

Estimated annual energy savings:  
\$12,061

- **New Light Fixtures**

- Replaced 75 exterior wall packs from 213 to 90 watt fixtures

Cost: \$17,354 (\$21,394 less utility rebate of \$4,040)

Payback period: less than 3 yrs

Estimated annual energy savings:  
\$5,974



# Recognition in Environmental Improvement



**8742 Lucent Boulevard  
Highlands Ranch, CO**

# 8742 Lucent Boulevard Highlands Ranch, CO

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-2.1%
Water use	-27.83%
Waste disposed	-12.7%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	39
2009 Diversion Rate	28.3%
Indoor Water Consumption (gallons/SF)	30

## Occupancy Rate:

Year	Occupancy Rate
2008	75%
2009	70%

## Top Best Practices

- Irrigation
  - Preventative Maintenance
  - Reduced Schedule
- Energy Management
  - Lower watt bulbs
  - Occupancy schedules
    - HVAC
    - Lighting

# Recognition in Environmental Improvement



**Adobe San Jose Towers  
San Jose, CA**



# Adobe San Jose Towers

## San Jose, CA

### Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-12.2%
Water use	-5.63%
Waste disposed	-46.6%

### High Performance:

Environmental Metric	
ENERGY STAR Score 2009	86
2009 Diversion Rate	95.5%
Indoor Water Consumption (gallons/SF)	20.96
LEED Certification Level	Platinum

### Occupancy Rate:

Year	Occupancy Rate
2008	78%
2009	83%

### Top Best Practice

- Sustainability Checklist
- Integrated Building Information System (IBIS)
- Solid Waste Program

# High Performance Awards

- *Best in Class*
  - Demonstrates highest level of environmental performance as evidenced by achievement of the ENERGY STAR label, LEED EB certification, high diversion rate and reduced indoor water use.
- *High Performance Recognition – Platinum*
  - Demonstrates high level of environmental performance as evidenced by achievement of the ENERGY STAR label, LEED EB certification, high diversion rate and reduced indoor water use.
- *High Performance Recognition – Gold*
  - Demonstrates notable environmental performance as evidenced by achievement of the ENERGY STAR label, and high E STAR score, LEED EB certification, high diversion rate and reduced indoor water use.



# Best in Class High Performance



**601 Townsend Avenue  
San Francisco, CA**

# 601 Townsend Avenue San Francisco, CA

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	11%
Water use	-20.67%
Waste disposed	0%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	95
2009 Diversion Rate	80.6%
Indoor Water Consumption (gallons/SF)	8.52
LEED Certification Level	Platinum

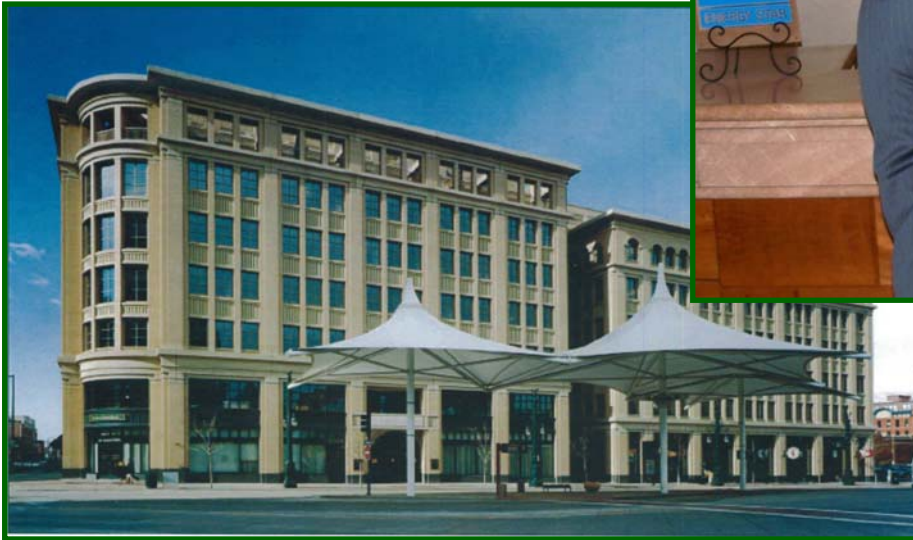
## Occupancy Rate:

Year	Occupancy Rate
2008	99%
2009	98%

## Top Best Practice

- Energy control and monitoring allowing us to optimize our power usage
- Water reduction program, using waterless urinals, low flow toilets, flow restrictors on sinks and showers and efficient commercial dishwasher
- Comprehensive waste management

# Recognition in High Performance Platinum



**16 Market Square  
Denver, CO**



# 16 Market Square Denver, CO

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-8.8%
Water use	7.1%
Waste disposed	28.4%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	97
2009 Diversion Rate	27.2%

## Occupancy Rate:

Year	Occupancy Rate
2008	90.48%
2009	90.48%

## Top Best Practice

- Evaluation and improvement of mechanical systems
  - Addition of variable frequency drives (VFD's) to water pumps (condenser & domestic)
  - EMS system – adjustment of start/stop schedule



# Recognition in High Performance Platinum



**27-01 Queens Parkway North  
Long Island City, NY**

# 27-01 Queens Parkway North Long Island City, NY

## Environmental Improvement:

Environmental Metric	Percent Reduction (2008-2009)
Energy use	-10.3%
Water use	-35.18%
Waste disposed	12.8%

## High Performance:

Environmental Metric	
ENERGY STAR Score 2009	88
2009 Diversion Rate	81.2%
Indoor Water Consumption (gallons/SF)	7.32
LEED Certification Level	Silver

## Occupancy Rate:

Year	Occupancy Rate
2008	100%
2009	73.62%

## Top Best Practices

- **Energy**
  - Installed electric monitoring system and automatic load shedding program into our BAS system
- **Water**
  - Installed 0.5 gpm aerators on faucets and waterless urinals
- **Waste**
  - Implemented recycling program which included GPM, paper, cardboard and e-waste

# Recognition in High Performance Gold

**303 Second Street  
San Francisco, CA**

**555 17<sup>th</sup> Street  
Denver, CO**

**425 Market Street  
San Francisco, CA**

**177 South Commons Drive  
Aurora, IL**

**455 Market Street  
San Francisco, CA**

**3033 Campus Drive  
Plymouth, MN**

**151 Almaden Boulevard  
San Jose, CA**

**5950 Airport Road  
Oriskany, NY**

**1670 Broadway  
Denver, CO**

**555 International Way  
Springfield, OR**

**700 Quaker Lane  
Warwick, RI**

# Questions



**Sustainability Strategies  
Client Solutions**

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