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A GREENER 4 GAME \$

Joe Abernathy
Vice President,
Busch Stadium Operations
St. Louis Cardinals

4^A GREENER GAME \$

- ❑ Open the New Busch Stadium in 2006
- ❑ Rolled out Sustainable Operations Mission Statement in 2007



MISSION STATEMENT

THE ST. LOUIS CARDINALS ARE COMMITTED TO PROMOTING ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY. OUR GOAL IS TO PUT A WINNING TEAM ON THE FIELD AND CREATE A SAFE, FUN, FAMILY FRIENDLY ENVIRONMENT AND ENTERTAINMENT EXPERIENCE FOR OUR GUESTS WHILE MINIMIZING THE IMPACT ON THE NATURAL ENVIRONMENT. SPECIFICALLY, THE CARDINALS WILL:



Strive to minimize pollution and waste through programs designed to reduce and recycle the consumable materials we use throughout our operations.



Conserve energy and water, support renewable energy resources, and encourage environmentally sound transportation options for employees and fans.



Identify and purchase environmentally friendly products and services for all stadium and team operations.

4^A GREENER GAME \$

- ❑ Started Recycling Program
- ❑ Developed Volunteer Green Team
- ❑ Signed on as EPA Energy Star Partner
- ❑ Signed on as EPA WasteWise Partner
- ❑ Since 2007
 - Reduced Solid Waste to Landfills by 30%
 - Reduced Energy Use by 20%
 - Reduced Water Consumption by 10%

Industry Developments

- ❑ Top Facilities are Diverting 90+%
- ❑ Zero Waste Events are Possible
- ❑ Increased use of Compostable Products
- ❑ Compostable Containers for Public Areas
- ❑ Hand Sort Trash to recover recyclables
- ❑ Streamlining Sources of Waste

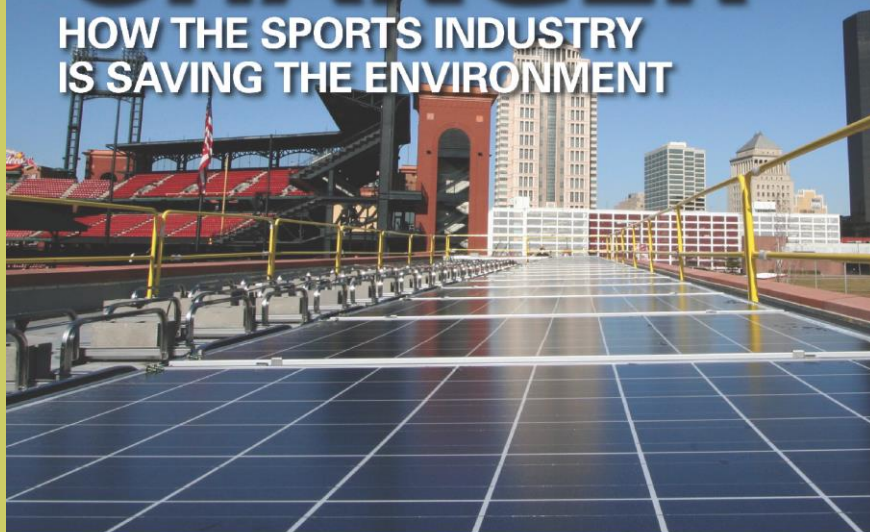
NRDC Report

NRDC REPORT

SEPTEMBER 2012
R.12-08-A

GAME CHANGER

HOW THE SPORTS INDUSTRY IS SAVING THE ENVIRONMENT



PREFACE Major League Baseball Commissioner Allan H. (Bud) Selig

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CASE STUDY

BUSCH STADIUM, HOME OF THE ST. LOUIS CARDINALS



BALLPARK STATS

Location: St. Louis, Missouri
Began Construction: January 17, 2004
Opened: April 10, 2006
Seating Capacity: 46,000
Owner: St. Louis Cardinals, LLC
Operator: St. Louis Cardinals, LLC
Venue Uses: MLB baseball games and concerts
Construction Cost: \$421 million (in 2012 dollars)²

THE CARDINALS' GREENING STORY: MOTIVATIONS, CHALLENGES AND LESSONS FROM THE FIELD

The St. Louis Cardinals are one of the most award-winning teams in baseball. Since they joined the National League in 1892, the Cardinals have won 11 World Series Championships, 18 National League Pennants, 8 National League Central Division Titles, 3 National League Eastern Division Titles, and more than 9,300 games.¹

The Cardinals have also been earning accolades for their green efforts, including the St. Louis Green Business Challenge Award of Achievement, the Missouri Waste Coalition Environmental Stewardship Award, and the Downtown St. Louis Community Improvement Sustainability Award. Thanks to the strong commitment of their operations staff and front office team, the Cardinals have achieved a 29 percent waste diversion rate, a 20 percent reduction in overall energy use (and base power demand), and a 10 percent cut in water use across all operations since opening their stadium just five years ago. With a solar array newly installed in 2012, the Cardinals continue to set the bar high on and off the field.

WHY GO GREEN?

The Cardinals see greening and efficiency as an integral part of operating Busch Stadium in an economically and socially responsible way. "Since day one, operating this building in an effective manner has been a prime objective," says Joe Abernathy, vice president of stadium operations at Busch Stadium. "We've always been a proponent of continuous improvement in what we do and how we do it." For the Cardinals, this improvement involves both operational efficiency and the bottom line, as well as being a community and sports-industry role model.

As the former president of the Stadium Managers Association as well as longtime VP of Busch Stadium Operations, Abernathy views greening as an imperative not only for the Cardinals, but also for Major League Baseball (MLB) as a whole. With more than 20,000 fans attending most MLB games, Abernathy sees baseball, our national

"WE LOOK AT [GREENING THE STADIUM] MORE AS A JOURNEY OF CONTINUOUS IMPROVEMENT, RATHER THAN ATTAINING A GOAL OR DESTINATION," Joe Abernathy says.

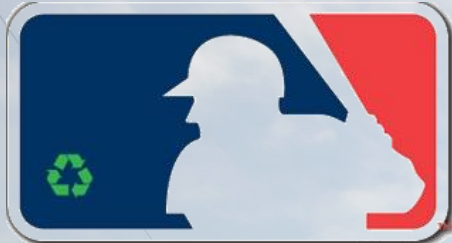
pastime, as an important mouthpiece for environmental stewardship. "I think collectively we could make a difference," he says.

Abernathy hopes that the Cardinals' green efforts will help spur further action by all 30 MLB teams, and other sports teams in the Midwest, to become more efficient and environmentally intelligent. "If we can get other stadiums measuring their resource use and greening, then we can use that data to start identifying which buildings out there are operating better than others, and maybe there are individual processes or techniques they have that they can teach the rest of us to do too," he explains.

The Cardinals' interest in greening has also been encouraged by the growing green buildings and sustainable operations movement in the United States. "We caught that wave and are continuing to do what we've done all along as far as running an efficient operation." According to Abernathy, efficiency is just as important for Busch Stadium as any building or business that wants to save money on operating costs. "We're just basically running a building that houses baseball games," he says.

WHERE TO START?

"When it comes to stadiums and sustainable operations, reducing energy use is the place to start," says Abernathy. "The cost of energy to run a stadium is typically 15 to 20 percent of our total stadium operations budget. So when we were able to reduce our energy use by 20 percent, it had a significant impact on the bottom line—for us, saving up to \$150,000 annually. It all starts with knowing what your energy consumption is."



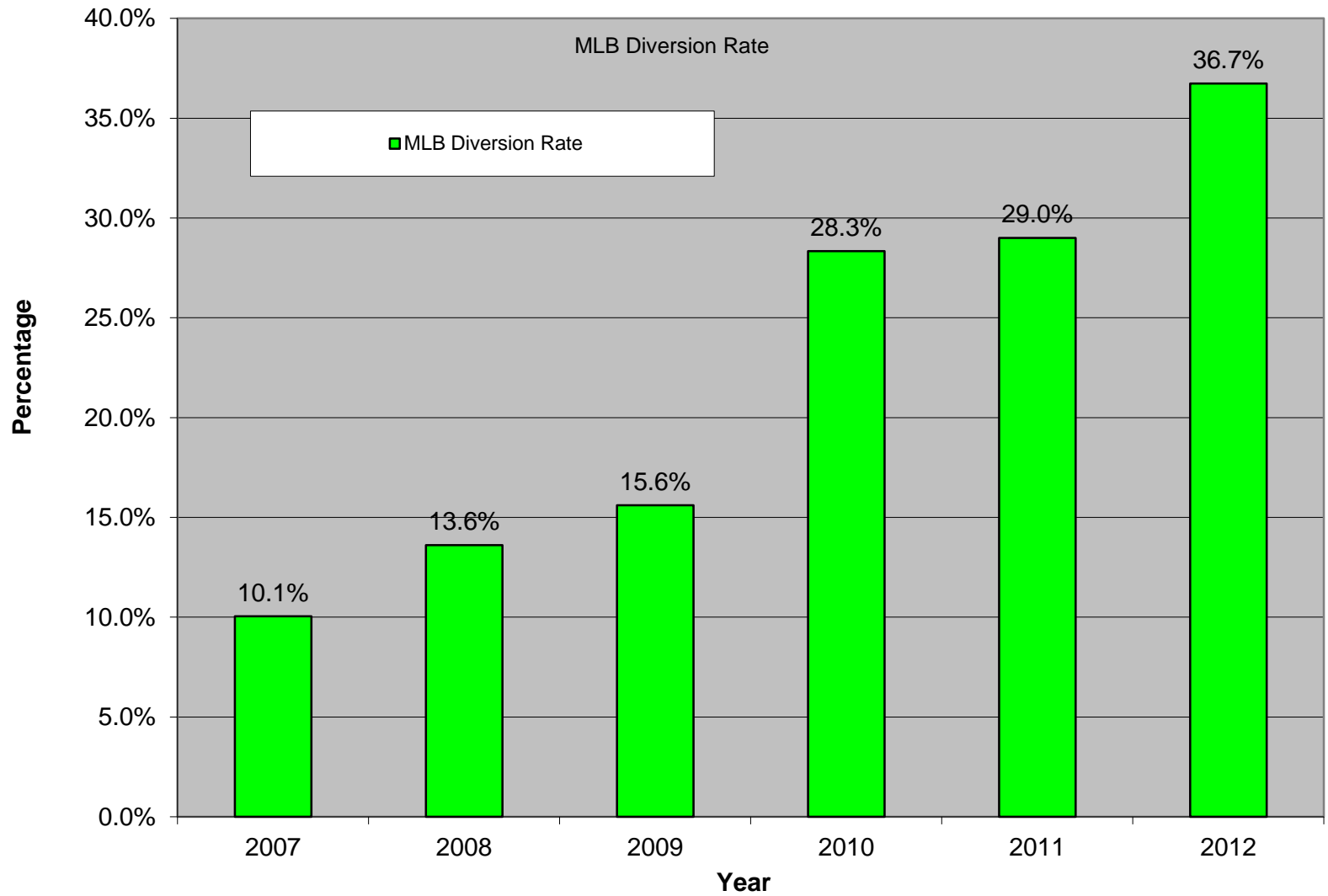
MLB

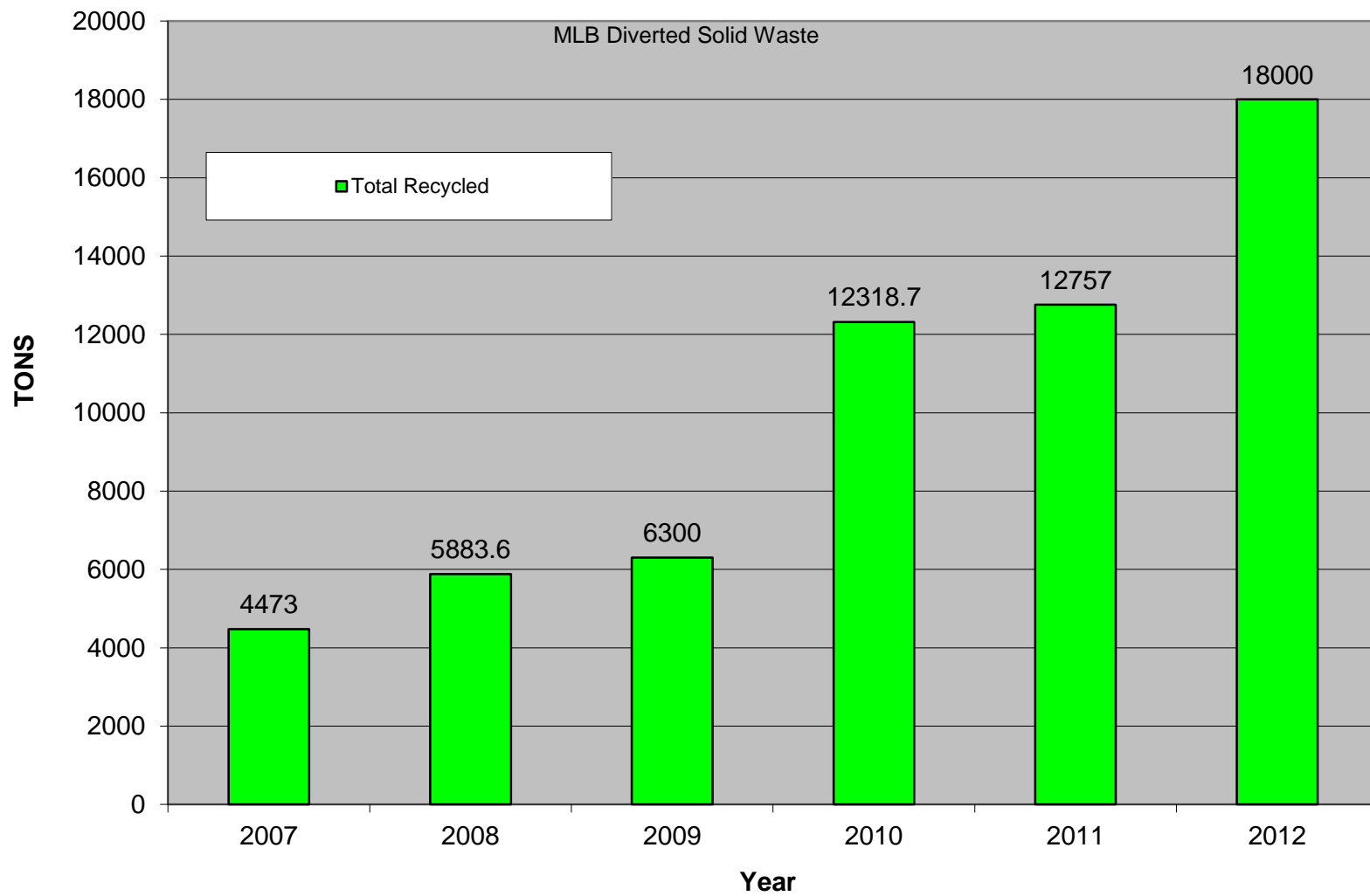


Green Glove Award Goes To...

San Francisco Giants







EPA Battle of the Buildings

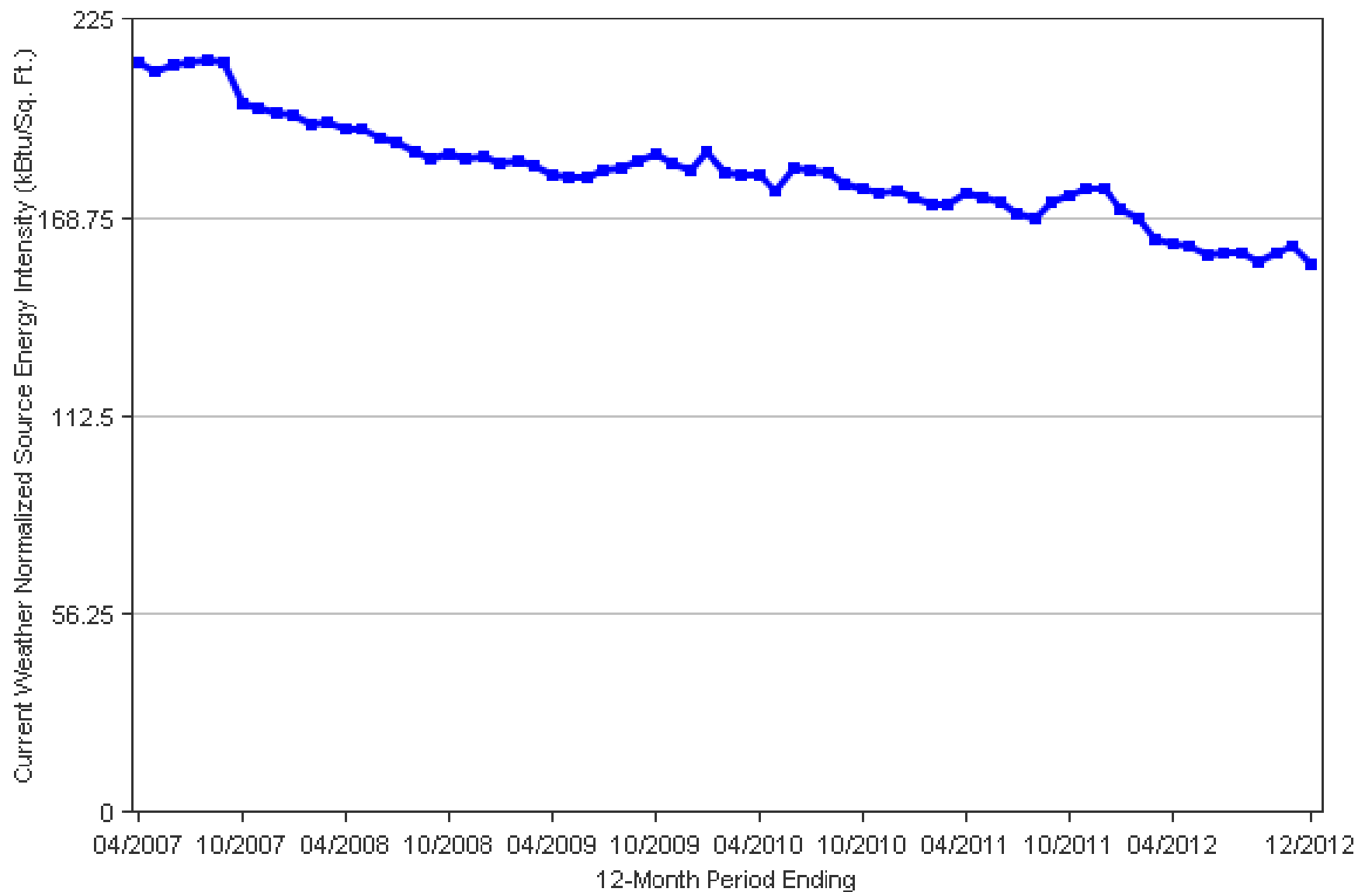
2012 ENERGY STAR National Building Competition — Competitor List

Updated November 2, 2012

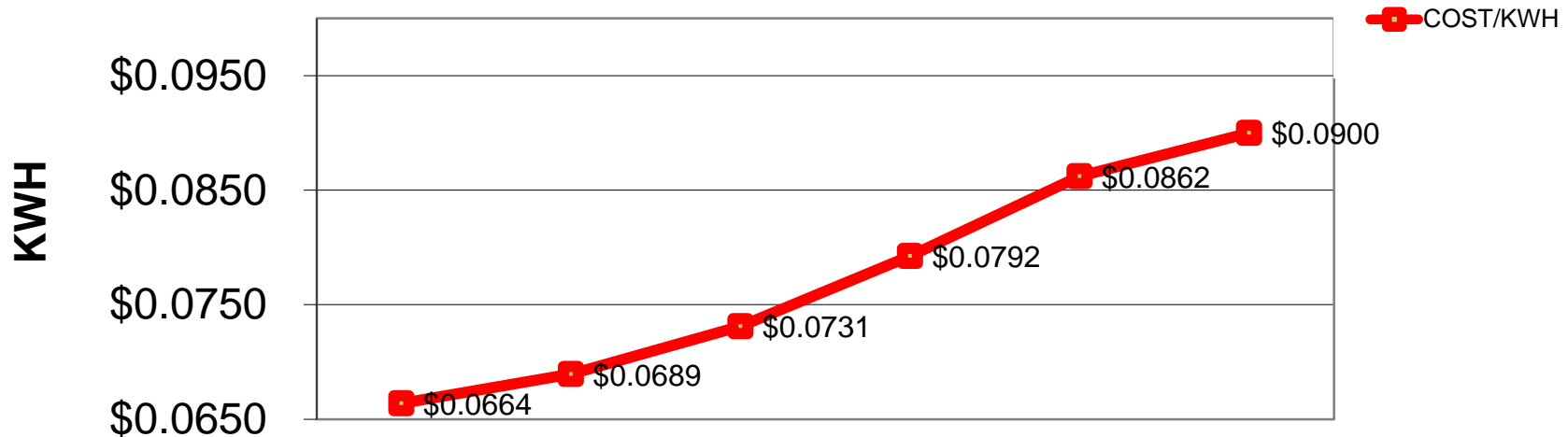
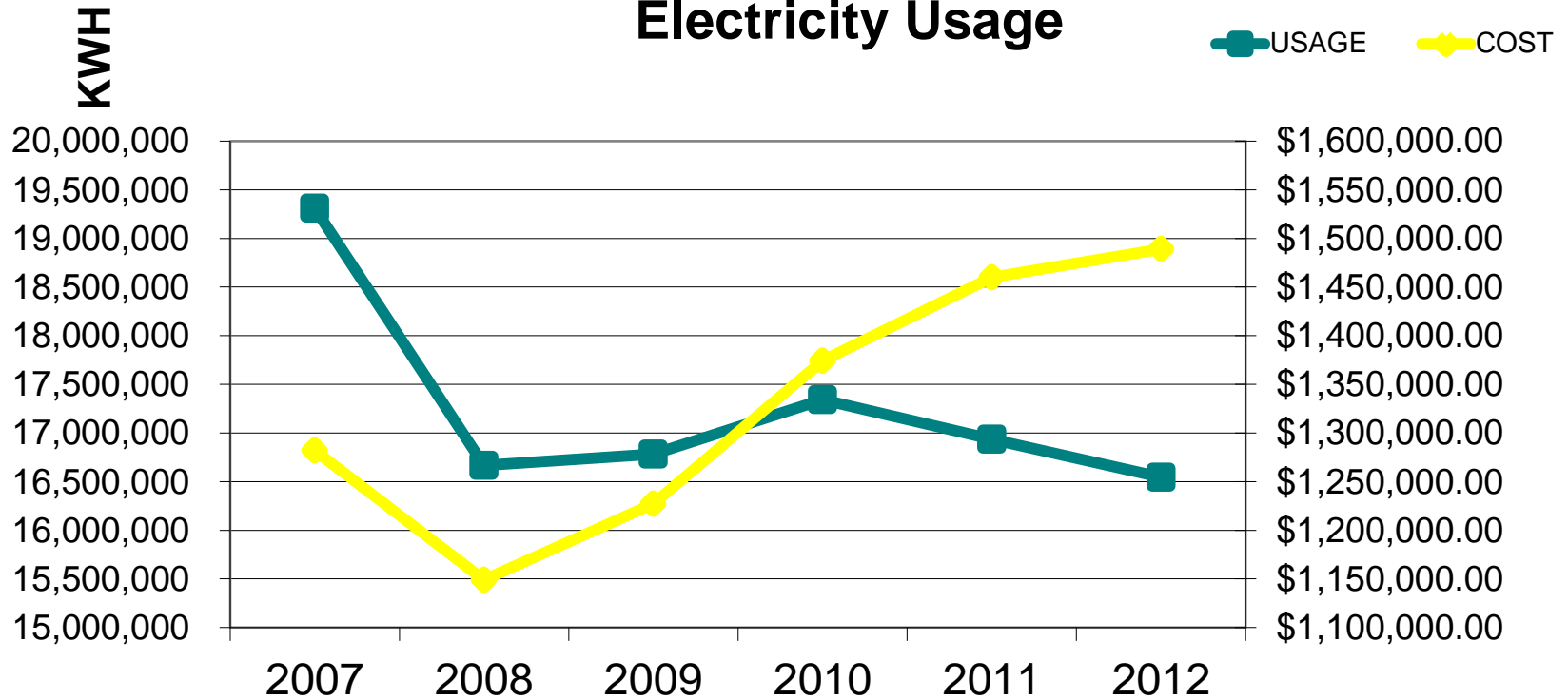
Below is a list of all buildings competing in the 2012 ENERGY STAR National Building Competition. All data in this spreadsheet is self-reported by the competitors. All buildings that are eligible for recognition at the end of the competition will be required to have their energy and/or water use data for the baseline and comparative periods (calendar years 2011 and 2012) validated by a licensed professional engineer or registered architect. Click the arrows on each column header to see a drop down list of text or numerical values in each column category; select or deselect text or values, and click "Okay" to sort the spreadsheet. "N/A" in columns J, M, and N indicates the building has not submitted data.



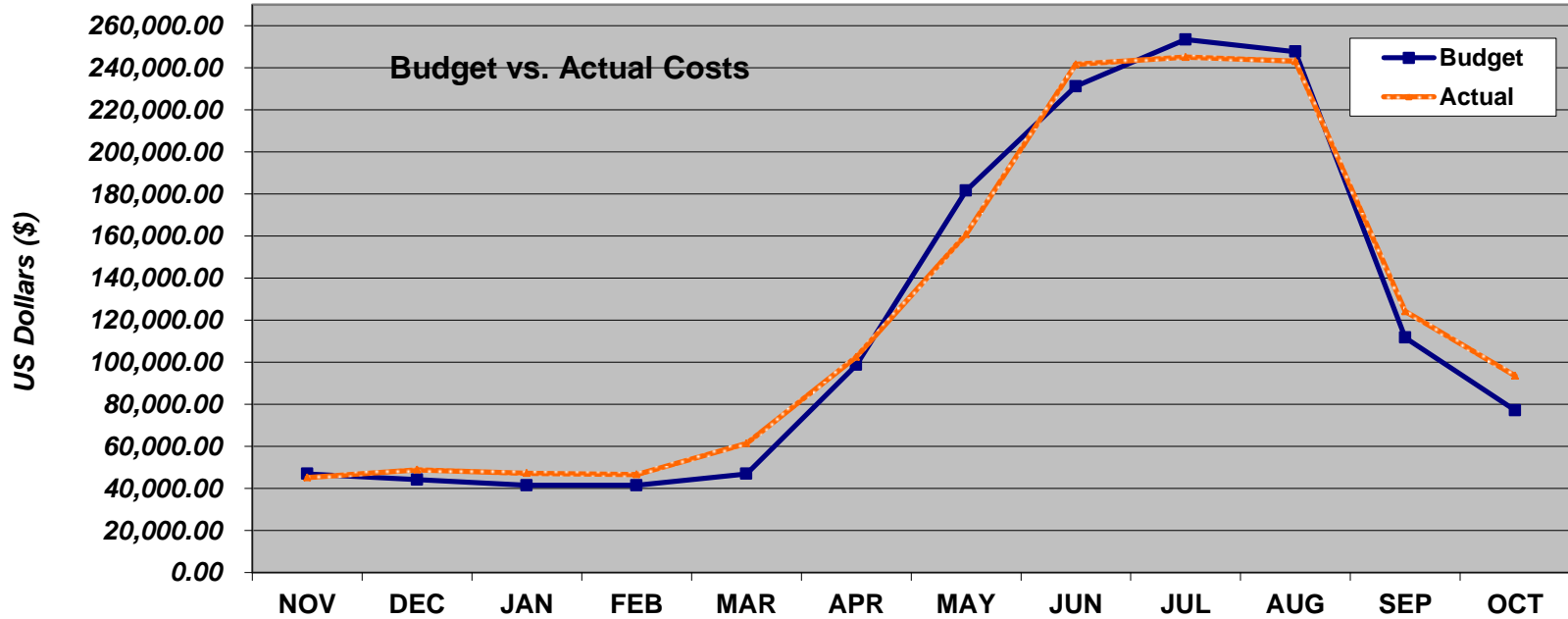
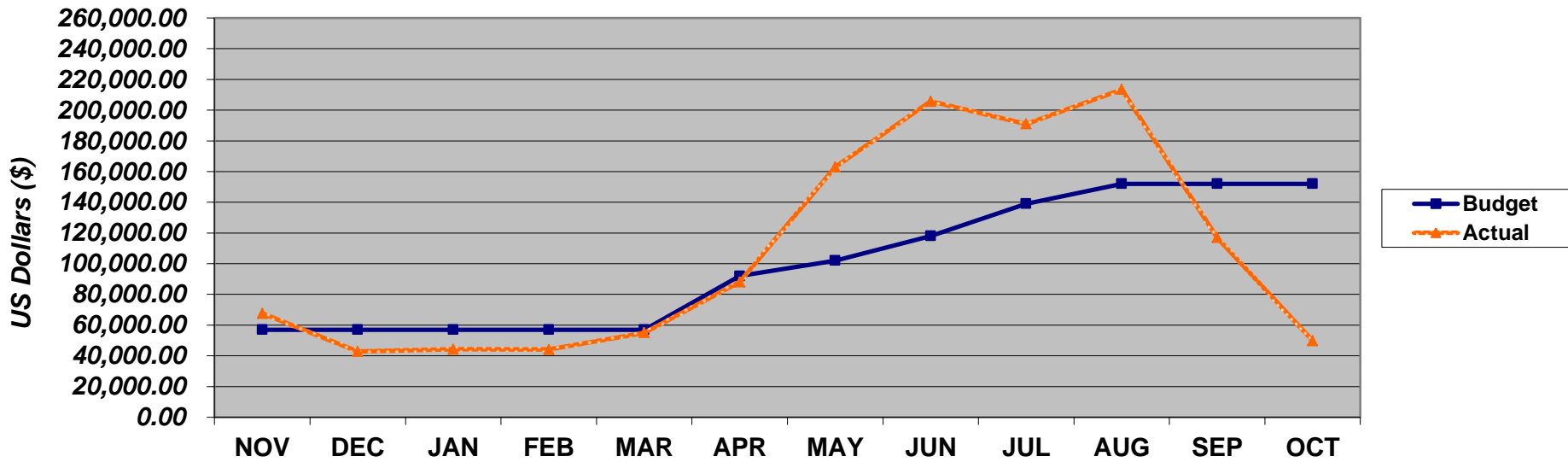
Building Name	Building Owner	Organization	Building Type	City	State	Year Built	Energy Starting Weight (kBtu/Sq. Ft.)	Energy Midpoint Weight (kBtu/Sq. Ft.)	% Reduction Energy Use	GHG Emissions Prevented (MtCOe)	Energy Cost Savings
Museum of Arts & Design	Museum of Arts and Design	GSH Group, Inc.	Entertainment/Culture	New York	New York	2009	926	829	10%	1528	\$111,978
Busch Stadium	St. Louis Cardinals	St. Louis Cardinals	Entertainment/Culture	St. Louis	Missouri	2006	177	160	10%	583	\$465,110
Pueblo Grande Museum	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1974	292	268	9%	14	\$9,135
Oregon Convention Center	Green Building Services	Green Building Services	Entertainment/Culture	Portland	Oregon	1990	207	202	3%	0	\$74,543
DT - Orpheum Theater	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1929	300	293	2%	30	\$9,320
Art Museum	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1959	187	184	2%	92	\$28,061
PhxConvCntr - North & West Bldgs	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	2009	149	148	1%	93	\$41,578
Dee Events Center	Weber State University	Weber State University	Entertainment/Culture	Ogden	Utah	1977	193	193	0%	10	-\$1,040
Experience Music Project Science Fiction Museum	Experience Learning Community	Green Building Services	Entertainment/Culture	Seattle	Washington	1999	525	528	-1%	-31	-\$9,288
Progressive Field	Cleveland Indians	Cleveland Indians	Entertainment/Culture	Cleveland	Ohio	1994	203	210	-4%	502	-\$190,538
PhxConvCntr - Symphony Hall	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1973	226	242	-7%	-70	-\$33,323
San Diego Convention Center	Green Building Services	Green Building Services	Entertainment/Culture	San Diego	California	1989	140	151	-7%	-552	-\$392,568
PhxConvCntr - South Bldg	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1987	228	246	-8%	-170	-\$110,779
Performing Arts Center	City of Phoenix - Energy Mgmnt	City of Phoenix	Entertainment/Culture	Phoenix	Arizona	1959	65	73	-13%	-14	-\$4,064
MetLife Stadium	New Meadowlands Stadium Company	MetLife Stadium	Entertainment/Culture	East Rutherford	New Jersey	2010	176	N/A	N/A	N/A	N/A
Milwaukee Brewers Miller Park	Milwaukee Brewers	Milwaukee Brewers	Entertainment/Culture	Milwaukee	Wisconsin	2001	157	N/A	N/A	N/A	N/A
DC0030ZZ - NATIONAL BLDG MUSEUM	US General Services Administration	US General Services Administration	Entertainment/Culture	Washington	District of Columbia (D.C.)	1886	260	N/A	N/A	N/A	N/A
Nationals Park	Washington Nationals Baseball Club	Washington Nationals Baseball Club	Entertainment/Culture	Washington	District of Columbia (D.C.)	2008	167	N/A	N/A	N/A	N/A



Electricity Usage



Budget vs. Actual Costs





2010 ANNUAL REPORT



St. Louis Green Business Challenge- Award of Achievement



St. Louis Cardinals, LLC



54%

IMPROVEMENT

35

POINTS
GAINED

PROJECT HIGHLIGHTS

ACCOMPLISHMENTS

- ✓ Recycling – 264 Tons and a diversion rate of over 27%
- ✓ Initiated Composting Program
- ✓ Missouri Waste Coalition Award
- ✓ Participated in AmerenUE Business Energy Efficiency Program by starting a retro commissioning project
- ✓ Hosted a Green Week including an e-cycling event

INNOVATIONS

- ✓ Renewable Energy Credits- Recognized as a Gold Leader with Ameren's Pure Power
- ✓ Operation Food Search- total value of the food donated from this program through September was equivalent to \$104,655 or 29,666 lbs.
- ✓ Ice Mountain Green Team
- ✓ WasteWise and Energy Star Partnership
- ✓ All restroom papers (paper towels and toilet paper) are 100% post consumer recycled content.

"The Cardinals have been working hard on improving the sustainability of our operations. The RCGA St. Louis Green Business Challenge was a great way for us to focus on this issue and help us summarize our progress. We are excited and proud of our accomplishments highlighted through the Green Business Challenge. We plan to use this scorecard in the future as we strive to continuously improve the sustainability of our operations here at Busch Stadium."

- Joe Abernathy
Vice President Stadium Operations



ST. LOUIS GREEN BUSINESS CHALLENGE 2010



St. Louis Cardinals

700 Clark Street St. Louis, MO 63102

www.cardinals.com

Owner

1,271,000 Square Feet

150 full-time, 500 part-time,

2000 contract Employees

Joe Abernathy

JAbernathy@cardinals.com

THE ST. LOUIS GREEN BUSINESS CHALLENGE

encourages companies to adopt sustainable business practices by forming Green Teams, conserving energy and water, reducing waste, improving indoor environmental quality, and providing clean transportation options. The Challenge is a program of the St. Louis Regional Chamber and Growth Association and the St. Louis Climate Prosperity Project to promote green savings in our region.



RESOURCE ADVISOR FOR THE CHALLENGE:

 MISSOURI BOTANICAL GARDEN

www.stlouisgreenchallenge.com



The Partnership for Downtown St. Louis and the Downtown Community Improvement District- Sustainability Award

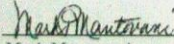
Sustainability Award



The Partnership *for* Downtown St. Louis and the Downtown Community Improvement District are pleased to honor the **E-Cycle St. Louis** in appreciation for significantly enhancing the regional image of downtown.

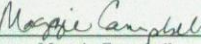


THE PARTNERSHIP *for*
DOWNTOWN ST. LOUIS


Mark Mantovani
Chairman
The Partnership *for*
Downtown St. Louis

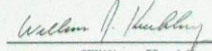


DOWNTOWN COMMUNITY
IMPROVEMENT DISTRICT


Maggie Campbell
President and CEO
The Partnership *for*
Downtown St. Louis

E-Cycle
St. Louis

November 17, 2010


William Kuching
Chairman
Downtown Community
Improvement District

Missouri Waste Coalition- Environmental Stewardship Award



St. Louis Science Center- Eco Expo Honorable Mention



WasteWise-Partner Award



2013 Green Week DNC ISO 14001 Certification



2013 Green Week

Pure Power



2013 Green Week Diversion Day



2013 Green Week EPA Food Recovery Challenge



EPA Food Recovery Challenge



Operation Food Search



A GREENER 4 GAME \$

Joe Abernathy
Vice President,
Busch Stadium Operations
St. Louis Cardinals