# STATEMENT OF ROGER PLATT, SENIOR VICE PRESIDENT OF GLOBAL POLICY AND LAW, USGBC

# BEFORE

# THE HOUSE SCIENCE, SPACE AND TECHNOLOGY COMMITTEE's SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT:

## THE SCIENCE BEHIND GREEN BUILDING RATING SYSTEMS

Tuesday, May 8, 2012

On behalf of the U.S. Green Building Council, our nearly 13,000 organizational members and more than 75 local chapters, I would like to thank Chairman Broun and Ranking Member Tonko for the opportunity to testify today. My name is Roger Platt and I am the Senior Vice President of Global Policy and Law at USGBC.

We commend the Committee for its leadership in convening this important hearing to learn more about the science underlying green building rating systems.

USGBC is a nonprofit membership organization whose vision is a sustainable built environment. One of the ways we support this mission is through our LEED Green Building Rating System, a voluntary certification program that can be used with any building type and at any phase in the building lifecycle.

LEED-certified buildings have become an essential component of any sound business strategy for property owners. High-performing LEED-certified buildings save money and deliver higher profit margins by reducing energy and operating costs. Some of America's most admired and iconic companies – Pepsi-Cola, General Electric, Google, Target, Marriott, McDonalds, Apple and Procter and Gamble – rely on LEED certification to increase their bottom line and their brand value.

My testimony will focus on three areas: 1) How the private sector developed LEED; 2) The market-driven business case for LEED; and 3) How government adoption of LEED is saving millions of dollars every year.

#### **Private Sector Development of LEED**

Private sector leaders and building professionals established LEED in 2000 and it has quickly become the most successful voluntary, private, market-driven real estate program in the country. The formula underlying LEED's 100-point rating system is developed in an open, consensus-based process among stakeholders and technical experts. Final approval of changes to the developed system is made by USGBC membership.

2

LEED provides a measurable, private sector consensus definition of <u>L</u>eadership in <u>E</u>nergy and <u>E</u>nvironmental <u>D</u>esign to the building community. It is the chief tool USGBC employs in its mission of market transformation. LEED challenges market leaders to meet high standards, builds momentum for best practices and moves the whole of the market forward as those best practices are mainstreamed by market forces.

Since its initial public launch in 2001, LEED has continuously raised the bar. USGBC released rating systems for the operations and maintenance and commercial interiors markets in 2006, for the schools sector in 2007 and for the residential market in 2008. These programs have had great success in the private marketplace. To date more than 12,300 commercial projects and over 19,000 residential units have achieved LEED certification.<sup>1</sup> Of the certified commercial buildings, 6% are federal government projects.<sup>2</sup> The newest version of the rating system, LEED 2012, is currently in development and is scheduled for release at the end of the year.

The hallmarks of the LEED development process are openness, transparency and consensus. LEED is developed by balanced and diverse technical committees composed of USGBC members. Any changes to the LEED standard must be approved through a democratic balloting process open to all USGBC members. While many of our systems rely on government tools such as ENERGY STAR, private sector leaders, relying on expert technical advice, ultimately set the criteria for LEED.

USGBC relies on expert committees to provide a consistent source of sound advice and subject matter expertise. The committees ensure the integrity of LEED is grounded on technical considerations of the highest quality. To date, technical experts from across the building industry have donated more than 25,000 hours on the development of the newly proposed LEED rating system and each public comment (now over 20,000 in number) is responded to

<sup>&</sup>lt;sup>1</sup> LEED project data

<sup>&</sup>lt;sup>2</sup> Ibid.

individually and is available online.<sup>3</sup> We expect further refinement with an additional public comment period opening in May.

Details about the LEED development process are publicly available on the USGBC Web site, <u>www.usgbc.org</u>, in the "LEED Foundations Documents," which describe the consensus process with great specificity.

### The Business Case for LEED

LEED saves money and increases the bottom line for business. The economic benefits of LEED certification – reduced energy and operating costs – are well known. A recent independent study of PNC's bank branches by the University of Notre Dame found that the annual utilities cost per employee in their LEED facilities was \$675.26 lower than in non-green facilities.<sup>4</sup> In addition, and more generally, LEED-certified buildings have been proven to generate higher rents, have a greater resale value, offer faster lease-up and retain higher occupancy rates. It is results like these that make it easy to see why nearly half of the Fortune 100 companies use LEED certification to increase their brand value and their bottom line, all the while preserving natural resources.

Contrary to the opinion of some, LEED-certified buildings do not have to cost more than a conventional building. The high-performance building market has reached a state of maturity. At LEED's inception in 2000, a high-performance building premium did exist, but as LEED has achieved widespread adoption, the premium has all but disappeared.

#### **LEED Saves Taxpayers Money**

LEED saves U.S. taxpayers money just as it does private developers. The federal government is the largest user of energy in the United States. And just like other large building owners, the federal government seeks ways to reduce and eliminate energy waste. As responsible stewards of taxpayer money, the Congress and the Administration have sought opportunities to reduce energy use, and taxpayer waste, in the federal building portfolio.

<sup>&</sup>lt;sup>3</sup> DIVE INTO 2012 available at: <u>http://www.usgbc.org/DisplayPage.aspx?CMSPageID=2360</u>

<sup>&</sup>lt;sup>4</sup> Conlon, E. and Glavas, A. (2012). The Relationship Between Corporate Sustainability and Firm Financial Performance. Accessed March

<sup>27, 2012</sup> via business.nd.edu/uploadedFiles/Conlon%20and%20Glavas%202012.pdf

The federal government has completed 797 certified LEED projects representing over 80 million square feet of real estate.

Some notable LEED success stories from the public sector include:

*Department of Treasury Headquarters, Washington, D.C.*: The 19th-century U.S. Treasury Building – a National Historic Landmark neighboring the White House – was awarded LEED Gold certification in September 2011. The certification is expected to yield energy savings to taxpayers of more than \$3.5 million every year while reducing potable water use by 43 percent, and adding 164 additional workstations in the building (offsetting leased space costs).<sup>5</sup>

*FBI Regional Building, Chicago, IL:* Developed by USAA Real Estate Company and occupied by the FBI, the buildings increased its ENERGY STAR rating from a highly efficient score of 78 to an exceptional score of 95 (out of 100), meaning the building is operating in the top five percent of the market in terms of energy efficiency.<sup>6</sup>

*Potomac Yards, Arlington, VA:* The Potomac Yards federal complex has twice earned LEED Gold certification – once under LEED for New Construction, and in 2008 under LEED for Existing Buildings. The building, which earned an ENERGY STAR label in 2007, also achieved a verified 41 percent reduction in water use.<sup>7</sup>

GSA has recently launched a new building portfolio management system, designed to benchmark performance in sustainable building operations across its portfolio. The system is the backbone of GSA's application to the LEED Volume Program for Operations & Maintenance, a

<sup>&</sup>lt;sup>5</sup> "At Treasury, Green is Our Favorite Color – But We'll Take (LEED) Gold!" by Dan Tangherlini. Available at: <u>http://www.treasury.gov/connect/blog/Pages/At-Treasury-Green-is-Our-Favorite-Color-But-Well-Take-LEED-Gold.aspx</u>

 <sup>&</sup>lt;sup>6</sup> "FBI Chicago Regional Office Transforms into Intelligent Building for Environmental Efficiency and Sustainability." Available at: <u>http://www.cisco.com/web/strategy/docs/gov/fbiChicago\_cStudy.pdf</u>
<sup>7</sup> "Arlington, Virginia - Potomac Yard." Available at: <u>http://www.epa.gov/oaintrnt/facilities/hq\_nova.htm</u>

program through which GSA intends to certify 50 buildings by the end of 2012.<sup>8</sup> According to the General Services Administration, this process allows them to save time and taxpayer resources on verifying energy and water performance.<sup>9</sup>

Private sector leadership is changing the way government thinks about high-performance buildings. Everyday 1.5 million square feet of real estate is certified under the suite of LEED rating systems<sup>10</sup>, more than 75% is in the private sector.<sup>11</sup>

Governments that have embraced LEED have seen significant savings for taxpayers. Studies have demonstrated that LEED saves money.<sup>12</sup> Just as research in the private sector has demonstrated that using LEED is a wise investment for businesses large and small, the work of the national labs conclusively demonstrated that using the LEED rating system saved taxpayers money. In 2011 a Pacific Northwest National Lab (PNNL) study found GSA LEED buildings to have 25 percent lower energy use compared to the national average. These high-performing buildings reduced operational costs by 19 percent compared to the national average. LEED Gold buildings were singled out as being particularly high performers.<sup>13</sup>

That research built on the study that PNNL performed in 2006, evaluating the applicability, stability, objectivity and availability of five different sustainable building rating systems.<sup>14</sup> The study concluded that LEED "continues to be the most appropriate and credible sustainable building rating system available for evaluation of GSA projects."<sup>15</sup> In particular, GSA noted that

<sup>12</sup> McGraw Hill Construction (2010). Green Outlook 2011: Green Trends Driving Growth.; Conlon, E. and Glavas, A. (2012). The Relationship Between Corporate Sustainability and Firm Financial Performance. Accessed March 27, 2012 via business.nd.edu/uploadedFiles/Conlon%20and%20Glavas%202012.pdf.

<sup>&</sup>lt;sup>8</sup> "Like TurboTax for LEED" - GSA Launches Building Portfolio Management System. Available at: <u>http://www.constructiondive.com/story/like-turbotax-for-leed-gsa-launches-building-portfolio-management-syste/</u><sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> LEED project data

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Green Building Performance a Post Occupancy Evaluation of 22 Buildings available at: http://www.gsa.gov/graphics/pbs/Green\_Building\_Performance.pdf

<sup>&</sup>lt;sup>14</sup> Pacific Northwest National Laboratory (operated for the U.S. Department of Energy by Battelle), *Sustainable Building Rating Systems Summary* (July 2006), completed for General Services Administration under Contract DE-AC05-76RL061830, *available at https://www.usgbc.org/ShowFile.aspx?DocumentID=1915*.

<sup>&</sup>lt;sup>15</sup> Letter dated Sept. 15, 2006 from GSA Administrator Lurita Doan to Sen. Christopher Bond, Chairman, Subcommittee on Transportation, Treasury, the Judiciary, HUD, and Related Agencies, Committee on Appropriations (accompanying report), *available at https://www.usgbc.org/ShowFile.aspx?DocumentID=1916; see also* Pacific Northwest National Laboratory (operated for the U.S. Department of Energy by Battelle), *Sustainable* 

LEED "[is] applicable to all GSA project types; [it] ranks the quantifiable aspects of sustainable design and building performance; [is] verified by trained professionals; [has] a well-defined system for incorporating updates; and [is] the most widely used rating system in the U.S. market."16

We are also pleased that the PNNL review of Green Building Certification System<sup>17</sup> released on Friday showed that LEED matched more than any rating system (96 percent), of the performance requirements set out by the federal government<sup>18</sup>. We look forward to providing further input to this Committee, GSA, the national labs and other stakeholders, as they review rating systems per the requirements of the Energy Independence and Security Act of 2007.

Building Rating Systems Summary (July 2006), completed for General Services Administration under Contract DE-AC05-76RL061830, available at https://www.usgbc.org/ShowFile.aspx?DocumentID=1915.

<sup>&</sup>lt;sup>16</sup> Letter dated Sept. 15, 2006 from GSA Administrator Lurita Doan to Sen. Christopher Bond, Chairman, Subcommittee on Transportation, Treasury, the Judiciary, HUD, and Related Agencies, Committee on Appropriations (accompanying report), *available at https://www.usgbc.org/ShowFile.aspx?DocumentID=1916*. <sup>17</sup> Green Building Certification System Review available at: <u>http://www.gsa.gov/graphics/ogp/Cert\_Sys\_Review.pdf</u>

<sup>&</sup>lt;sup>18</sup> Johnson, Lacey (2012) "GSA releases an evaluation of green certification systems" accessed May 3<sup>rd</sup> via http://www.eenews.net/