

# THE COMPUTERWORLD HONORS PROGRAM

---

## CASE STUDY



### ORGANIZATION:

U.S. Green Building Council (USGBC)

### PROJECT NAME:

USGBC Boosts Green Building with LEED Online Certification Process

### Summary

The U.S. Green Building Council (USGBC) is the nation's leading nonprofit organization working to promote environmentally responsible, profitable buildings that are healthy places to live and work. USGBC's major program is the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™, which is a voluntary standard for the design and construction of high-performance "green" buildings.

Previously, the time-consuming and paper-intensive process of completing and submitting documentation for LEED certification prevented many organizations from applying for this designation for their buildings. In order to continue its groundbreaking environmental work, USGBC needed a groundbreaking solution to the cumbersome certification process. The solution was Adobe LiveCycle™ software, which in conjunction with Adobe PDF enabled USGBC to dramatically streamline the LEED application and certification process, reducing the time needed to submit application forms by as much as 50 percent. USGBC used Adobe LiveCycle software to create and deploy nearly 400 two-page intelligent Adobe PDF forms which can be uploaded to LEED-Online, a new online workspace for LEED certification. USGBC's elegant and innovative use of Adobe technology to drive the certification work flow process has made it easier for more organizations to seek certification, which helps USGBC continue advancing its mission of transforming the building market to sustainable design and construction practices.

### Introductory Overview

Climbing gas prices, a looming energy crisis, and the threat of global climate change have made reducing fossil fuel resource use the most important challenge of our time. In the United States, which is responsible for 25% of the entire world's carbon dioxide pollution, buildings account for fully one third of the country's energy use, greenhouse gas emissions, raw materials use, and waste output. Fortunately, awareness is growing that high-performance "green" building is the key to reducing our impact on the natural environment, and USGBC is at the forefront of this important movement. With more than 6,000 member companies representing every sector of the building industry, USGBC provides green building education and training, awareness-building, and public policy leadership. But USGBC wants to do more than advo-

LOCATION:  
*Washington, DC,  
United States*

YEAR:  
*2006*

STATUS:  
*Laureate*

CATEGORY:  
*Environment, Energy  
and Agriculture*

NOMINATING COMPANY:  
*Adobe Systems*



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

cate; the Council is seeking no less than the transformation of the entire building marketplace to sustainability. To effect this transformation, six years ago the Council created a comprehensive, responsibly aggressive measurement tool to guide the design and construction of green buildings. That tool—the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™—was the first green building program in the world to balance the needs of the full spectrum of the building industry and is helping the Council lead a national consensus on green building. Today LEED has become the national benchmark for green building, and LEED certification is one of the industry's most coveted designations.

Since its launch in 2000, LEED has been the primary driver of fundamental changes in how buildings are built. The rating system is used by diverse organizations nationwide, from federal agencies and state and local governments, especially school boards; to Fortune 500 companies with huge facility portfolios; to universities and healthcare institutions with large campus footprints; to some of the nation's largest retailers. The number of projects registering with USGBC (the first step in the certification process) and the number of projects achieving certification have increased exponentially each year. To date, 430 building projects have earned certification, and an additional 3,313 have registered with USGBC, encompassing more than half a billion square feet of space. But USGBC risked being a victim of its own success. The complex, paper-based application process (which, in fact, was not environmentally responsible itself) made it nearly impossible for staff to keep up with the workload. With thousands of projects in the pipeline and goals to expand even further, the future was daunting. Moreover, LEED's relative success masked the fact that untold numbers of projects were choosing not to use LEED because of the perceived difficulty of completing the documentation and certification process. Compared to USGBC's bold vision of transforming the marketplace, 430 projects is a drop in the bucket.

USGBC knew that if it wanted to make this vision a reality, something had to change. In early 2005, USGBC conducted an exhaustive review of the LEED certification process. The extensive research included interviews with dozens of customers, sustainability experts, and USGBC staff members. Nearly every person interviewed cited the same core issues with the LEED certification process: The application process was too unwieldy, labor-intensive, and expensive to be a realistic undertaking for many project teams. Thus the development of a fully online, paperless process was identified as an imperative for increasing the accessibility of LEED certification. This finding was supported by McGraw-Hill Construction's market research surveys, in which a streamlined process was named second only to rising energy costs as a driver for stronger adoption of green building practices. In light of these findings, in April 2005 USGBC declared the development of an online workspace its top priority for the coming months, and targeted its Greenbuild Conference & Expo in November 2005 for its release.

USGBC's Director of Technology, Joe Diianni, was given a mandate: develop a technology solution that will reduce the time needed to submit and process LEED certification applications; increase the number of organizations seeking LEED certification; process more applications without hiring additional staff; and reduce processing costs. Diianni had explored developing an online workspace several times in the past, but had not found a solution that was simple for project teams to use, captured all the necessary technical data, and was flexible enough grow with the organization and its goals. This time, however, Diianni had recently begun using Adobe LiveCycle™ and Adobe PDF to automate the Council's membership registration and renewal process. Impressed both the ease of use and scalability, he felt that Adobe products would provide the certification solution as well.



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

In the meantime, Adobe as a company was aggressively embracing sustainability as one of its core values. When approached by USGBC, Adobe stepped up as a full partner in the effort to advance the green building market. Adobe provided virtually unlimited access to its deep resources, along with a fully engaged project team to work with Diianni.

With just a few months to go before the November launch date, Diianni and his 3-person team, working closely with Adobe, embarked on an utterly novel deployment of the ubiquitous Adobe technology to drive a new, fully online LEED certification process. As a result of this Herculean effort, the project was completed on time, and USGBC unveiled LEED-Online on November 11, 2005.

LEED-Online is an online workspace that allows project teams to work collaboratively to organize, calculate and submit the technical and scientific data required to earn certification. LEED-Online also enables USGBC staff and project teams to interact to a greater extent than ever before, and facilitates USGBC staff's review of the documentation.

### Benefits

Before LEED-Online, applying for LEED® certification was time-consuming, costly, and paper-intensive for both the applicants and USGBC staff. The importance of green building was widely recognized by the building industry, but the process could be intimidating for smaller projects and too time consuming for major developers or architects who might otherwise be interested in certifying dozens—or even hundreds—of projects. USGBC staff was also having difficulty managing the increased certification volume, and the environmental costs of the paper documentation requirements were significant. But LEED-Online, powered by Adobe document management technology, makes LEED certification feasible for the entire continuum of the building industry. The automated processes supported by Adobe LiveCycle™ software are more convenient for both applicants and USGBC staff, and USGBC estimates that the automated workflows supported by Adobe solutions will accelerate submitting LEED application forms by as much as 50%.

### Customer Benefits

Previously, a manager seeking LEED certification would have to complete a complex and inflexible Excel workbook with up to 69 separate credit-specific worksheets detailing the strategies and materials used in the building's construction. The workbook had to be managed by a single person, requiring him or her to either copy and paste data and calculations by the different people responsible for each aspect of the building, or to email the entire workbook to the various team members, compromising the integrity and security of the data. In addition to completing the workbook, project teams had to submit as many as 2,000 pages of documentation supporting the assertions in the workbook. After receiving a project's application—two to three thick binders of information—USGBC copied the materials to share across a review team made up of more than a dozen staff and third-party experts. The entire process—from the initial submittal of materials to achieving LEED certification—could take years.

USGBC used Adobe LiveCycle software to create and deploy more than 400 two-page, "intelligent" Adobe PDF forms that are associated with specific building systems for which a project can receive credits toward LEED certification. These PDF forms offer project teams many



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

advantages:

**\*Easy Calculations:** The PDF forms contain built-in functions for calculating complex equations for heat loss, solar gain, and other relevant LEED measurements. Automating these calculations greatly reduces the amount of time required to complete the specific credit.

**\*Enhanced Collaboration:** The forms enhance project teams' ability to collaborate. Team members can download the specific forms they need, and can complete the Adobe PDF forms offline and then e-mail the forms to co-workers for additional input.

**\*Simplified Submittals:** LEED-Online replaces thick binders full of paper documentation. After applicants have completed the Adobe PDF forms, they can attach supporting documentation—such as CAD drawings, landscaping plans, details about construction materials and interior finishes, and other information—to the application as Adobe PDF files or in native file formats from programs such as AutoCAD®, Pro/E, and Microsoft Office. All the materials are uploaded to LEED-Online.

**\*Streamlined Reviews:** Via LEED-Online, project teams, USGBC staff, and third-party experts can conveniently review the application information. They can add their input to the application documents using Adobe Acrobat® commenting tools to highlight areas of interest or concern. After the application has been reviewed, all the associated forms and documentation are stored in LEED-Online; design and construction managers can visit the online workspace at any time to see if their applications have been approved or if additional information and documentation need to be submitted. Final applications with all comments in Adobe PDF can be archived for future reference, serving as a valuable educational tool for future projects.

**\*Increased Security:** The new system also enhances information security, because username and password permissions are associated with each Adobe PDF form. Instead of sending an entire workbook to every member of a project team, project managers can limit users' access to only the specific forms they need.

\_Staff Benefits\_

Improving the customer experience, and thus increasing the adoption of green building, was the primary catalyst for the new process, but it also provides many advantages to USGBC staff and to the outside experts who assist in reviewing the applications. These advantages include:

**\*Streamlined Reviews:** With LEED-Online, all the necessary documentation is housed online in easy-to-use PDF forms that can be conveniently shared with the necessary parties, eliminating the need pass thousands of pages of information back and forth. Additionally, staff and the outside experts can very quickly review submissions using the electronic review and commenting tools in Adobe Acrobat software.

**\*Improved Data Accuracy:** USGBC also linked the submitted Adobe PDF forms with its SAP system. Data is thus automatically captured in SAP as application forms are received, eliminating the need for USGBC staff to manually key application data into back-end systems. The enhanced process helps reduce costs and improve the accuracy of data, and it also makes it easier for USGBC to track and report green-building trends.

**\*Scalability:** The solution also gives USGBC room to expand services by integrating more functionality around digital signatures and automated workflows, and will allow USGBC to continue processing increased applications without adding additional staff.



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

**\*Reduced Development Costs:** The use of Adobe technology has also greatly benefited USGBC's Web development and IT staff. Prior to working with Adobe LiveCycle forms and the Adobe Workflow Server, USGBC spent a significant amount of time on the development of the spreadsheets and custom Web forms. A member of the LEED staff would develop the initial Excel file, and a member of the IT staff would then have to do significant additional development before the spreadsheets were ready for use. Design, development, and testing took up to four months. Now, design and development can be combined into one small phase, and the testing and deployment time has been reduced to as little as one week. Moreover, once the technology department has created the initial PDF forms, non-technology staff is able to create new forms themselves, increasing their ability to respond to customer needs and freeing IT to focus on other mission-critical applications. Overall, USGBC estimates that its deployment of Adobe technology has reduced its development costs by as much as 75%—money and time that can be applied to USGBC's other critical efforts to promote sustainability.

### Transforming an Industry

It is difficult to quantify—even to imagine—the potential impact of USGBC's new Web-based certification process. Currently, 3,743 projects encompassing more than half a billion square feet have certified or registered with USGBC. This number includes projects from all over the United States, as well as 24 countries including Mexico, India, China, and Brazil, to name just a few. LEED is a global platform, and is accelerating environmentally responsible building practices throughout the world.

By simplifying the certification process, USGBC expects that it will greatly reduce the attrition rate (the number of projects that do not go on to complete the application process for certification). Even a slight decrease in attrition will have a tremendous impact: On average, a LEED-certified building consumes between 30 and 70 percent less energy, 30 to 50 percent less water, and reduces material waste by 50 to 90 percent. Multiplied by the current number of registered projects, the potential savings is astronomical.

Third-party certification (such as that provided by USGBC) that a building meets a standard that has become common nomenclature is critical to effecting market transformation. Any green building practice is better than none, but the aggregation of practices in the five key areas addressed by LEED—energy, water, indoor air quality, materials, and site—is what delivers true high-performance buildings. Committing to certification and recognition of that commitment sets the bar at a level high enough to drive real impact in terms of reduced energy and water consumption; reduced greenhouse gasses; and human health, wellness and productivity. Technically, a building can have green features without being LEED certified, but LEED certification ensures that a building was constructed as designed and will perform as expected.

### Reaching a Broader Audience

USGBC didn't develop LEED-Online just to make things simpler for people who are already building green; USGBC is also trying to increase the number of people who want to build green. Approximately 1,000 commercial building projects will register in 2006, an increase of 20% over 2005. An increase in the number of registered and certified projects increases the demand for green products, for green service providers, and for green buildings themselves, eventually leading to USGBC's vision of a transformed marketplace. Today, that marketplace uses up one third of the United States' energy, one third of its raw materials, and produces one third of the its greenhouse gas emissions. Changing those numbers is vital to the future health



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

and prosperity of the planet.

LEED certification isn't just about a physical structure. Equally, if not more, important is how green buildings affect the people who use them. Numerous studies have indicated that children learn better in green schools, as measured by a 20% increase in test scores; that hospital patients heal more quickly in green hospitals, as measured by shorter stays and fewer nosocomial (hospital acquired) infections; and that employees work better in green offices, as measured by various of productivity metrics and decreased absenteeism. If the new LEED certification process encourages even one more school or hospital to build green, then it is a success.

### The Importance of Technology

USGBC is a unique organization that was faced with a unique challenge to develop a simple, user-friendly platform that would allow customers to easily collect and organize vast amounts of data, while at the same time enabling staff and consultants to quickly and easily review that data. It also needed to tie into USGBC's SAP system and protect the technical rigor and brand reputation of the LEED® certification; and it all had to be done in just five months, and within the budget parameters of non-profit organization. Adobe's LiveCycle™ solutions for document collaboration, document control and security, and process management enabled USGBC to streamline the submittal and processing of applications for LEED certification while meeting these demanding requirements.

USGBC chose Adobe LiveCycle software (Adobe LiveCycle Forms, Adobe LiveCycle Reader Extensions, Adobe LiveCycle Form Manager, and Adobe LiveCycle Designer) to automate USGBC's forms processes because it provided a cross-platform solution that would allow applicants to access and complete forms using the ubiquitous, free Adobe Reader® software. Adobe LiveCycle software also integrated easily with the organization's SAP systems, streamlining the task of connecting form data to critical applications. The Adobe products also offered USGBC a scalable solution. Because future PDF forms can quickly and easily be developed by non-IT staff, and because Adobe commenting and reviewing features greatly reduce the application review time, USGBC will be able to respond to the increasing demand for LEED certification at the same that it continues to refine the LEED Rating System in response to new science and new market needs.

Some of the specific advantages and features of the Adobe solution include:

- \*Less overhead and faster deployment of Adobe LiveCycle forms, as compared to other solutions such as custom Web forms in .NET and JavaScript.
- \*Ability to work with the form offline and still securely submit data back to USGBC.
- \*Formcalc (the language behind the form's calculations) is easy to learn and use, similar to Excel, allowing non-technical staff to play a major role in the development of the actual production forms.
- \*Compatible with many platforms (IE Windows, Mac, Linux) versus just the previous solution of Excel.
- \*Web services used on the Adobe Server Products were easy to use and fast to implement, en-



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

abling rapid integration between USGBC Web Applications and SAP.

\*Combined the design and development into one small phase, and reduces the testing and deployment times down to weeks.

### Originality

Although the use of interactive PDF forms for data collection is not an original idea—the IRS uses interactive forms for taxes, Coca Cola uses forms for marketing, and many other companies use the forms for general data collection—USGBC has deployed this ubiquitous software in an innovative way, and on an unprecedented scale. USGBC's model is the first example of interactive PDF forms being used to actually drive an application.

USGBC uses the forms to drive LEED-Online, which is the Web-based process for applying for and achieving LEED® certification. Project teams complete nearly 50 interactive PDF forms to collect all of design, construction, and other technical and scientific data for a building project. The data from those forms is then automatically transmitted throughout the entire workflow process of certification, from the project team, to the certification manager on USGBC's staff, to the third-party review, and back again as many times as needed. Additionally, the PDF forms are fully integrated with USGBC's SAP system, enabling the automatic and accurate capture of important project and financial data. USGBC also utilizes the Adobe forms for project registration, company membership, and chapter membership. Customers are able to download what looks like a typical paper application, complete it offline, and electronically submit it to USGBC with payment. These forms are also linked to USGBC's SAP system, further automating customer service and management.

The U.S. Green Building Council was founded in 1993 to fill a void in the market. Numerous groups were interested in green, but lacked a common standard and a common forum that would truly allow green building to succeed. USGBC's LEED Rating System was not the first green building rating system, but it is the only one that was designed collaboratively, with input from literally thousands of volunteer building industry professionals. LEED brings together every sector of the building industry and thus provides a solution that is endorsed and respected by all, making it possible for green building to become mainstream practice.

Similarly, USGBC is neither the first nor the only organization to use interactive PDF forms. But as it did with LEED, USGBC has employed existing solutions in a new and effective way. USGBC's use of existing Adobe technology to drive critical business processes, as well as the degree of its integration with SAP, is highly innovative. In fact, Adobe is considering USGBC's project to conduct a baseline study on how SAP customers can leverage Adobe LiveCycle™ technology, and to develop a case study on the use Adobe forms in critical business processes.

LEED is also not the only rating system that uses a Web-based certification process. It is, however, the only green building rating system that combines online ease-of-use with technical rigor, consistency, transparency and robustness. Other systems use a simple Web-based checklist or yes-and-no question and answer form, but do not provide for the high volume of data-collection and independent review and verification that is necessary to ensure that a building meets green performance standards. USGBC's innovative use of Adobe LiveCycle and Adobe PDF drives a user-friendly, fully automated, and scaleable process that also maintains the technical rigor and environmental benefit of the LEED Rating System.



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

The nature of the design and construction process also required an innovative approach. Each segment of the industry typically relies on different programs and types of documentation for its particular contribution to a building – architects use CAD, designers employ illustration and photography, and contractors use project management tools, to list just a few. Somehow, USGBC needed to develop a solution that was both flexible enough to encompass these diverse applications, yet could also serve as a common platform for the entire project team. Adobe LiveCycle provided that solution, enabling each member of a project team to work individually while facilitating collaboration among the team as a whole.

### Success

It is difficult to quantify or predict exactly how many people will benefit. Eventually, USGBC hopes that its impacts will be global, as an increase in certification drives market transformation. Near term, current project team members and USGBC staff—upwards of 10,000 people—benefit most directly.

### Global Impact

In the introduction to *\_From Greed to Green\_* by David Gottfried, noted environmentalist Paul Hawken writes: “Nothing compares with the growth, magnitude and import of the U.S. Green Building Council...no organization has had a bigger impact on the environment in terms of energy and materials saved, toxins eliminated, greenhouse gases avoided, and human health enhanced. And it is just the beginning.” With LEED-Online, USGBC has ensured that it can continue to advance its mission and fulfill the green building movement’s wonderful potential.

### The Customer Experience

Shortly after LEED-Online was introduced, USGBC had one member contact Tom Hicks, Vice President of LEED, to tell him that LEED-Online was the most important thing that had happened to her since she got married!

More typical of the feedback USGBC received thus far is the experience related below. Peter Fox is an Assistant Project Manager for Brown Facilities working alongside a construction manager to earn LEED certification for the new Life Sciences Building at Brown University. Colleges and universities are among the Council’s most important market sectors; not only are campuses tremendous energy consumers, but as the educators of the next generation they also set an important example. Because of budget and staff constraints and a sometimes entrenched bureaucracy, however, campuses are also sometimes more reluctant to apply for LEED certification. Fox’s experience, however, suggests that LEED-Online will help overcome these obstacles:

“We started this process under the old system and very few people liked it. Many parties have to come together in order to track and prepare the various credits required for LEED certification. [Before LEED-Online] keeping the entire team updated on LEED activity was a great consumer of time, [but] now monitoring the progress of different parties and tracking the schedule for completion of the work for each credit, which was a big part of the project team communication, is easy. The online system is an improvement in that anybody on the team can quickly view the status of the team in real time. Draft versions of the documents can be uploaded and then reviewed and changed very easily by people working far from each other. This option allows members of the team to focus on what needs to be done rather than reviewing what has



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**  
*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**  
*Washington, DC,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**  
*Adobe Systems*

already been done. In terms of accountability, the layout of the screen allows team members to quickly identify any work that may be late and better prepare for upcoming meetings. There is no doubt that the online system allows for better communication between the project team. The online system is a tremendous improvement and has been well received by our team.”

### *\_The Staff Experience\_*

USGBC’s ability to more quickly and easily process LEED applications is also a significant factor in the Council’s ability to respond to the demand for LEED certification. As Max Zahniser, USGBC’s Certification Manager, explains:

“LEED-Online is the digital solution to the inherent administrative and accessibility challenges that come with a third-party documentation and certification process. It’s a dynamic, centralized certification process tool that allows us to avoid the negative environmental impacts of our previous printed binder review practices, and allows for greater integration among all participants in that certification review process. We’re very excited about the flexibility it will afford us as we continue to expand our programs and services.”

Since its launch, 567 building projects—some 20%—have registered to use LEED-Online; this includes both projects that have registered since the program’s introduction and projects that were previously registered under the old system and have switched over to LEED-Online. Because of the delay between the time a project registers and the time a project actually applies for certification, it is difficult to gauge the actual rate of uptake among USGBC’s target audience. (Application for certification typically occurs closer to a building’s completion, which can sometimes take several years from the date of project registration.) Of the remaining 2,746 registered projects who have not yet signed up for LEED-Online, many of them may be several years away from applying and thus from taking full advantage of the program. USGBC expects, though, that many more of these projects will go on to earn certification as a result of the new process.

### **Difficulty**

As a nonprofit organization, USGBC had limited resources—both financial and human—to commit to the development of a new technology solution. Joe Diianni’s initial excitement about employing Adobe LiveCycle™ to develop an online certification process nearly evaporated in the face of what would be prohibitive costs for purchasing and licensing the necessary software. Diianni and USGBC’s management firmly believed, however, that Adobe LiveCycle and Adobe PDF were the right solutions, and were determined to find the resources to make it possible. As it turned out, it was Adobe itself that made the project possible.

In conversations with executives at Adobe, it became clear that Adobe shared USGBC’s commitment to sustainability. It also became clear that USGBC’s envisioned use of Adobe technology would have a significant impact on promoting sustainable design and construction. Joe Diianni, Chris Smith (USGBC’s COO) and Michelle Moore (USGBC’s VP of Communications and Community) were invited to make a presentation about the future LEED-Online at Adobe’s headquarters in San Diego. At that meeting, Adobe was equally impressed by the potential of LEED-Online to increase the number of green buildings as by USGBC’s innovative use of the company’s technology to drive LEED-Online and its integration with USGBC. As a result of that meeting, Adobe agreed to donate a portion of the fees to USGBC, thereby making USGBC’s technological dream a reality.



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

As explained above, USGBC nearly abandoned Adobe technology as a solution because of cost concerns. By partnering with Adobe, however, USGBC was able to employ Adobe tools to develop its new certification process.

**ORGANIZATION:**

*U.S. Green Building Council  
(USGBC)*

**PROJECT NAME:**

*USGBC Boosts Green Building  
with LEED Online Certification  
Process*

**LOCATION:**

*Washington, DC,  
United States*

**YEAR:**

*2006*

**STATUS:**

*Laureate*

**CATEGORY:**

*Environment, Energy  
and Agriculture*

**NOMINATING COMPANY:**

*Adobe Systems*