

No.3/September 2010

**MEDIA  
PLANET**

# SUSTAINABLE BUSINESS

3

TIPS TO

**BUILD A SUSTAINABLE  
ENTERPRISE**

Help the  
environment  
One building  
at a time

Sustainability 101  
Your path to  
a sustainable  
career

Increasing use  
of alternatives  
Incorporate  
renewable  
energy into  
your company



**Jeff Drees**  
President, Schneider Electric US

“Energy is the  
largest controllable  
operating expense  
in a building, but is  
often overlooked.”

## **BUILD A SUSTAINABLE ENVIRONMENT**

**Maximize your investment** in renewable energy

# Save up to 30% on energy costs today!

See page 3 to learn how.

Make the most of your energy<sup>SM</sup>

**Schneider**  
 **Electric**

## CHALLENGES

**Sustainability** is on a roll and the competitive marketplace is a big driver.

## Sustainability is on a roll

**W**hen we buy products or services, we are buying both the good and the bad associated with their entire life cycle. Stepping up and taking ownership of supply chain impacts, direct impacts and waste streams gives companies multiple paths for making positive sustainability improvements. There are a few key areas we will address here: greening the supply chain, sustainable green buildings, energy efficiency and renewable energy.

### Greening the supply chain

The best thing about greening your supply chain is that it provides one of the lowest cost opportunities for improving a company's sustainability. Currently large retail companies have launched programs that gather supply chain data and these companies are rapidly moving to implement green requirements for providers in the supply chain. Green requirements may include recycling of byproducts, more efficient transportation, greener packaging, better product design and redesigning production systems to be more efficient.

The driver for implementing green requirements will emerge from IT innovations such as cloud

computing that offer ways of harnessing data in ways that were not previously accessible. As a result, supply chain accountability will organically evolve from the old mainframe based infrastructure to an integrated green machine. Once this gets rolling, greening of supply chains will become inevitable in the cloud-connected world. Each company and organization should be asking itself: "Are we ready?" and "Are we getting ready fast enough?"

### Sustainable green buildings

As the green building market continues to grow, LEED® certification is becoming part of the expectation for Class A buildings. In the leasing market, more tenants are recognizing that the space they lease has direct impacts on their environmental footprint and health. Building tenants and occupants are starting to understand that LEED for New Construction certification shows a building was designed and built with green in mind. However, ongoing recertification under LEED for Existing Buildings Operations and Maintenance (LEED-EB: O&M) is needed to assure that green design and construction translates into green operations over the life of the building. LEED-EB: O&M addresses many important facets of green operations, such as energy and water efficiency, sustainable procurement, and waste reduction.

"The best thing about greening your supply chain is that it provides one of the lowest cost opportunities for improving a company's sustainability."



**Michael Army**  
President and Founder of  
Leonardo Academy

Whether or not building owners attempt LEED certification, focusing on these four areas will ensure greener operations over the long term.

### Energy efficiency and renewable energy

We have heard about the goal of zero net energy buildings. Since building use consumes 40 percent of the total fossil energy in the US and European Union, energy efficiency, renewable energy and innovative design are key components of our sustainability and achieving the goal of zero net energy. While programs like LEED and Energy Star push for more sustainable energy consumption, it is up to each individual to adapt their lifestyle to more efficient energy use and to demand renewable energy from the marketplace. In addition, the demand for minimizing greenhouse gas emissions through energy efficiency measures has led to over a 50 percent increase of renewable electricity generating capacity in 2009, and 24 states have enacted energy savings goals.

Despite the programs driving these changes, the principle strategy in achieving a sustainable building and realizing the goal of zero net energy remains the same. Energy conservation is the most critical component for both new and existing buildings in maximizing the investment in renewable energy and achieving a sustainable future.



## WE RECOMMEND



**Jeff Drees**  
helped under-  
developed nations  
gain access  
to energy

PAGE 6

"The biggest impact we can make is to transform these buildings and everything in them into energy efficient ones."

**Effective cleaning aids in operations** **p. 7**  
Effective cleaning helps you go green

**Greenbuild International Conference and Expo** **p. 5**  
Greenbuild comes to Chicago

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## NEWS

TIP

1

GREEN YOUR  
BUILDING AND  
SAVE

**Question:** Why should your company build green?

**Answer:** Green buildings cost less to operate and have higher asset values than conventional buildings.

# BUILDING GREEN: INVESTING IN YOUR BUSINESS AND THE PLANET

**In the U.S., buildings account for over 40 percent of total energy consumption, 13 percent of total water consumption and produce 39 percent of total carbon dioxide emissions—a primary cause of global climate change.**

Because of the role buildings play in our biggest global challenges, green building offers one of our greatest opportunities to address those challenges head-on.

Building green makes good environmental and business sense. Green buildings cost less to operate and maintain and have higher asset values than conventional buildings.

Studies show that green design, construction and operations can be achieved without any additional upfront costs for your business and can result in lifecycle savings of 20 percent of the total construction cost. A commitment to green building is a commitment to the health and productivity of your workforce. Incorporating materials free of toxic chemicals, superior ventilation systems and abundant natural light help keep occupants healthier and more productive.

## More than the bottom line

Green buildings are not just good for a business' bottom line; they also positively impact today's most critical environmental and economic challenges.



"Green buildings are not just good for a business' bottom line; they also positively impact today's most critical environmental and economic challenges."

**Samra Kasim**  
Communications Specialist,  
U.S. Green Building Council

mic challenges. Green buildings average 25-30 percent less water and energy use than conventional buildings. And a study by Booz Allen Hamilton and the U.S. Green Building Council (USGBC) estimated that the green construction market will add eight million jobs and \$396 billion in wages to the U.S. economy in four years.

USGBC, a nonprofit coalition of 16,000-plus member companies

and organizations from throughout the buildings industry, is the leader in advancing green building. The LEED green building certification program, created by USGBC's members, is a voluntary program that defines high-performance green buildings. In the 10 years since its launch, LEED has certified more than 13,500 green homes and commercial buildings with nearly 60,000 more seeking certification. USGBC and its members are committed to a future where building green is simply the way we do business.

**SAMRA KASIM**  
Communications Specialist  
U.S. Green Building Council  
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NEWS

# Education for a sustainable future

**Colleges and universities have been responding as of late to the increasing number of students, as well as employers, wanting courses and degrees in sustainability.**

Mechanical and electrical engineering and earth sciences have been taught for decades at universities but now courses, and even research centers, on solar, wind and hydroelectric power are commonplace.

Degrees that focus on environmental studies and sustainability management will be in growing demand as the job market begins to cater to individuals qualified to man positions in the sustainability field. Community colleges and Universities alike offer degrees in solar design and installation and energy-efficient building. Graduates in these fields are just about guaranteed jobs. For instance, the nation will likely need more than 5,000 solar installers by 2015. In addition, any institution or organization with a large workforce and a physical infrastructure that includes buildings, grounds, food service,



a supply chain or large procurement process and waste facilities, will deem it necessary to hire a sustainability manager.

There is a growing concern among the older generation, that their experience will give way to individuals straight out of colle-

ge with a sustainability degree, and they will be left jobless. According to experts, schooling will be especially relevant for individuals that do not have a lot of credentials to qualify them for specific positions. If someone has a background that contains fabu-

lous experience in a relevant industry, it may not be necessary to go back to school, but it definitely couldn't hurt.

**JASON LEAVITT**

editorial@mediaplanet.com



## DON'T MISS!

The Greenbuild International Conference and Expo is the place to be to learn about how green building can help your business and the environment. This year, Greenbuild returns to McCormick Place West in Chicago from Nov. 17-19—the site of the groundbreaking Greenbuild 2007—for what promises to be one of the biggest Greenbuilds ever, with more than 1,000 exhibiting companies and more than 100 education sessions. Chicago is a vibrant city at the forefront of green building, with more LEED-certified buildings than any other city. It's the ideal place to celebrate being part of Generation Green—and to set forth with the work of redefining our future. In addition, a free Green Job Fair that is open to the public will be held on Nov. 16 from 12:30-5:30 p.m. To learn more about Greenbuild 2010, visit [www.greenbuildexpo.org](http://www.greenbuildexpo.org); learn about the Green Job Fair at [www.greenbuildexpo.org/JobFair](http://www.greenbuildexpo.org/JobFair).

**SAMRA KASIM**

Communication Specialist for US Green Building Council




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## NEWS

## QUESTION &amp; ANSWER



**Jeff Drees**  
President,  
Schneider Electric US

**What is the biggest obstacle being faced in your industry in regards to environmental sustainability?**

Many of our customers today want to do more to reduce their energy use, but they really don't know where to start. Energy is invisible to many of our customers, and the technologies exist today to make it visible. We can make smarter decisions about energy use, no matter if you're looking at a building, factory, data center or all of the above. It can be an asset in an organization, not a liability, and it starts with awareness.

**In ten years where do you see your industry being able to make the biggest environmental impact?**

Let's face it, we've got old, inefficient buildings in the U.S. —20-30 percent inefficient in how they use and consume energy and 70 percent built prior to 1990. The biggest impact we can make is to transform these buildings and everything in them into energy efficient ones. Energy is the largest controllable operating expense in a building, but is often overlooked. Over the next decade, there is no reason why every CEO should not only be fully aware of their energy costs, but seeing 30 percent energy savings or more. That's a huge opportunity and impact, but very realistic.

**What is one change an organization can make to become more sustainable?**

I'd say it's increase your awareness. The path to energy efficiency is simple—measure, fix, automate, monitor and improve. By understanding where your energy is being used, fixing the no-brainers, putting in some simple automation and then continuously monitoring and improving, organizations can realize up to 30 percent or more energy savings with a quick return on investment. It's good for the environment and good for the wallet.

**Question:** How are emerging nations being aided in their battle to be provided with sustainable energy?

**Answer:** Those in the energy community across the world are stepping up to help provide the appropriate resources, training, and equipment to provide energy aid in emerging nations.

# Emerging nations are getting help for the fight to use sustainable energy

**Recent reports place the number of people without electricity in the world at around 1.6 billion, a staggering figure in this day and age.**

The even more alarming fact is that these people must rely upon so called "dirty fuels" such as wood, coal, and even dung to provide appropriate heat.

**The need to help others**

Companies are taking drastic actions to provide clean, sustainable energy to as many of these 1.6 billion people possible. An example of some of the steps being taken are those of Schneider Electric's BipBop Program, which aims to have 1,000,000 households which previously had no access to electricity with access to sustainable energy by the end of 2011, and an additional 10,000 young people with adequate training in the electric sector by that point in time.

Jeff Drees, President of Schnei-



der Electric U.S. said, "Training is one of the most important aspects of bringing energy to a country that lacks the resources. Training a skilled workforce to safely install and manage the equipment is key to ensuring the sustainability of that country."

**Hope for the future**

Drees added, "It is essential for industry to assist in the progress of these countries by coming together and making an investment into the overall sustainability of an emerging society. By collaborating, we can

rapidly improve quality of life for people and change how they consume and manage energy for future generations."

TIP

2

RENEWABLE  
ENERGY DROPS  
ENERGY COSTS

TIM RADWAY

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## PROFESSIONAL INSIGHT

So, you have made the decision to **“go green.”** You have committed to a reduction in energy and water use and implemented a recycling program.

TIP

3

A GREEN  
CLEANING  
SUPPLY HELPS  
AVOID HEALTH  
PROBLEMS

# Effective cleaning aids in operations

**Y**et, a contagious illness has still ravaged your workforce, resulting in lost time, lost productivity, and, most significantly, lost profits. And all because you neglected to take into account the most important aspect of maintaining a green space—making sure that it is healthy for workers, visitors and other occupants.

### Maintain a greenspace

Most often, an unhealthy indoor environment can be traced

to unclean conditions. With the economy in a continual state of flux, budgets are being cut and it is often cleaning that is first on the chopping block. Far too many facility professionals recognize the crucial connection between cleaning and health and cleaning's role in protecting building occupants from various public health threats. Yet, providing a clean environment demands a commitment to “effective” cleaning—making sure that the cleaning service provider has implemented a professional management framework, such as that set forth by the ISSA

“Most often, an unhealthy indoor environment can be traced to unclean conditions.”



**Dan Wagner**  
ISSA, The Worldwide Cleaning Industry Association

Cleaning Industry Management Standard (CIMS), which outlines the specific elements of a quality, customer-focused cleaning operation.

### Invest in effective cleaning

The good news is that facility professionals can invest in effective cleaning without sacrificing their commitment to “going green.” The cleaning industry has embraced the sustainability movement, resulting in a robust supply of products and materials with a preferred environmental profile, including everything from chemicals to equipment to

microfiber mops—products that have proven to work as effectively as traditional alternatives and offer bottom line savings, while, at the same time, doing their part to protect the environment and safeguard health. And implementing a successful program has never been easier with the introduction of green cleaning road maps like the CIMS-Green Building framework, making the protection of occupant health and the environment a wise and necessary business decision.

*For more information on green cleaning and ISSA's CIMS program, please visit [www.issa.com/cims-gb](http://www.issa.com/cims-gb).*

## What products are being used to clean your world?



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## NEWS

**Question:** What exactly is water harvesting?**Answer:** Water harvesting is a term that describes the on-site collection, cleaning, storage and reuse of rooftop rainwater, surface stormwater, greywater from showers and sinks and other sources, to replace or reduce the consumption of municipal potable water.

# “Water harvesting” is latest buzz term in sustainability

**When it comes to concerns for long term sustainability of our resources, water conservation is quickly becoming an area of focus in communities across the country.**

Over development in dry regions is the most visible pressure point in the Southwest states, but even areas like the Midwest and Chicago project significant shortages in municipal drinking water supplies in the future as withdrawal limits are reached from the Great Lakes and aquifer levels continue to drop. Most municipalities significantly under charge for municipal water, and sharp increases in water rates are projected in the coming years as local budgets tighten and the existing infrastructure upgrades become essential.

An emerging sustainable trend is the practice of “water harvesting”—a term that describes the on-site collection, cleaning,

storage and reuse of rooftop rainwater, surface stormwater, greywater from showers and sinks and other sources, to replace or reduce the consumption of municipal potable water. The harvested water can be applied to irrigate landscaping, flush toilets, make-up water in evaporative cooling systems and other non-potable applications. “A typical commercial or institutional building can reduce their consumption of municipal drinking water by 90 percent or more using water harvested on-site,”

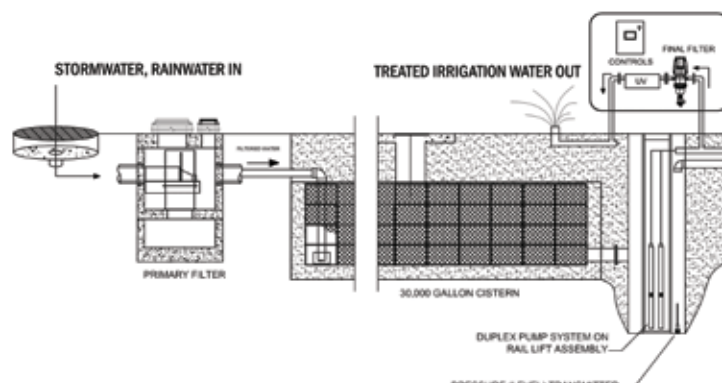
explains John R. Bauer, President of Wahaso—Water Harvesting Solutions, a company that specializes in commercial systems. “That can easily add up to an annual savings of 3-4 million gallons of drinking water. At the same time, that building is reducing its impact on the local municipal stormwater system by retaining and reusing rainwater from storm events.”

## How it works

Commercial water harvesting systems typically include four

major components—Initial filtration and storage of water collected on the site, a sanitation step with chlorine or ultra-violet light to ensure the safety of the water, a final filtration and pressurization step, and a control system that monitors the system operation and ensures that it is operating properly. A commercial system can carry a price tag of \$75-150,000 and take 10 years or longer to pay back. According to Bauer, building owners often are willing to accept the longer payout because they are most interested in sustainability practices and are often seeking LEED “green” building certification. “These owners also realize that water rates will rise in the coming years, and that the system will reduce operating costs for the life of the building, adding to its market value,” explains Bauer.

## WATER IRRIGATION SYSTEM



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## ✧ DON'T MISS!

The increasing use of alternative, renewable energy has become more popular because of the rise in energy costs. The devastating effects climate change has had on our environment is another reason behind the move to renewables. Incorporating renewable energy solutions as a company's main source of energy consumption helps combat both of these issues.

The initial financial investment for a renewable energy source such as solar panels, wind turbines or solar thermal systems is very reasonable. Further savings are achieved by taking advantage of state tax, federal tax and utility incentives and rebates.

Solar panels have been the most popular form of renewable energy for most companies and can help reduce an organization's total energy costs up to 50 percent.

Wind turbines and solar thermal systems are also money saving options that some organizations have turned to in order to limit their impact on the environment.

The incorporation of renewable energies has additional benefits for businesses besides just cost savings. Using renewable fuels makes an organization less dependant, by allowing them to independently power their building. There is enough energy from the sun reaching our planet to supply the entire world with energy many thousand times over. Solar energy usage continues to grow year after year at around 35 percent, with businesses being the major benefactor. Since commercial and industrial organization's traditional energy usage is a main source of pollution and carbon emissions, renewable energy must play a role in their energy supply to meet the increasing threat of climate change.