

Sustainability Management Association

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The Sustainability Management Association (SMA) is transforming leadership. Sustainability management incorporates Economic Performance, Social Responsibility, and Environmental Stewardship — to include all three in strategy, decision-making, function, and process.



SUSTAINABILITY
MANAGEMENT
ASSOCIATION

www.sustainabilityma.org

Dear SMA Members,

Thank you for your involvement and contributions. Because of your actions, the SMA celebrated our third year this fall. Since our inception, we have grown to 146 members, have certified 136 Sustainability Management Associates and Professionals, and have one local SMA chapter in Chico, California with another underway in Dallas, Texas. In addition, the SMA has an international presence with six members in Indonesia, Sri Lanka, Turkey, Greece, South Africa, and Canada.

To ensure our members are aware of the constantly changing aspects of the sustainability industry, we organize approximately eight sustainability focused educational webinars each year. Each webinar has on average 25 participants, with the most recent webinar on October 20 discussing Smart Buildings for a Smart Grid hosted by Russell Garcia from Johnson Controls, Inc. and Gary Van Winkle of EMCORE Mesa. We hope you have participated in these educational webinars. If so, please provide us your feedback. We want to make sure you, as our member, are getting the information you need.

As a part of celebrating our success, we are adding another service for our members - this quarterly newsletter. In this newsletter, you will find articles describing various aspects of the sustainability industry, such as recycling contamination and water issues in California.

To support these activities, our Board has expanded to include eight members. The SMA Board currently includes:

- George Barber of the Paradise Irrigation District
- Jim Wagoner of the Butte County Air Quality Management District
- Michelle Visentin of Roebbelen Contracting, Inc.
- Mark Kindelberger of Schneider Electric
- Brandon Morton of North Lake College in Irving, Texas
- Jeffrey Heuton of Custom Drywall Inc.
- Dr. Yu-ti Huang of the Dominican University of California
- Amanda Fairley of Waste Management

To help us best serve our members, we have two student interns for SMA - Paulina Figueroa Prado and Shelby Abbott.

Again, we would not be here now without your support. Please let us know what you think about SMA. We want to know what services you want offered, what topics you want to learn more about and if you want to participate more in the SMA, such as presenting at a webinar or writing an article for our newsletter. The best way to contact us is through email or phone number.

I look forward to hearing from each of you.

Sincerely,

Amanda Fairley

Sustainability Manager of the South Atlantic Area, Waste Management

Upcoming Online Events



Flow Batteries – The New Solution for the Emerging Energy Storage Market and Renewable Power

Date: December 8, 2015

Time: 9:00 a.m. PDT

Webinar Description

Join SMA's webinar with best in class speaker Kevin Bell of Imergy Power Systems. The webinar will focus on how flow batteries fit into the emerging energy storage market. Flow batteries provide long duration energy storage with unlimited deep cycle capabilities; they are not the correct technology for every energy storage application. This webinar will focus on the role flow batteries can play, and how they have the ability to significantly expand the use of renewable power, both on the grid and behind the meter.

The webinar will give participants first hand insight into the latest different technologies, services and policies.

Join us to learn more, or ask technical questions, about:

- Energy Storage
- Flow Battery Technology
- Firming renewable power
- Integrating Renewables
- The future of net metering
- Demand Charge Management
- Frequency Regulation and Grid Stabilization

Give your organization a competitive advantage by learning about emerging technologies that optimize your renewable energy system for your facility.

Who Should Attend?

Professionals from the built environment, renewable energy industry, and professionals looking to reduce energy costs to optimize energy efficiency for any type of organization from government, schools, business, agriculture, retailers, to LEED certified professionals.

About the Speaker

Kevin Bell, Director of Sales, Imergy Power Systems

Kevin is the Director of Sales for Imergy Power Systems, a leader in stationary energy storage solutions located in Silicon Valley. He has more than 20 years of proven experience in project development and implementation focusing on energy storage, renewable energy, and public infrastructure projects. He is adept at managing multi-stakeholder development processes and negotiations, including integrators, utilities, and regulators. His previous experience includes years in energy efficiency performance contracting, fuel cells, photovoltaics, and other renewable combined heat and power technologies. He holds a BS in Civil Engineering from the University of California at Berkeley. Kevin can be contacted via email, kevin.bell@imergy.com. www.imergy.com

Join the Meeting

www.sustainabilityma.org/transforming-leadership-webinar

Instagram Contest



SUSTAINABILITY
MANAGEMENT
ASSOCIATION



Enter SMA's Instagram Contest to **win these AWESOME PRIZES!!**

- Sierra Nevada Brewing Co. sweatshirt
- Klean Kanteen cup
- Chico Bag
- Free membership to the SMA!

How to Play the SMA Instagram Contest

1) Post a picture of the Triple Bottom Line

- Economic Performance
- Environmental Stewardship
- Socially Responsibility

2) Don't forget to tag #SMAComp on Instagram


Follow us on social media to learn how you can help your community!



Winners will be selected December 15, 2015

 Instagram: @Certsma

 Twitter: @CertSma

 Snap chat: @Smaorganization

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Articles

Sustainability in Higher Education

By Dr. Yu-ti Huang
Post-doctoral researcher and instructor at
Dominican University of California

Sustainability is a critical challenge that all organizations are confronting in the near century. It has evolved into organizational management that considers not only economic, but also integrates environmental and social plans into all facets of decision-making.

A university, like a small city, influences the environment by its campus activities. Even beyond that, universities being centers of education have a pivotal role in training new leaders and, therefore, a great responsibility in modeling sustainable practices in their entire learning environment. Toward that goal, many universities are trying different integrated management systems for minimizing their environmental impacts, as well as incorporating changes in their curriculum and programs offered, increasing their outreach to the community, adopting more sustainable practices regarding their operations and infrastructure, making administrative plans that take into account the triple bottom line and other initiatives.

Although a wide-ranging sustainability assessment framework for businesses or corporations has been available since 2000 called the “Sustainability Reporting Guidelines” developed by the “Global Reporting Initiative”, until recently no such framework had been developed specifically for universities. The most comprehensive framework assessing sustainability in higher education developed so far is the “Sustainability Tracking, Assessment & Rating System” (STARS), developed in 2010 by the “Association for the Advancement of Sustainability in Higher Education” (AASHE). STARS is a self-reporting framework which is currently open to any higher-education institution in the United States or Canada and

possibly will become available to other countries in the near future, as an international pilot program is already in place.

Once a campus-wide sustainability assessment has taken place following the STARS framework and the baseline has been established, universities can move forward taking different paths. One may be a top-down approach in which the university’s higher administration decides on the credits to pursue first. Another could be a more inclusive method that incorporates a broader representation of the campus community and uses its response on what the priorities should be to move forward. Another possibility may be dependent on what funding agencies or philanthropists would be willing to sponsor, as clearly some upgrades demand more resources than others.

However, it still can be difficult for a university to decide how to prioritize their efforts when considering their future sustainability goals if pursuing a higher rating. There are so many credits that can be pursued; it raises the question: which ones should be chosen first? Up until lately, there was no objective decision-making support system that could assist administrators to develop future sustainability plans based on this framework. The author of this article, therefore, created a procedure that can be used with any version of the STARS framework for any university to develop its short-, medium-, and long-term sustainability plans. This procedure provides an objective starting point for campus community discussions on what can be improved. Ultimately, this process allows each higher-education institution to choose the best approach for its own long-term sustainability goals.

Articles

[Sustainability is Maturing as an Academic Discipline, a Degree](#)

Brandon D. Morton
Sustainability Coordinator and Adjunct at
North Lake College in Irving, Texas



Sustainability has made it as a new discipline at many colleges and universities in the United States and abroad. According to the Association for the Advancement of Sustainability in Higher Education, more than 478 colleges and universities in 67 states and provinces offer [1,456 different sustainability-focused academic programs](#). The programs vary in skill level, from an entry-level certificate to an advanced doctoral degree.

Many programs are specialized in one discipline with a sustainability emphasis, like [Architecture and Sustainability](#) by Ferris State University in Michigan, while others are interdisciplinary and combine multiple academic disciplines into a program course series like [Leading Sustainability](#) by the New School in New York. The majority of programs at minimum incorporate the three areas of sustainability, Economy, Environment and Society, or have described

these three broad areas with synonyms to achieve an organizational area of focus.

Many early adopters of sustainability as a new discipline did so because of the American College and University President's Climate Commitment (ACUPCC). Beginning in 2006, the ACUPCC required more than 600 participating institutions to integrate sustainability in the curriculum and all college practices. In October 2015, nine years later, Second Nature announced the rebranding of ACUPCC, to focus on three areas: Carbon, Climate and Resilience. Colleges and universities that commit to the [new Second Nature Commitments](#), like North Lake College, will begin planning for the next evolution in curriculum of an emerging, maturing discipline.

Since 2013, North Lake College has offered a 15-credit hour emphasis in sustainability for all Associate Degree programs, called the Green Diploma. Students can choose from more than 70 different sustainability studies and science courses, with a minimum of 3 credits in each of the three spheres of sustainability; Sustainable Economy, Sustainable Environment, and Sustainable Society. In spring 2016, North Lake College will be offering an online course in Sustainability Management for continuing education and professional development. The course is also designed to prepare professionals for the Sustainability Management Certified Professional exam. For more information, please visit www.northlakecollege.edu/green.

Articles

Recycle Often. Recycle Right. – Contaminating Our Recyclables

Amanda Fairley
South Atlantic Area Sustainability
Manager at Waste Management

Recycling has been in the news frequently over the past few years. To sort recyclables efficiently and effectively, they are taken to material recovery facilities (MRFs). These facilities have a series of conveyor belts, magnets, optical eyes, and other machinery to separate the different commodities, like paper, plastics and metal. Some MRFs are closing due to financial issues. Commodity prices are down causing MRFs to get less for the paper, plastics, metals and other materials sorted. Contamination is up making it harder for MRFs to get the required commodity quality in order for the materials to be sold and reused. Specifically, Waste Management (WM) averages about 16 percent contamination in its single stream MRFs, which has increased 3 percent over the past 5 years.

In an effort to increase recycling and improve the quality of materials, WM has launched a comprehensive education program online called Recycle Often. Recycle Right.SM The campaign promotes the basics of recycling by simplifying guidelines and empowering everyone to become Recycling Ambassadors.

As recycling has evolved over the years, confusion about things such as collection systems, what can and cannot be recycled, what materials are made from, how they are packaged and their eventual end market, has grown. The result? Today, up to 65 percent of consumers place non-recyclables in their curbside recycling bins.

WM's Recycle Often. Recycle Right.SM campaign simplifies recycling by promoting three basic rules:

1. Recycle all bottles, cans and paper
2. Keep items clean and dry
3. No plastic bags

WM encourages users to visit the Recycle Often. Recycle Right.SM website, www.RecycleOftenRecycleRight.com, where recycling information can be downloaded by educators, city staff and members of the community. Myth Busters guides provide explanations for why and how materials are or are not recyclable. In addition, visitors can pledge to practice better recycling and share their stories through social media.



Visit the website to learn more and help encourage others to recycle right and often to continue to keep the health of the recycling industry strong.



Photo: MRF sorting equipment

Articles

Cleaning the Air through Voluntary Woodstove Replacement Programs

Jim Wagoner
Air Pollution Control Officer at Butte County Air Quality Management District

Residential wood combustion is a source of air pollution during winter months in many areas. The smoke pollution can become trapped in the air due to the natural topography and stagnant weather conditions. Butte County is located in rural Northern California, and many of the residents use woodstoves as their primary source of heating since it is a reliable, affordable option. A high percentage of the woodstoves are older uncertified devices. With voluntary incentive programs, reducing the number of these older, inefficient stoves by replacing them with either the most efficient, lowest polluting woodstoves, or with natural or propane gas, or electric heating devices, will have major benefits in terms of decreased fine particle pollution and climate pollutants, lower levels of toxic air pollutants, with an overall benefit to public health.

Incomplete combustion of wood occurs when using low-efficiency wood stoves, the type common in many areas. Based on recent census data, nearly 10,000 residences in Butte County rely on wood as a primary heat source, out of nearly 85,000 total residences. Many more use wood heat to supplement either electric or gas. Many of these wood burning

devices do not meet current EPA certification levels. When wood is burned in these stoves, various air pollutants are emitted, including fine particle pollution, greenhouse gases such as carbon dioxide, methane, and nitrous oxide.

A local voluntary woodstove change-out program can result in significant reductions in these pollutants. Many air quality management districts in California are implementing woodstove change-out incentive programs when local funding is available. With the incentives that can be provided through such a program, residents in rural, often low-income communities could be incentivized to replace their older stoves with a more efficient heating option, and in turn decrease climate and toxic pollutants, improve overall public health, and save money on monthly energy bills.

The Butte County Air Quality Management District has started the final year of a three-year program funding woodstove replacements. We have offered vouchers ranging from \$1,000 to a \$3,000 low income voucher, and to date have replaced 487 older, polluting stoves. Funds for this three-year program are a result of a Consent Decree between EPA and defendants in a court settlement. Specific emissions reductions are a requirement of the settlement, and must be achieved through this program.



Wood stove examples

Articles

The Greening of Project Management

Jeffrey Heuton
Assistant Project Manager at Boyett Construction

The concept of sustainability is changing how the world operates, from better governance of the environment to alternative fuel sources for operating vehicles and heating homes. One area where sustainability is significantly shifting business practice is in the construction industry, where more firms are embracing the increasingly popular building trend of green design. The construction industry can adapt project management practices to more efficiently design and build sustainable buildings. These adapted tools can also better analyze the cost and profitability factors driving forward plans to develop green buildings. The key activities involved in performing the four stages of building construction remain vital to this process; however, they are altered for green construction. Project managers should also integrate sustainability into their project plans, project management practices, and project teams.

Source: <http://www.pmi.org/learning/sustainability-construction-industry-7099>

Toilets- Silent Water Wasters

George Barber
General Manager at the Paradise Irrigation District

In the water world, we know there are many toilet leaks that are unknown to customers. You do not have to wait until Fix a Leak Week, March 14-20, 2016, to seek out and repair your household leaks.

Facts on Leaks:

- The average household's leaks can account for more than 10,000 gallons of water wasted every year, or the amount of water needed to wash 270 loads of laundry.
- Household leaks can waste more than 1 trillion gallons annually nationwide. That is equal to the annual household water use of more than 11 million homes.
- Ten percent of homes have leaks that waste 90 gallons or more per day.
- Common types of leaks found in the home include worn toilet flappers, dripping faucets, and other leaking valves. All are easily correctable.
- Keep your home leak-free by repairing dripping faucets, toilet flappers, and showerheads. In most cases, fixture replacement parts do not require a major investment.



- Most common leaks can be eliminated after retrofitting a household with new WaterSense (EPA) labeled fixtures and other high-efficiency appliances.

Today's focus is on toilet leaks!

Articles

What can Leak?

The most common places inside the tank that can leak into the bowl

- A worn out flapper or ball
- A damaged seat under the flapper
- A damaged gasket under the flush valve
- A hole or crack in the overflow tube
- A refill valve (ballcock) that needs a new seat or washer

How do I know if my toilet is leaking?

Although it will not show every potential leak, the dye test will prove most of the most common leaks.

The Dye Test

An easy test you can do that will positively tell you whether or not your toilet is leaking is the dye test.

Remove the cover on the toilet tank and carefully set it aside so it cannot be accidentally knocked over and cracked. Begin the test with clear water in the tank as well as in the bowl.

You will need some dye. Some municipal water companies will provide dye capsules or tablets, but food coloring works well. Put enough dye in the tank water to give the water a deep color. Wait 30 minutes and make sure no one uses the toilet. In 30 minutes, if you find any of the dyed water in the toilet bowl your toilet is leaking. A properly operating toilet will store water in the tank indefinitely without any water running into the bowl.



The most common and simple repair is the flapper in the toilet tank. A quick internet search will help show you how to make this simple repair.

If you would like to contribute to the newsletter, or want to learn more about a special topic, please contact the SMA at info@sustainabilityma.org & www.sustainabilityma.org