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Curtains Up!

Let's Put On a Sustainable Show Using Standards

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Introduction

This is an imaginary discussion between a corporate event organizer and a meeting planner. The corporation wants to be socially and environmentally responsible while holding their meetings and conferences for next year. What to do? What does "sustainability" mean, and how does one hold a "green" event? Let's eavesdrop while the professionals explore the possibilities . . .

Meeting Planner: Hi! Thanks for coming, and thanks for your business! How can I help you?

Event Organizer: I sure hope you can help me because I don't know who to turn to. We have a full slate of meetings planned for next year: our annual stockholders' meeting that includes an opening concert, client convention, Board of Directors meetings, special interest groups symposiums, the annual 10k charity run, numerous regional sales meetings, and many others. We are con-

cerned that all of this face-to-face time will generate a lot of waste, consume a lot of electricity, water, and fuel. We are concerned that in this down economy, our shareholders, including our international ones, will question our use of resources.

People are so aware of the sustainability conversation now that they expect we will do the "right thing." And we truly do wish to do the "right thing," as we are responsible corporate citizens in many areas of our product lines and manufacturing processes. How do I know what the "right thing" is? Who decides this? And on top of this, we have seen how important it is to provide safety for our audiences and the event professionals, as the accidents at the Indiana State Fair, the Ottawa Bluesfest, and the Pukkelpop music festival in Belgium last summer certainly seemed avoidable. We want our participants and employees to know we respect their safety and have safeguards in place. But I'm not sure what they all are or how to find out!

Meeting Planner: Well, you are among good company in asking these questions. It seems

like every company, convention and travel bureau, trade association, and live event production company is asking these things. I bet you have heard of the term "greenwash," and are worried that the decisions you make will really be of no consequence and have no real impact on the sustainability of your events? I imagine your safety concerns are deeply rooted in your organization in every other aspect of your workplace.

Event Organizer: Yes, these are exactly our issues. I want assurance that there are bona fide criteria that back up the sustainability and safety claims of each of the service providers we will contract with. I want to know what the certifiable credentials of these providers are, and if they can back up their claims with some kind of widely recognized principles, not just marketing hype they concocted to seem like they're green and safe. A colleague in my association told me that there are some truly responsible organizations in the meetings and live events industries that have taken these issues seriously too, and have developed guidelines



credit: photo courtesy of Freeman/TEL-AV

Vancouver Convention Center

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based on science and accountability. Do you know anything about that?

Meeting Planner: Absolutely! There is guidance for pretty much every facet of your event, from the way you deal with your vendors to the rights and safety of your staff, and everything in between. For instance, the accidents you mentioned could have been prevented by strictly adhering to a standard¹ which was developed by PLASA's Technical Standards Program.² By the way, have you ever heard of ISO 26000? I think a lot of the fundamental ideas surrounding your concerns are covered there.

Event Organizer: No, but I know our company uses 9001 to manage the business. We're even certified. So I know about ISO (the International Organization for Standardization). What is 26000?

Meeting Planner: Its official name is ISO 26000:2010, *Guidance on social responsibility*. It's a relatively new standard³ that took five years to develop and it deals with an organization's social responsibility. There was an extraordinary amount of participation in developing the standard, as in, 450 subject matter experts from 92 countries, and they made sure they included everyone: industry, government, labor, consumers, nongovernmental organizations, service, support, and research. They had good representation of gender and geography as well.⁴ Consensus, not concoction!

Event Organizer: What do they say defines "social responsibility" then?

Meeting Planner: A lot of it is what you mentioned; they call them "core subjects." There are seven of them: organizational governance, fair operating practices, consumer issues, community involvement and development, human rights, labor practices, and the environment. So, when you talk about the safety of employees, ISO 26000 puts it in the context of responsibility as an employer to make sure your people are safe. They don't go into detail

about things like making sure theatre riggers are certified by a program like the PLASA ETCP⁵ but the guidelines given would lead you to doing something like that to ensure their safety. The standard provides guidance on things that might seem like common sense, but you'd be surprised how many organizations don't care at all about their workers' fundamental rights. There are a few core subjects the standard identifies that I think you'd be interested in, including the sustainable resources section. ISO 26000 provides the framework for helping people "do the right thing."

Event Organizer: I'll have to look that one up and take it back to my boss. Thanks! Sure sounds like some good guidance. Are there others?

Meeting Planner: There are quite a few, actually. Were you aware that there are both regional and international standards that provide guidance for many aspects of these issues? Let's walk through the rest of them together.

First, let's start with the "big picture." There are many aspects to consider when you're talking about a sustainable event: the organization that is hosting the event, the organization that is running/planning the event, and the venue where the event is being

held. It's like peeling back an onion. I like to start with the event itself first, that will lead to a lot of decisions. If it is a sporting event, we will be limited to where the event can be held, although some of these events move—for instance, world cups, Olympic Games, and others. There are commonalities for some standards that are not dependent on the event itself; other standards apply only to specific kinds of events. You and I should look specifically at standards that apply to the venue, the location of the venue, the materials used for the event, the event itself, the management of the event, and the organization that is holding the event. Each of these aspects has different considerations, and to be completely sustainable, you have to look at the whole picture (see Figure 1).

Event Organizer: Okay, let's start with the events themselves. What sustainability standards are out there that guide specifically what happens during the event?

Meeting Planner: Well, unfortunately there are no standards for events other than meetings and certain other events. There currently is discussion involving several live event associations to develop something, but this will take some time and there is no initiative yet. You can, of course, develop some standards in-house in the meantime, but I think

I have another standard that you can use for your meetings, with confidence. It is perfectly suited to your concerns. You should make sure that your colleagues' meeting planners know about it and follow it when it's approved.

It was developed by the Convention Industry Council (CIC). They started an online site where planners could collect best practices; they call it an exchange—the Accepted Practices Exchange (APEX). Through their APEX initiative, the CIC got together with ASTM International to create an American National Standard for events that would address many concerns about the waste and environmental impact produced by their industry. They tried to balance the social, environmental, and economic concerns of event

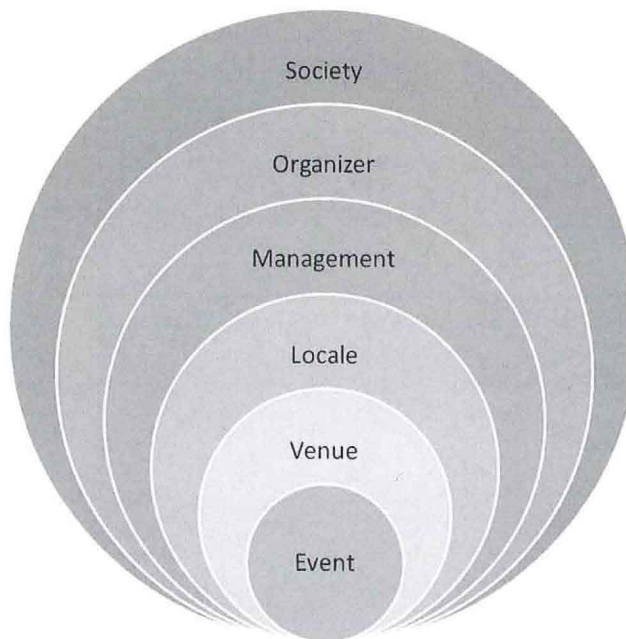


Figure 1: Peeling back the onion of sustainable events

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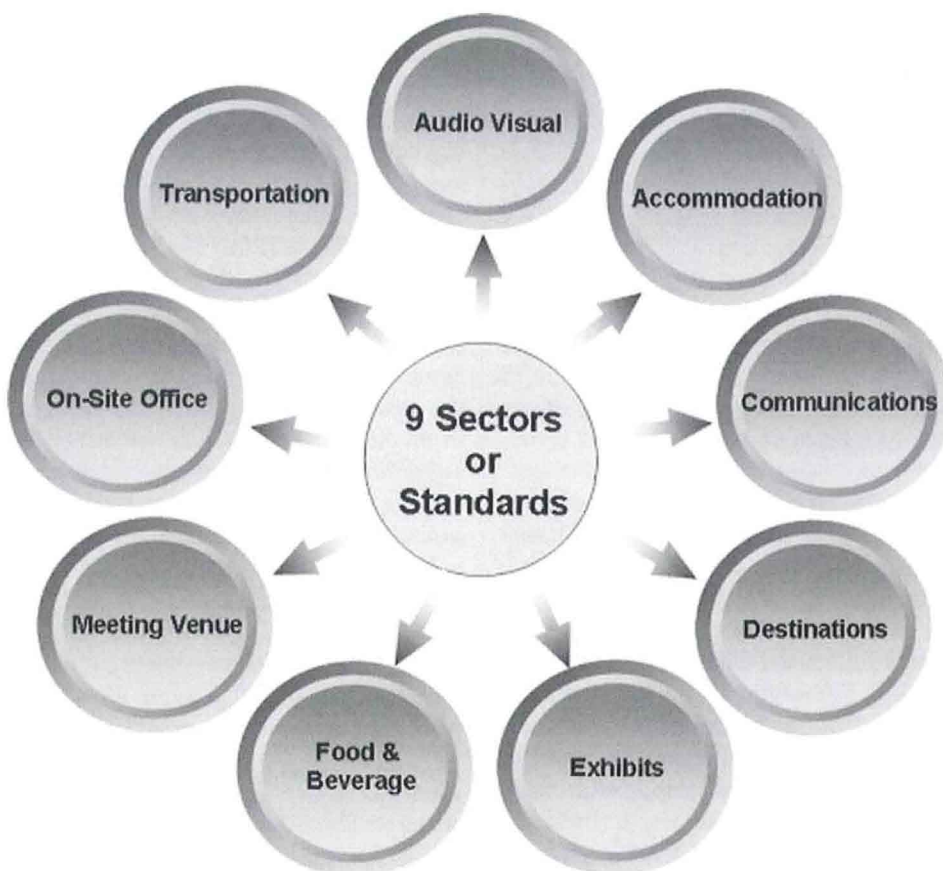


Figure 2: ASTM APEX Sectors

organizers just like you. I like the way it's organized—it covers all facets of meeting planning and management; it's very real-world and includes doable solutions.

In the APEX/ASTM standard, meeting management has been divided into nine sectors with each one using the same type of grading system, so you can jump from one sector to the other and know right where you are (see Figure 2).⁶ You can find more information at the CIC website (www.conventionindustry.org).

The green meetings and events standards developed through APEX go through the ASTM process, under the auspices of Task Group E06.71.14, *Green Meetings and Events*, part of Committee E06 on Performance of Buildings' Subcommittee E06.71 on Sustainability. After reviews and approvals, the standards also will undergo a final editorial stage before being published. This is a great piece of guidance for you, and it is the most prescriptive of them all.

Event Organizer: This APEX standard is very comprehensive, but, like you said,

it's only for meetings. It would be great if standards were developed for other events, too, like sports. I would be interested in working on a task group if this happens as I have a lot of expertise. What is the next level to consider?

Meeting Planner: The next level has to do with how the event is managed. There is a management standard that applies to all events: ISO/DIS 20121, *Event sustainability management systems – Requirements with guidance for use*. The DIS in the title tells you that at this time it is a “draft international standard,” still under review. This began as a British standard: BS8901, *Sustainability Event Management*. Its development has been expedited to allow the Olympic Committee to apply it to the 2012 Summer Games in London. Because the British standard has been in effect for some time already, there is a great deal of experience with the issues that have been applied to the ISO standard. Since ISO is international, it can be applied anywhere. This particular standard, being a “management

standard,” joins a group of other ISO management standards. We've already talked about one of these, ISO 9001:2008, *Quality management systems – Requirements*.

Event Organizer: I'm a lot more comfortable now that I'm better informed. It seems like I can go back to my boss and report on some major initiatives that will really help us put on a sustainable meeting by scrutinizing our internal processes.

Meeting Planner: Yes, and that is exactly what ISO 20121 does. By following its principles, organizations are able to modify their behavior in more sustainable ways. The standard does not tell you exactly what to do, rather, it encourages an organization to evaluate every aspect of their event planning and improve things along the way.

The idea of management has a very specific meaning to ISO, and the principles are consistent across each one of these types of standards. This principle is “PDCA” or “Plan-Do-Check-Act.” It forces an organization to come up with its own specific actions, rather than being prescriptive. Like ISO 9001, it is challenging at first, but becomes easier as you go. It reaches into every aspect of how events are organized. The graphic that ISO uses for this cyclical PDCA principal is shown in Figure 3. ISO describes these activities as follows:

- Plan: establish objectives and make plans (analyze your organization's situation, establish your overall objectives and set your interim targets, and develop plans to achieve them)

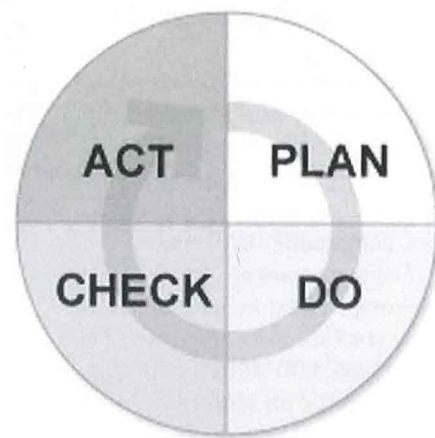


Figure 3: ISO Management Standard Cycle

- Do: implement your plans (do what you planned to)
- Check: measure your results (measure/monitor how far your actual achievements meet your planned objectives)
- Act: correct and improve your plans and how you put them into practice (correct and learn from your mistakes to improve your plans in order to achieve better results next time).

Event Organizer: Wow, this is a serious body of work, and the fact that so many countries were involved in its creation gives it creditability. You mentioned that part of the standard has to do with deciding where the event will be held. Do you have any more insight into that?

Meeting Planner: Yes, the ISO 20121 standard calls for conformity to other standards too: ISO 26000, *Guidance on social responsibility*; BS 8900:2006, *Guidance for managing sustainable development*; and ISO 14001, *Environmental management systems – Requirements with guidance for use*.

Event Organizer: Besides managers and organizers of specific events, there must be other professionals like me who are trying to responsibly run events. Is there anything that I can be involved in?

Meeting Planner: Yes, there are other things you can consider. One is an international movement for considering sustainability in many areas: the Global Reporting Initiative (GRI). According to their website, “the GRI is a network-based organization that produces a comprehensive Sustainability Reporting Framework (the G3 Guidelines) that is used globally. GRI is committed to the Framework’s continuous improvement and application worldwide. GRI’s core goals include the mainstreaming of disclosure on environmental, social, and governance performance. GRI’s Reporting Framework is developed through a consensus-seeking, multi-stakeholder process. Participants are drawn from global business, civil society, labor, academic, and professional institutions.

The Reporting Framework sets out the principles and performance indicators that organizations can use to measure and

report their economic, environmental, and social performance. The cornerstone of the Framework is the Sustainability Reporting Guidelines. One specialization within the GRI is event organizers such as you, for whom the Event Organizers Sector Supplement was created. This Supplement, which includes views from the event organizer industry and global stakeholders on the key issues for sustainability reporting, covers the key issues for the sector, expanded from the G3 Guidelines:

- Economic impacts of events
- Environmental impacts by attendees
- Knowledge transfer
- Legacy
- Sourcing
- Commissions and gifting
- Site selection and bidding process
- Participant and attendee management
- Food and Beverage
- Accessibility
- Inclusivity
- External partners (e.g. sponsors, partners, patron)

Remember the ISO 26000 standard I told you about earlier? Well, you can get a free publication, *GRI and ISO 26000: How to use the GRI Guidelines in combination with ISO 26000* that gives you lots of information about where the overlap is. There’s a great table starting on page 7 that shows

the GRI guidelines and the 26000 sectors, side-by-side. Just go to their website and download it.⁷

You may also wish to get involved with the Green Meeting Industry Council (GMIC), which, according to their website, “is the premier global community solely dedicated to sustainability in the meetings and events industry, not only through education but also by spearheading research, policy, and standards. GMIC is a non-profit professional meetings association with member representation in over 20 countries. The GMIC is 100-percent focused on advancing sustainability in the meetings industry, helping leaders of all levels.” Although the GMIC and the GRI are not actually standards bodies and their initiatives are not standards, their guidelines behave like standards and are widely accepted.

Event Organizer: All of this sounds great, but how do we determine whether the venue itself is “sustainable?” Are there standards for that too?

Meeting Planner: Well, yes and no. This is an area where standards are being developed quite actively at present, but they are based on some widely-adopted guidelines. There is a concept that began with the “green” movement and morphed into the idea of “sustainability” for buildings.



Canadian Labour Congress 2011

credit: photo courtesy of Freeman/TEL-AV

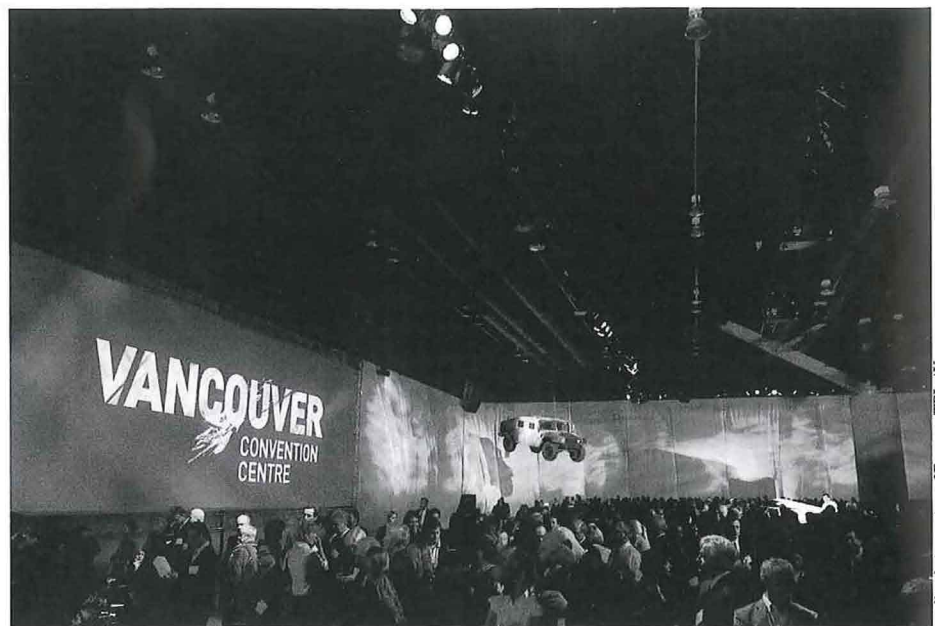
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The most popular way of expressing this sustainability is called “LEED®” which is a program from the United States Green Building Council (USGBC). LEED stands for “Leadership in Energy and Environmental Design.” The USGBC states that “LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations, and maintenance solutions.” The idea is that through the lifespan of a building, starting with its inception, there are principles relating to materials, human comfort and productivity, conservation of resources, and reduction of pollution that make the building sustainable. There are numerous categories that include recycling, reuse, transportation, lighting, heating and cooling, and others. Different types of buildings such as commercial, residential, academic, and others are given unique evaluation programs. The USGBC says that “LEED promotes sustainable building and development practices through a suite of rating systems that recognize projects that implement strategies for better environmental and health performance.”

The rating systems assign specific credits for different aspects of the design and construction. Although it is not a standard, the USGBC says that “The LEED rating systems are developed through an open, consensus-based process led by LEED committees, diverse groups of volunteers representing a cross-section of the building and construction industry. Key elements of the process include a balanced and transparent committee structure, technical advisory groups that ensure scientific consistency and rigor, opportunities for stakeholder comment and review, member ballot of new rating systems, and fair and open appeals.”

There are numerous standards within LEED from a variety of standards developing organizations (SDOs), such as the Illuminating Engineering Society (IES), the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), and the Institute of Transportation Engineers (ITE). One of the major standards within LEED is important for live events since it relates to energy consumption: the seminal document and joint standard, ANSI/ASHRAE/IESNA Standard 90.1–2007,



Vancouver Convention Centre West Hall 2011

Energy Standard for Buildings Except Low-Rise Residential Buildings. Another important standard within LEED to consider for live events is recycled content, as defined in accordance with ISO 14021, *Environmental labels and declarations – Self-declared environmental claims (Type II environmental labeling)*. Event participants also will appreciate that the air they are breathing will be in conformance with yet another standard, ASHRAE 62.1–2007, *Ventilation for Acceptable Indoor Air Quality*.

Another rating system for buildings similar in some ways to LEED, but actually an American National Standard since 2010,⁸ is *Green Globes*.™ According to the website (www.greenglobes.com), “The Green Globes system is a revolutionary building environmental design and management tool. It delivers an online assessment protocol, rating system, and guidance for green building design, operation, and management. It is interactive, flexible, and affordable, and provides market recognition of a building’s environmental attributes through third-party verification.”

This effort began in Canada. As described on the Green Globes website, “The genesis of the system was the Building Research Establishment’s Environmental Assessment Method (BREEAM). In 1996, the Canadian Standards Association (CSA) published *BREEAM Canada for Exist-*

ing Buildings. More than 35 individuals participated in its development, including representatives from federal and provincial departments, the National Research Council and the University of Toronto. . . . The Green Globes system is used in Canada and the US. In the US, Green Globes is operated by the Green Building Initiative (GBI). In Canada, the version for existing buildings is operated by BOMA Canada under the name *BOMA BEST*. The Green Globes system also has been used by the Continental Association for Building Automation (CABA) to power a building intelligence tool called *Building Intelligence Quotient (BiQ)*.”

There is tremendous activity in this area of building-specific sustainability in addition to these initiatives. There are large efforts being undertaken to meet some audacious and aspiring goals, such as the Zero Net Energy (ZNE) building. This is a building with zero net energy consumption and zero carbon emissions annually. There are standards being developed that lead toward this type of goal. The most important is ASHRAE 189.1, *Standard for the Design of High-Performance Green Buildings*. This standard provides a total building sustainability package for those who strive to design, build, and operate green buildings. From site location to energy use to recycling, this standard sets the foundation for green buildings by addressing site sustainability,

water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere, materials, and resources. Standard 189.1 also serves as a jurisdictional compliance option to the public version 2.0 of the *International Green Construction Code*™ (IgCC) published by the International Code Council. The IgCC regulates construction of new and remodeled commercial buildings.

Event Organizer: I like the idea that there are solid standards and best practices that relate to the building's energy and water consumption, but we have a significant amount of other considerations for our events in the building. We use a lot of digital signage, computer networks, security systems, and audiovisual systems for our events. Is there anything that addresses these from a sustainability standpoint?

Meeting Planner: Yes, I was getting to this. There is a new initiative from the low-voltage systems industries⁹ called STEP. This stands for *Sustainable Technologies Environments Program*. The STEP Foundation is establishing a rating system that takes all of the other technologies into account, but for low-voltage systems. The Foundation has approved the development of a standard from the rating system that will be submitted to the American National Standards Institute (ANSI) by its founding members, some of which are SDOs. These are InfoComm International, the Computing Technology Industry Association (CompTIA), the Telecommunications Industry Association (TIA), and BICSI (Building Industry Consulting Services International).

There are some powerful ideas that can save significant energy and waste by creating synergies between the different systems you mentioned. There is a concept called "building automation" or "integrated building technologies" that ties everything together with software. Advanced user interfaces and programs link ideas such as building occupancy, natural lighting, weather, and user demand to save energy. The STEP program is based on standards where applicable.¹⁰

There is a sophisticated application of LEED and some of the concepts in STEP that you could consider for your large conventions—the Vancouver Convention Center, which is certified LEED for NC (New Construction) and LEED for EB (Existing Buildings, Operations, and Maintenance). The technology designers also unified the Building Management System (EBMS), the Lighting Control System, the Audio and Visual Systems, and the Scheduling Application to take it beyond the basic LEED requirements, using a strategy called *Unified Sequence of Operations*, with some important features, as follows:

- Shared Occupancy Sensor
- Calendar data from EBMS
- Proactive System Operation: Systems respond to cues from EBMS; systems are powered up only when required, no changes are made during meetings/events, and Occupancy Sensors determine systems to shut down

Standards work affects entire continents and every market sector, and the international cooperation between standards developing entities is a model that may, in fact, change the world, and at the very least, change the way we do business.

Event Organizer: Wow, I didn't realize when we started this discussion that so much is going on! Thank you for your help. I understand now the pieces of the puzzle that I will have to consider. You have just changed the way we'll be doing business.

Conclusion

The conversation that just took place was between an event planner and someone who needs to host a meeting, but the same conversation happens over and over again across the globe, between building contractors and architects, government agencies, and school systems worldwide. As a society, we are slowing beginning to realize that we're making a big mess and the finite resources we now have at our disposal

will rapidly diminish into non-existence if we don't do something about it, and do it quickly. Without placing blame on any one industry or country, we are all paying the price for what appears to be an overabundance of the ability to generate power, chop down the forests, and make everything disposable. The problem is, although we think our trash gets thrown away, there is no "away" and the sludge and chemicals and trash pile up, either in our oceans, in holes we've made in the ground, or in the atmosphere above us.¹¹

It seems that our voracious appetites for energy require that we slice off mountain tops for coal and drill far below the ocean floor for oil, carelessly wreaking havoc on the ecosystems of the planet that sustains our very existence.¹² It seems like an overwhelming problem, but, like a sleeping giant that has just been awakened, the world is beginning to realize that if we don't do something soon, no return on investment

formulas will save us. The bottom line on the balance sheet will show us that we can't eat money. And when the last tree is gone and there is no topsoil left to sustain life, that's all we'll have left to feed our children's children—the remnants of our greed. We will have tripped over a log to save a splinter. And in the end, we need to look in the mirror before we start thinking we're not to blame. In the end, we realize that "the government" is us. The "large corporation" is our

neighbor, and regardless of how ruthless or stingy a producer may be, if there were no market, there would be no sale. Each and every one of us has a hand in an oil disaster or electrical brownout.

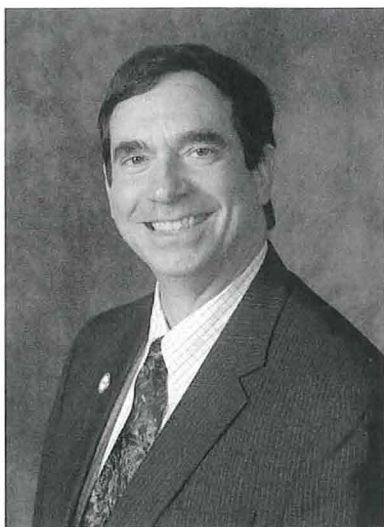
But it doesn't have to be this way. We can figure out a way to use our resources responsibly and be good stewards of our planet. The relationship between industry and environment does not have to be adversarial; we can design new industrial systems and products that are safe, economically profitable, and sustainable. We can pay attention to the organizations that are working so hard to help us save us from ourselves—organizations that are trying to identify and ameliorate the flagrant waste and inefficient processes that seem to drive economies all over the world.

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The standards community brings a coalition of governments and large corporations together to come up with solutions to some looming and very overwhelming problems. Standards work affects entire continents and every market sector, and the international cooperation between standards developing entities is a model that may, in fact, change the world, and at the very least, change the way we do business.

So let's get back to business. Let's continue the conversation that involves an activity we have all, at one time or another, participated in: a meeting. Let's discover the ways in which our standards developing community is changing the way meetings and live events impact our resources, and *let's put on a sustainable show!*



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References

1. ANSI E1.21-2006, Temporary Ground-Supported Overhead Structures Used To Cover Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events
2. PLASA is the lead international membership body for those who supply technologies and services to the event, entertainment, and installation industries.
3. ISO 26000:2010, Guidance on social responsibility was approved in 2010.
4. See www.iso.org/iso/social_responsibility
5. ETCP is the Entertainment Technician Certification Program, an industry-wide health and safety program that directly affects crews, performers, and audiences. There are two rigging personnel certifications, among others: ETCP Certified Rigger – Arena, and ETCP Certified Rigger – Theatre. See www.etcplasa.org for more information.
6. See www.conventionindustry.org/StandardsPractices/APEXASTM.aspx
7. See www.globalreporting.org/NR/rdonlyres/E5A54FE2-A056-4EF9-BC1C-32B77F40ED34/0/ISOGRIRReport_FINAL.pdf
8. ANSI/GBI 01-2010: Green Building Assessment Protocol for Commercial Buildings is based on the Green Globes rating system.
9. Broad classification that covers several specialized fields, including lighting, fire systems, alarm and burglary systems, access control systems, home automation systems, networking, and audio/ video systems.
10. For more information visit www.thestep-foundation.org
11. Paraphrased from Cradle to Cradle, McDonough, William and Braungart, Michael, North Point Press, 2002
12. The Intergovernmental Panel on Climate Change, which included representation from over 113 countries and is overseen by the United Nations and the World Meteorological Organization, again linked human activity to Earth's warming temperatures, rising seas, more intense storms, and a host of other environmental maladies in their 4th Assessment Report, AR4, in 2007

Write a winning paper!

SES congratulates the authors of the above article, who won 2nd place in the 2011 World Standards Day Paper Competition.

Look for details about the 2012 WSD Paper Competition in the next issue of *Standards Engineering*.

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