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## Every Little Thing Helps

Sustainability is about more than the systems we design. It's also about the habits we get into on a daily basis to help reduce our environmental impact.

By Brian Huff, CTS-D

We're at a critical tipping point in global environmental affairs. Many decisions made today may have a far-reaching and irrevocable impact on future generations as they try to maintain a reasonable standard of living in a world that is running out of resources. Assuming the world's population doubles by 2050 as predicted, it's essential that we develop habits and methods to support not only the planet's current inhabitants but also its future ones, most of whom will want the same carbon-producing luxuries we've enjoyed for decades in the West.

The new administration intends to make clean energy and conservation high priorities, and it sees them inextricably linked to restoring prosperity to the national and world economies. I'm making it my No. 1 personal and professional objective to find and promote ways to reduce power consumption and electronic waste in the pro AV world.

Because I am not an environmental scientist or energy technology expert, I am focusing on simple methods that can have an immediate impact while working toward net-zero carbon emissions. Although a net-zero goal may sound absurdly idealistic and not nearly as intriguing as combating the destruction of the rain forest or designing plug-in vehicles, it turns out it is relatively easy to make small but revolutionary conservation and efficiency changes our industry.

For instance, I recently cleaned up my office, recycling several hundred pounds of old and obsolete drawings, catalogs, and project files. I communicate and store just about every aspect of my project designs electronically now, and get nearly 100 percent of my technical information from the Internet. I need a fraction of the paper, layout, and storage space that I did even five years ago, and although it's only anecdotal, I seem to be attending many more project meetings by phone and Web conference.

In paper use alone, I have reduced my global impact over the last two years by a half ton—which, according to the Environmental Defense Fund, eliminates the harvesting of 2 tons of wood, the reduction of 21 million BTUs of energy, 3,130 pounds of carbon dioxide or equivalents, 10 pounds of nitrogen oxides, 7 pounds of particulates, 1 pound of hazardous air pollutants, 3 pounds of volatile organic compounds, 10,491 gallons of wastewater, and 1,253 pounds of solid waste.

In 2006, I did a cost/benefit analysis and discovered that by drastically reducing the use of express mail for bulky submittals, the cost savings easily covered the purchase of DVI display cards and three 21-inch WXGA LCD monitors for my workstation. Mix in a scanner and some advanced PDF creation software, and I am now running a largely paper-free design practice. If I did the same calculation today, I could probably afford three 24-inch or even 26-inch monitors and HDMI or DVI-D cards.



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After working in this semi-immersive way, using a one-screen PC seems like driving a Model T. It's a liberating experience, resulting in significantly increased productivity and vastly reduced energy consumption—a real win-win.

### Helping Clients Reach Their Goals

In my preliminary assessment, I see many other areas of AV systems design where smart decisions could allow our industry to make a substantial contribution to lowering CO<sub>2</sub>, other greenhouse gas emissions, pollution, and waste. For instance, we can try to convince clients not to standardize on outdated or limited-use technology.

If the client still uses VHS material in their presentations, suggest converting tapes to DVD instead of requiring VCRs in every system. Another example: Use backward-compatible Blu-ray players where standard DVD players would normally be specified to reduce device obsolescence.

Is there any reason not to start specifying all 1980x1020 displays with HDMI connectivity now? It's fairly clear that HD is the new XGA, 16:9 is the new 4:3, and HDMI is the new RGBHV. These practices not only slow the march of electronic components toward the landfill, it also reduces raw ore mining and environmental pollution generated in the manufacturing process.

Add network-based AC power distribution and monitoring diagrams to systems documentation, including estimated power consumption and power draw goals for each system. In fact, why not convert estimated savings to dollars and tons of CO<sub>2</sub> saved per year, and make it part of your deliverables package? This could come in handy if the design requires a cost increase over a traditional system because it will support and supplement the client's green agenda and goals.

### Keep Your People Involved

And that's just the start. Be sure to calculate your own firm's carbon footprint at a site like The CarbonNeutral Co. ([www.carbonneutral.com/pages/businesscalc.asp](http://www.carbonneutral.com/pages/businesscalc.asp)). Then look to your employees for efficiency suggestions and help them do their part. Support and encourage participation in the U.S. Green Building Council, its local chapters, and trade shows. Set up a company wide LEED-AP accreditation training or reimbursement program for interested employees.

Provide bike storage, showers, and changing facilities for employees who want to walk or cycle to the office. Responsibly recycle batteries and printer cartridges, lamps, and computers. And don't forget to continually review and refine the environmental aspects of your corporate system design standards.

The bottom line is, when it comes to publicizing your efforts to promote green AV, you have to walk the walk if you want to talk the talk. Otherwise your advocacy may be perceived as just more marketing greenwash. Fortunately, there are lots of ways to show you're serious, and it all starts with your personal approach to conservancy. AV

*Guest columnist Brian E. Huff, CTS-D, has over 25 years of experience designing and specifying audiovisual systems for education, corporate, and government clients. He holds a High Technology MBA from Northeastern University, an ISF-Commercial certification, and is an active member of InfoComm, AES, and SMPTE.*