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info@projectgreenav.com

Making Money in Green AV May 2012

The opportunities to make money in Green AV are varied and can be found in many markets. I will specifically focus on opportunities with the US federal government because of the likelihood that new orders and regulations will trickle down to impact most of the other markets that AV systems integrators and consultants address. Since federal agencies are not mandated to "think Green," there is an immediate need for sustainability experts and contractors in different industries.

The federal government, under new executive order 13,514, must now "increase energy efficiency, measure, report and reduce their greenhouse gas emissions from direct and indirect activities, conserve and protect water resources...eliminate waste, recycle and prevent pollution, leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products and services, design construct, maintain and operate high performance sustainable buildings in sustainable locations, strengthen the vitality and livability of the communities in which the federal facilities are located and inform federal employees about and involve them in the achievement of these goals." This opens up a world of opportunity for AV designs, implementation, integration and service. If you think that these requirements won't trickle down to the local government, schools, museums and eventually public and private corporations and institutions, you are mistaken. And it WILL affect your future business. Once standards become easily understandable and enforceable, the adoption rate will increase throughout the different industries.

My recommendation is to start learning about Green AV- environmentally responsible technology implementation and usage- and be in a position to be considered an expert in the field. Expand beyond standard AV systems and be the versed in other fields. Be marketable, be knowledgeable, be prepared. Focus your Green AV skills now by working with the government. Help them to meet the goals of executive order 13,514. They have to do it; you can be the one to get it done.

What Can We Do?

So let's focus on the government requirements that AV systems integrators can help to achieve. The executive order requires agencies to create goals for sustainability and the reduction of GHG (Green House Gases) for three different scopes. 1) Direct emissions 2) emissions from energy consumption and 3) emissions from suppliers/ contractors. Breaking that down for what that means for AV: Standards for federal agencies will include purchasing and contracting with suppliers with Green business practices in place (agencies must "Green" their supply chain), installing energy management reporting programs and software for reportable data and energy consumption reduction for existing buildings and new construction (they must reduce their overall carbon emissions), sourcing and procuring environmentally responsible products and electronics that conform to energy star standards if available or are energy efficient and which are manufactured in a responsible way (they must reduce emissions from energy consumption) and finally they must implement programs to build, run and maintain sustainable minimal impact buildings for all new construction.



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AV companies are perfectly poised to offer all these services to the US government agencies to help them attain their GHG and energy efficiency requirements.

Are you Green?

The first directive will be to look inside your own company and think about green business processes that you can begin implementing. With some research and perhaps participation and certification from third party agencies you will be able to outline the goals you want to reach, and detail how you can reach them. You will have to have the processes well documented, and any reductions reported and analyzed. You may even want to consider Greening your supply chain- are your suppliers documenting their environmentally responsible programs within their own business? Documentation is the key to achieving recognizable standards that the government will accept- like ISO environmental standards 14001 and 14066. Specifically, the most recent release from ISO environmental, 14066, was developed to "achieve consistency in the global carbon market and maintain public confidence in the GHG reporting and other communications." ISO 14066 moves toward third party auditing to verify business claims, which leads to more credibility regarding the attainment of environmentally conscious goals. Just as important as creating and documenting company-wide goals is instilling the environmentally responsible behavior and thinking into your company culture... you'll see what I mean in these next few examples:

Middle Atlantic- I had the opportunity to visit the Middle Atlantic NJ Headquarters recently for a meeting and tour of the facility. What an amazing eco-system! Bob Schluter, the founder of Middle Atlantic, created a deeply forged culture of sustainability in the company- so much so that engineers use some of their time to focus on efficiency and re-use within the building. They re-use excess heat from the oven to heat parts of the building. Middle Atlantic is ISO 14001 certified.

Da-Lite- In June 2011 Da-Lite announced that they were re-certified as ISO 14001, including the headquarters and two US manufacturing facilities (love to see manufacturers keeping the actual manufacturing in the US). One of the coolest programs that Da-Lite has implemented is their Screen Green Exchange Program- as part of their commitment to Green business they will take away and recycle old screens when a new Da-Lite screen is purchased- free of charge.

Mid-Atlantic Control Systems- MID-Atlantic is taking huge (and costly) strides to decrease their environmental footprint. In order to generate energy for the company, they have installed roof mounted solar panels on the top of their facility- in addition to their self-implemented recycling requirements for paper, cardboard, pallets, plastic and metal product waste and installed motion sensors, they have been able to significantly cut their business' carbon footprint. Additionally Mid-Atlantic preaches what it practices- they sell the same solar panels that they installed on their building and the offer Green consulting services to integration clients. This service allows them to seamlessly fit into an existing integration business and be the Green communicator between the integrator and enduser, architect or GC.





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I applaud these, and all the AV companies which have developed sustainability programs within their facilities. As manufacturers, Middle Atlantic and Da-Lite are committed to social responsibility by keeping their manufacturing facilities domestic. They are one step ahead of much of the industry.

Sustainable Buildings

The next way AV integrators can help the government is by providing energy management software, programming and overall efficient systems. Smart building technology (also called Intelligent building technology) can be implemented in both existing and new construction in varying degrees. InfoComm defines SBT as "a process achieving, designing, constructing, commissioning, and operating buildings which leverages technology to optimize the goals and objectives of the built environment." AV systems integrators have the opportunity to look beyond conventional AV systems to pull together other facilities technologies like security, lighting, HVAC, IT and life safety. Creating a completely interconnected system is, in itself, efficient. But adding energy management programming, which offers useful reporting and analysis rendering optimal energy reductions is the icing on top. It may fit in with your current business model, or your model may have to evolve to include SBT (and don't forget BIM for the most efficient and advanced way to work with all contractors on new construction to ensure the least waste and down time for the project)- This is part of the AV Future.

So maybe you aren't ready to take on full building integration. Offering energy management software, custom AV programming and a great dashboard- all with great reporting analytics- will help agencies to manage energy consumption, reduce as necessary and document the changes to prove that they are reaching their goals. And it's something many integrators can already do- Anyone heard of Crestron's Greenlight or AMX Resource Management Suite ™?

Take advantage of this perfect storm- AV systems integrators are already doing this and it's time to tell our clients all about it. Educate them about your capabilities and how they can be incorporated into green business programs agency wide.

For much of the new construction, government agencies will apply for LEED certification. AV integrators and consultants should be versed in what this means. Consider having a LEED AP or LEED Green Associate on staff to speak the language of the architect or LEED consultant. It may set you apart from your competition and will illustrate your commitment to further your clients' green initiatives. Expand the industries with which you converse-> bring AV beyond the boundaries. Partner with other industries- electricians, HVAC, etc. We have to talk with all other pieces. Learn their language; learn how to communicate with them. Doing this will garner more respect for the AV industry. Nobody wants to hand over control of their system to an AV guy (or any other outsider for that matter)- but the AV guy is best equipped to program and establish control systems for all the facility. Making friends with the other industries allows them to feel validated in their expertise, and will inspire them to bring you to the table for control, but of course not for installation.

Their business is protected and you get to expand yours.





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Should you choose to stay within the AV boundaries- good news- there is a new option for you. Offer agencies InfoComm's new STEP guidelines. This program is specifically about sustainable technology integration and use. BTW- a big chunk of STEP certification points come from SBT. (Gary goes into more detail)

Green your Supply Chain- Responsible Procurement

Moving on to sourcing and procuring green products from environmentally conscious manufacturers. AV systems are inherently energy sucking electronics. There are some manufacturers, however, which have taken significant steps towards making their products more energy efficient or Green. Energy star and TCO certified products are a start- but they generally don't cross into the Professional AV world. Green AV products are energy efficient while in use, in standby and when off. They are manufactured using minimal toxic components. The manufacturing facilities implement environmentally conscious processes and programs. And Green AV companies are socially minded as well as environmentally minded- rounding out a truly sustainable manufacturer.

Take a minute to see how many Green Professional AV products you can think of...

Examples:

Da-Lite screen Green
Draper ecoVision screen
Extron Energy Star Amplifiers
Middle Atlantic Racks and UPS
RelampIt! Projector Lamps

Software/ Programming: Crestron Green Light/ AMX Resource Management Suite

Added Benefit, little additional effort

Also important when considering responsible procurement, is end of lifecycle planning. Offering end of lifecycle programs as part of design, installation, integration, service and maintenance adds value to your contract and also allows agencies to fulfill yet another criteria of the executive order. There are several ways an integrator can handle end of life-time product in an environmentally responsible way.

The first is to find out if the product can be refurbished or repurposed. Many products can and some cannot. Extend their life by keeping them from becoming waste. For example: RelampIt has developed a way to re-manufacture lamps (in the US). However, as is common in the technology industry, some products become obsolete and unusable.

Next is to research if the manufacturer has any type of product reclamation process in place. Electronics manufacturers are now required to take back a lot of CE products and may also have the capabilities to take back and recycle professional equipment. Knowing who these manufacturers are in advance of purchasing product for the installation will illustrate smart procurement on your end, and will mean less work when it's time to collect. Da-Lite, on the non CE end ,for example, has a take back program for their screens. They will recycle old Da-Lite screens, disassembling them to individual components and



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partnering with recycling facilities specific to the component. This take back program is free of charge, should the client purchase a new Da-Lite screen in conjunction with the program.

If there are no reclamation programs available for the device, there are e-cycling companies that are able to break down all components in a typical AV rack (including the rack) plus other devices. Chose companies that keep all recycling and processing domestic, further cutting the carbon footprint. Some are focused on zero waste processing, meaning ALL of the devices that are recycled are made into useable materials. PGAV can help facilitate pick up of AV equipment, and have it transported to domestic, audited recyclers.

Finally, one of the more emotionally fulfilling options is donating working equipment to not-for profits, inner city schools or other local facilities unable to purchase equipment due to financial constraints. Most times, the devices we are able to donate are of far better quality and technologically more advanced than anything they could afford. Additionally, there are many studies that indicate a correlation between technology in the classroom and increased assessment scores and knowledge retention. Tax deductable donations help more than those donating the equipment, it helps reduce waste and helps children, teachers and institutions on the receiving end- giving more learning opportunities than they would have otherwise been afforded. And who knows- if you open a child's eyes to the wonders of AV, you may have a new addition to the AV workforce in 10-15 years. We all know new talent is hard to come by ©

I have spoken long enough on what doors Green AV open with the Federal government. So just to recap, AV systems integrators can help government agencies to achieve their required GHG and energy efficiency goals by addressing your own internal business processes, offering energy management and SBT, designing systems with energy efficient products, sourced from manufacturers with sustainable business policies, and establishing end of lifecycle program for devices. Hopefully this gives you the motivation you need to expand your business model to include Green AV. I guarantee, it will affect your entire business, in all your verticals. The time to start is now. Don't overwhelm your business and processes, take small steps and you will begin to see big advantages.





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I welcome questions, now or in the future as you begin implementing the changes. I would love to hear about any progress or success you encounter by adding Green AV to your business model.

Discussion topics:

- 1) Green everything was a hot topic just before the economy crashed, then consumer demand for Green decreased with the economic downturn. Is Green AV subject to the same fate- do you feel that it won't be adopted as quickly due to financial and budgetary constraints? Is there anything we can do to show our clients a quick ROI in the Green realm? (Video Conferencing, energy mgmt programming?)
- 2) Going back to SBT- what is the best way for AV companies to get involved in building automation and management? I suggested making friends with the other industries/ contractors involved- what is your take on it?
- 3) AV lacks the standardization that a lot of other industries have. As we move toward AV and IT convergence do you see this as being a stumbling block, a saving grace for AV or something else? And how will it affect Green AV adoption?
- 4) InfoComm wants to move away from the buzz word "Green AV" to Sustainable. What do you think the difference is?
- 5) For AV systems integrators as well as manufacturers- once the decision to move to green business practices and offer environmentally responsible services/ products- how does that change their approach to marketing the new offering?