Energy conservation was a recurring theme in the sessions that made up the Sustainability workshop track at SPECS/2011. The importance of energy management to a retailer’s bottom line was the focus of the session entitled, “Making Sustainability a Strategic Advantage With an Energy Management Program.”

The speakers — Jon Towslee, VP strategic accounts, Novar/Honeywell; Joseph C. Falci, senior director of rate analysis and energy procurement consulting, Advantage AIQ; Benjamin Collinwood, director of national accounts, REC Solar Inc.; and Bob Valair, director of energy and environmental for Staples Inc. — discussed energy procurement options, energy conservation and renewable energy sources.

“A sound strategy leads to well-orchestrated tactics,” Novar’s Towslee explained. “Tactics indicate that we know where we are going, but we also need to figure out how we are going to get there.”

Towslee recommended to attendees that they take a step back and consider carefully where they want to go in terms of sustainability strategies and then formulate a plan for achieving the pre-set objectives.

The speakers all agreed that energy management programs impact a retailer’s triple bottom line of social responsibility, environmental responsibility and fiscal responsibility. They also stressed that three building blocks are crucial to a meaningful energy management program: renewable energy, energy procurement, and energy conservation and efficiency.

“On the demand side, the objective is to maximize efficiency,” Towslee said. “We are trying to create an environment for our customers that is comfortable and inviting. With that, we also have objectives to meet, such as conservation and cost savings.”

Sometimes the best place to start is with the low-hanging fruit, which can be as simple as reminding employees to shut things off when they leave the store.

“Look first at the low-cost, no-cost things you can easily implement,” Towslee advised.

Co-presenter Falci of Advantage AIQ discussed the supply side of energy management, which involves optimizing the unit costs (not usage) associated with energy supply.

“Under utility costs there are three main components,” Falci explained, “generation (power plant), transmission (power lines that travel state to state) and distribution (end use, meter boxes and power lines on streets).”

The generation piece is the only one of the three components that isn’t regulated and, therefore, is the only piece subject to change. Generation represents 60% to 70% of a total utility bill.

When evaluating how best to address the generation piece, Falci said, you have to start with the strategy.

“There are a myriad of pricing options, from fixed to index prices to fixed block and index, that will give you flexibility in how you manage your portfolio,” he added. “There are two markets — the financial market and the physical market.”

For supplier selection, Falci recommended utilizing an RFP process in order to ensure competitive pricing.

“Pricing requests should specifically indicate those items that should — or shouldn’t — be included in the pricing response,” he advised.

Benjamin Collinwood of REC Solar addressed renewable energy option. The four options include Biomass (wood, crops, garbage, etc.), which is not used that often; Micro-wind, which is on the upswing; Geothermal, whether closed loop, open loop, vertical or horizontal, or ground or water; and Solar, which includes passive solar, concentrated solar, solar thermal and solar electric.

“There is also micro-hydro,” Collinwood added, >
“but it’s not covered here because most retailers don’t have access to nearby streams, etc., to use this.”

According to Collinwood, there are many reasons to explore renewable energy options, among them to reduce store operating costs, hedge against rising rates, eliminate energy bills, save money, strengthen competitiveness, improve brand perception, improve community health, enhance the environment, create local jobs, increase sales and promote ROI.

“But those are just the ‘carrot,’” Collinwood added. “The ‘stick’ includes things like building code compliance, corporate responsibility, meeting carbon-, energy- or emission-reduction goals, avoiding competitive disadvantage, and meeting federal and state laws and mandates.”

Valair of Staples discussed how Staples has integrated sustainability into its corporate and store-level fabric.

“We have five pillars when it comes to integrating sustainability at Staples,” he explained. The company sells green products and services, offers customer recycling solutions, eliminates operational waste, maximizes energy efficiency and renewable energy use, and drives positive change in the world community.

Staples’ first lighting retrofit occurred in 1990, followed a year later by the debut of its first high-efficiency HVAC installation. By 2005, it was benchmark reporting. The retailers built its first LEED store in 2008/2009, and by 2010, Staples was an Energy Star Partner of the Year.

“Our energy management journey has taught us that you have to make breakthroughs and you learn over time,” Valair said. “You have to look at your lighting portfolio and your electrical/HVAC portfolio and see where energy fits.”

Staples also learned that it had to look at its energy and see how it was being used in order to properly specify EMS systems.

“And we had to obtain usage data so that we knew what to change,” Valair said.

Staples has unquestionably emerged as a leader in sustainability within the retail sector. But Valair emphasized that there is much yet to be done.

“We are going to reduce our energy footprint 50% by 2025,” he said. “We are committed to doing that.”

Getting Started: Speakers at the “Getting Started: Understand, Organize, Execute Sustainability for Your Organization,” spoke to the environmental imperatives behind the sustainability movement and the opportunities available to retailers.

Ralph DiNola, principal, Green Building Services, Portland, Ore., noted that sustainability can get complex, but it doesn’t have to.

“Start small, with one or two elements,” he said, and once they are conquered, move on to the next item.”

DiNola said that sustainability efforts work best if they are supported by upper management.

“Look to start with elements that give a positive financial return on investment, such as lighting retrofits and cardboard recycling,” he said.

He also urged attendees to appoint a sustainability manager.

The session, whose presenters also included Bob Corley, senior director, construction, Aaron’s, and Webly Bowles, Green Building Services, explored a number of other eco-related topics at the session. Here are some recommendations to make buildings more sustainable:

• Lighting: Fluorescents are generally the best, with LEDs recommended for accent lighting.
• Daylighting: Skylights, partnered with lights and lighting controls, are generally more efficient than adding PVs to the roof and powering your lights below.
• Paving: Use as little as possible. Push back on codes that require set amounts of parking for set amounts of square footage — design for what is truly needed.
• Maintenance: Select durable products during design to minimize maintenance and product replacement.
• Roofs: Generally white below the Mason Dixon line, and black above. White roofs must be cleaned at least once every three years.
• Entryways: Use mats, grills and grates on public entryways to help prevent contaminants from entering building.