



# Exploring the Best LEED Program Application Strategy

By Harvey Chace

The overarching mission of APPA's Center for Facilities Research (CFaR) is to assure that our research priorities match the needs of the APPA membership. To that end we aggressively solicit input from members, review the results of Thought Leader programs, and consult the APPA Board of Directors to identify the issues where immediate review will benefit facility managers from Athabasca to Augusta.

Although we have all been sensitized to the need to reduce our carbon footprint and build more sustainable campuses, it seems we still need to expand our body of knowledge about managing our opportunities to become greener. Many APPA members are learning that the expressway to sustainability is more like the four-wheel-drive-only passage from Silverton to Ouray, Colorado. Most troublesome is the dilemma of integrating the pursuit of LEED certification [U.S. Green Building Council's Leadership in Energy and Environmental Design] with best-payback, lowest life-cycle-cost outcomes. In order to help our members to meet this emerging challenge, the CFaR Advisory Council is seeking corporate sponsorship for research in this important new facet of capital construction optimization.

## WHAT IS THE NEED?

Sustainability in its current context is generally accepted to mean "meeting the needs of the present without compromising the ability of future generations to meet their own needs." The modern derivation of the term "sustain-

ability" stems from the consensus in the scientific community that mankind is consuming nonrenewable resources at a pace that nature cannot replenish and sustain. Therefore, it is imperative that we begin to introduce whole-nation, whole-community, and, in our case, whole-campus solutions that move us toward consumption neutrality.

Education facility portfolio managers will play a pivotal role in our pursuit of sustainability. Along with our corporate cousins who preside over industrial parks and our military brothers and sisters who operate enormous defense complexes, university facility professionals

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are among the world's most influential sustainability agents of change. We are, in most circumstances, the single largest stewards of each state or province's capital assets. And the influential positions we hold in the communities surrounding each campus thrust us, often reluctantly, into the position of pacesetter in environmental protection and conservation issues. Clearly, APPA members will disproportionately influence the tempo and weight of society's progress toward a more sustainable world.

## LEED AS A DRIVER

APPA members use several tools to keep their institutions on a steady course toward a more "sustainable future." State-level mandates on new

building energy performance and local campus conservation targets, as well as adoption of LEED program criteria are helping higher education facility officers to define and narrow the path of measurable progress.

The promotion of LEED-driven sustainability outcomes has been a priceless gift to facility portfolio managers whose worries about the capital renewal backlog are being swept up in the new wave of concern about making both new and old buildings more "sustainable." Jumping on, or in some cases driving, the sustainability bandwagon gives campus facility managers unprecedented opportunities to push their lingering building performance headaches to the top of the campus sustainability improvement project list.

But it is critical at this juncture to ask if the instruments we are using to guide us to a more sustainable future are really

taking us down the correct path to the right destination. In more direct terms, will the

design agents' unfettered pursuit of a maximum LEED point score always represent the best outcome for the institution? Or will proactive oversight of the LEED point accumulation strategy and an overarching design imperative based on minimizing post-construction operating costs produce a better outcome for the institution?

More importantly can we have both, e.g., the public demonstration of our commitment to a high level of LEED certification *and* uncompromised, lowest-life-cycle-cost buildings? And do we need to broaden the decision matrix to include the cost benefit of designing to an appropriate set of LEED criteria, but forgoing costly audit and certification costs?

A review of current LEED scoring guidelines for new construction and major renovation provide a menu of LEED point accumulation alternatives, from the installation of showers for building occupants who choose to bike to work to the use of certified wood products and regionally extracted and processed materials. This plethora of options presents a dilemma when committing the marginal project dollar.

Should we maximize HVAC performance and indoor air quality points before considering “soft” LEED points that have little or no effect on the university’s post-construction utility bills? What is the true life-cycle cost benefit to the institution if it chooses to invest first in systems and architectural elements that minimize the consumption of purchased energy, second in lab and classroom equipment that optimize learning and student success, and

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third in the LEED features that have social and economic impact outside the campus boundary? Each sustainability strategy option generates competing consequences for our world, nation, community, and campus.

Our senior campus administrators want to understand their strategic options and choose the right course. They are looking to APPA members to supply the answers. As a service to its members and as a contribution to the health of the education community, APPA is placing a high priority on the commissioning of a research study that compares and contrasts the sustainability design strategies open to universities and colleges to include examination and rationalization of the trade-offs between designing to accumulate LEED points, and obtain certification, versus designing for lowest total cost of ownership. ☺

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