

Maintenance & Operations

I am now going to speak about Maintenance & Operations or (M&O). Once a building has been constructed and is ready to be occupied, maintenance & operations need to be performed effectively and efficiently to reap the benefits and cost savings of building green.

A successful M&O program includes careful planning, continuous training, effective communications and a whole-building approach. Important elements may include preventative maintenance, detailed guidelines and training for the building's unique M&O demands.

Key to using a whole building approach is effective communications, which starts with building management. Management needs to first establish and fully understand the overall green building goals, benefits and cost savings, then communicate these to rest of the M&O team. An M&O team may include:

- Building Management
- Maintenance – responsible for items such as electrical, lighting, HVAC and plumbing,
- Custodial – responsible for recycling, waste management, cleaning practices and products,
- Groundskeeping – responsible for landscaping, snow & ice removal

Why is this important?

As a whole building approach, all departments need to work together to reap the benefits and cost savings of building green.

“Without specific maintenance and operation follow-up, high performance technologies can stop functioning efficiently, high performance ventilation strategies can be foiled by the use of toxic materials or cleaning products, and a lack of training or understanding of maintenance and operation issues can cause buildings to be less comfortable and healthy than designed.” – CHPS Best Practices Manual for M&O.

If there is a successful M&O program in place, a green building can be a ***sound financial investment***. From a Report to California's Sustainable Building Task Force, October 2003, they state, **“In the most**

comprehensive analysis of the financial costs and benefits of green building conducted to date, this report finds that an up-front investment of less than two percent of construction costs yields life cycle savings of over 10 times the initial investment.

For example, an initial up-front investment of up to \$100,000 to incorporate green building features into a \$5 million project would result in a savings of at least \$1 million over the life of the building, assumed conservatively to be 20 years”

So you can see it is extremely important to have a successful M&O program in place in order to capitalize on the benefits and cost savings over the life of the building.

Otherwise, these benefits can be lost and eventually erode over time.