Healthy Buildings

Part 1

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In today's dynamic marketplace, developing a comprehensive intelligent building strategy is critical for real estate and healthcare facility owners and/or operators. Houston has 178 office buildings leased to doctors and other healthcare-related companies that are rated, registered or certified as Energy Star or LEED (Leadership in Energy and Environmental Design) buildings. In addition to being a more pleasant environment for the occupants, these buildings are recognized as sustainable, healthy, efficient and "Green". If you haven't seen for yourself why they are so desirable by tenants, let me paint a picture.

But first, let's look at some of the conditions of buildings that aren't considered sustainable. Most tenants do not have a way to control their comfort levels in their work space. Nor do most see much daylight or a nice view. They breathe recycled (and recycled again) air that carries unhealthy elements, allergens, and toxic fumes from paints, carpets, furniture and cleaning products, and may be unbalanced regarding the CO2 emissions level. Usually occupants must touch potentially hazardous surfaces in bathrooms and other areas to use the facilities. Energy-hog types of lighting may be insufficient or harsh and poorly located for the needed tasks. Air leaks through the building's envelope and the overall expense of running the building is considerably higher than the energy-efficient LEED or Energy Star properties.

On the flip side, occupants of sustainable buildings may enjoy personalized air conditioning, heating and lighting, improved views, special parking for gas-efficient cars, bike racks, showers, no toxic odors, healthy air, recycling bins, transportation options for getting to and from work, smart and automatic plumbing and light fixtures, exercise facilities, and often a location within a "community" providing parks, shopping, residential options, restaurants, and more. Following are some of the reasons Green buildings are important to all types of employers and their employees:

A) Recent studies by major corporations and universities have determined that improving the indoor environmental quality (IEQ) of work space, classroom space, and even light assembly space improves the employee's productivity by 5%-17%!

B) "Research has found that 16-37 million cases of colds and flu could be avoided by improving indoor environmental quality, resulting in $6-$14 billion annual savings in the United States. Sick building syndrome symptoms, a condition whereby occupants become temporarily ill, could be reduced up to 50%, resulting in $10-$30 billion annual savings in the United States"
-Green Buildings and Productivity, Hannah Carmalt, Rutgers University

C) "A survey conducted by the Urban Land Institute and the Building Owners and Managers Association found that occupants rated air temperature (95%) and air quality (94%) of highest importance in terms of tenant comfort. The same study found that 75% of buildings did not have the ability to adjust features and that many individuals were willing to pay higher rents in order to obtain such measures"
-Green Buildings and Productivity, Hannah Carmalt, Rutgers University

D) "In general, Green workplaces boost employees' productivity by as much a 15 percent a year. (In shopping malls with skylights, sales increase as much as 40 percent.)"
-Going Green, The U-M Environmental Initiative, Spring 2007 (University of Michigan)

E) “The survey of more than 2,200 adults carried out by market research firm Harris Interactive found that 36 percent of employees would be more inclined to work for a “Green “ company , while 59 percent believe their current employer should be doing more to improve its environmental performance”
-Generation Y Demands Greener Employers, James Murray, BusinessGreen 21 Apr 2008

F) “More than two thirds of Generation Y workers, typically characterized as people born after 1980, said they wanted their employer to be environmentally friendly compared to just 52 percent of baby boomers”
-Generation Y Demands Greener Employers, James Murray, BusinessGreen 21 Apr 2008

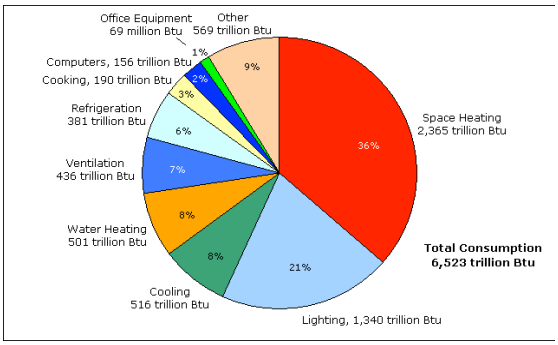
G) “Almost a third of respondents said they would be willing to sacrifice a portion of their salary to work for an environmentally friendly firm with Generation Y workers saying they would sacrifice on average, 6.2 percent of their wages. In contrast, environmentally conscious baby boomers would be willing to sacrifice just 2.5 percent”
Generation Y Demands Greener Employers, James Murray, BusinessGreen Apr 2008

H) “The potential impact for buildings on overall productivity is +12.5 percent (improved performance) and -17.0 percent (hampered performance) for an overall 30 percent change in work performance in the best and worst buildings”
-Building Investment Decision Support (BIDS), Bolker Harkopf, Professor & Director, Carnegie Mellon

I) Businesses see “Green” advantages as…

- Higher performing building
- Resource efficient
- Fewer environmental impacts
- Higher comfort and health
- Increase in worker productivity
- Aesthetically pleasing
- Lower health costs
- Better moral sense of community

If that’s not enough, with the volatile price of oil and increasing utility costs, building owners and operators need to incorporate intelligent building initiatives in order to remain competitive and profitable. Average buildings use approximately 40% of the energy consumption in the U.S., so there is a tremendous opportunity for building owners to make a difference. But healthcare properties use even more energy and have special issues that challenge efficient operation and management.



Source: Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey, Table E1A.

Issues such as 24/7 operations, energy and water use intensity, chemical use, infection control requirements, formidable regulatory requirements, and the heightened need for patient privacy are examples of design challenges unique to healthcare projects. Many of these issues can pose significant obstacles to the implementation of currently accepted sustainable design practices. Conversely, many healthcare facilities are typically owner-occupied which may make the implementation of sustainable design programs easier than in commercial buildings. Also, many healthcare facilities are designed to be long-lasting, durable buildings, a core principle of sustainable design.

Leaders in the healthcare industry and managers of medical office buidlings and other healthcare properties can “walk the talk”, promoting the health of patients, visitors, employees, community members, and the global community, while operating economically and efficiently. So how does one begin to make these changes in existing buildings? Stay tuned for Part 2 next month.