



GREEN BUILDING FACTS

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Why Build Green?

Building green saves money

- The cost per square foot for buildings seeking LEED Certification falls into the existing range of costs for buildings not seeking LEED Certification. *Source: 2004 study done by the cost consultants David Langdon, "Costing Green"*
- An upfront investment of 2% in green building design, on average, results in life cycle savings of 20% of the total construction costs – more than ten times the initial investment. *Source: The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force, October 2003*
- Estimated Value of green construction starts:
 - 2001: \$3.24 billion
 - 2000: \$792 million
 - 2002 \$3.81 billion
 - 2003: \$5.76 billion
 - 2004: \$4.51 billion
 - Today: \$12 billion
 - 2010 (projected): \$60 billion (10% construction starts)
- A \$4 investment (per square foot) in building green nets a \$58 benefit (per sq. ft.) over 20 years:
 - Estimated health & productivity benefits: \$46
 - Operations & maintenance: \$8.50
 - Energy savings: \$5.80
 - Emissions savings: \$1.20
 - Water savings: \$0.50
- Tenants can save about 50 cents per square foot each year through strategies that cut energy use by 30%. This can represent a savings of \$50,000 or more in a five-year lease on 20,000 square feet. *Source: U.S. Environmental Protection Agency*

- From 2000 to 2005, the aggregate total return of publicly held companies affiliated with USGBC have outperformed the Dow by 37.8%.
- Real estate and construction professionals overestimate the costs of green building by 300%. *Source: World Business Council for Sustainable Development*
 - Operating costs decrease 8-9%
 - Building value increases 7.5%
 - Return on investment improves 6.6%
 - Occupancy ration increases 3.5%
 - Rent ratio increases 3%

Source: McGraw Hill Construction, Greening of Corporate America SmartMarket Report, 2007
- Building green stimulates the economy by creating a demand for “green-collar” jobs and workers that can contribute directly to creating a sustainable future. *Source: Green-Collar Jobs in America’s Cities, Center for American Progress, 2008.*

Green buildings consume less energy and fewer resources

- Green buildings consume 30-50% less energy than conventional buildings
- Green buildings save, on average, 40% of drinkable/potable water
- Green buildings reduce CO2 emissions by 39%
- Green buildings have a 70% savings on waste output

Source: McGraw Hill Construction Key Trends January 2008 Report

Green building occupants are more productive

- Average annualized costs for personnel amount to \$200 per square foot, compared to \$20 for bricks and mortar costs and \$2 for energy costs.
- LEED Certified project case studies show examples of 2% to 16% increase in productivity.
- A study by Carnegie Mellon University measuring the relationship between increased lighting control and productivity showed an average increase of 7.1% in productivity. *Source: eBIDS.*

- Average employee relocation within a building averages 25% annually for most commercial spaces at a cost of about \$2,500 each. Flexible design features often found in integrated green buildings can help cut employee relocation costs by 90%.
- Sales in stores with skylights were up to 40% higher compared to similar stores without skylights. *Source: California Board for Energy Efficiency Third Party Program.*
- Students with the most daylighting in their classrooms progressed 20% faster on math tests and 26% faster on reading tests in one year than those with the least day lighting. *Source: Heschong Mahone Group, "Day lighting in Schools".*
- All other things being equal (they converted monthly gross sales to a sales index), an average non-sky lit store would have 40% higher sales, with the addition of day lighting. (Also, Heschong Mahone - studied 108 stores operated by a chain retailer, 2/3 had skylights and 1/3 were electrical lighting, mostly fluorescent.)
- Corporate perception of whether green fosters innovation: 57% agree; 28% neutral and 15% disagree according to McGraw Hill Construction, Greening of Corporate America SmartMarket Report, 2007.

Green building occupants are healthier

- People in the U.S. spend about 90% of their time indoors. *Source: EPA.*
- EPA studies indicate indoor levels of pollutants may be two to five times higher – and occasionally more than 100 times higher – than outdoor levels.
- An investigation of 20 studies with 30,000 subjects found significant associations between low ventilation levels and higher carbon dioxide concentrations – a common symptom in facilities with sick building syndrome.