

## **LEED & Adobe Miscellaneous Reference Material**

Adobe's portfolio is approximately 3 million square feet

We have spent \$5 million net on energy conservation and sustainability projects since 2000

That equates to \$1.67 per square foot over 13 years

Which is \$.13 per square foot per year

That is the equivalent of \$256 per year for a 2000 square foot home

We have realized \$3.2 million annual savings through the conservation measures undertaken

That is an 84% annual return on investment

Adobe's total sales are \$4.4 billion 2012

Cash flow from operations is about \$1 billion, or about 22% of total revenue

In order to add that same amount (\$3.2 million) to Adobe's bottom line, Adobe would need to generate sales of \$14.5 million, making the facilities group the equivalent of a \$14.5 million a year customer.

There are a total of 84 billion square feet of buildings in the U.S.

There are 12 billion square feet of commercial office buildings in the U.S.

to date (early 2013), 2.2 billion square feet of commercial office buildings have been certified through LEED

In 2005, 2% of all new projects were certified through LEED

In 2008, 12% of all new projects were certified through LEED

In 2010, 30% of all new projects were certified through LEED

71% of new projects over \$50 million in 2012 were specified LEED

25% of all retrofit projects in the U.S. are now pursuing LEED certification

40% of existing building owners are now pursuing LEED certification for their buildings

LEED is also increasingly global; 40% of all LEED projects are outside the U.S.

On average, LEED certified buildings consume:

25% less energy

11% less water

19% lower maintenance costs

34% lower greenhouse gas generated

27% higher tenant satisfaction

<http://www.sandiego.edu/business/documents/sizeofthemarketdraftApril26.pdf>

<http://www.usgbc.org/Docs/Archive/General/Docs18693.pdf>

In many discussions, I often note that the real value of green buildings is that studies show that they improve worker productivity anywhere from .4% to as much as 18% when compared with other buildings, and that a 1% increase in productivity is equivalent to the entire cost of utilities in most buildings. The productivity gains primarily come from reduced absenteeism, due to healthier and more comfortable work environments, with better lighting, greater access to natural lighting, cleaner air and more control over lighting and HVAC also contribute to varying degrees. While energy savings of up to 50%, and water savings of up to 70%-plus, and solid waste diversion savings of up to 100% are all laudable, the potential productivity gains are worth many times that.

### **1% Increase in Productivity Equal to Total Utility Costs for Most Buildings**

The original source of this was a study by Carnegie Mellon, cited by USGBC in 2005. It is referenced in the following paper:

<http://www.sustainabilityprofessionals.org/system/files/Valuing%20Green%20Building.pdf>

Per IFMA, annual utility costs in commercial buildings range from an overall average of \$2.92 per square foot, to an average of \$4.42 per square foot in high-tech buildings (IFMA, *Benchmarks V*, Research Report #30, 2007, adjusted for inflation at 3% per year).

That same study cited above found average productivity in green buildings to have improved 4.88 per cent which was equated to \$20.82 per square foot in that same study. Per this study, a 1% increase would equate to \$4.27 per square foot ( $\$20.82/4.88=\$4.27$ ), which is greater than the average utility costs of \$2.92, and almost as much as that of high-tech buildings of \$4.42 per square foot.

Another study showed productivity improvements ranging from 3% to as much as 35.5% in green buildings, with dollar savings of from \$36.89 to \$55.33 per square foot, primarily through improved lighting, improved access to daylight, and improved indoor air quality. These numbers suggest that a 1% increase would be somewhere between \$1.55 and \$12.30 per square foot ( $\$36.89/3=\$12.30$  and  $\$55.33/35.5=\$1.55$ ), equating to somewhere between one-half and four times average utility costs.

<http://www.epa.gov/P3/success/michigan.pdf>

Other references to productivity studies:

<http://www.institutebe.com/Building-Performance-Management/Productivity-Gains-from-Energy-Efficiency.aspx>;

[http://www.cmu.edu/iwess/workshops/absic\\_dec\\_2007/BIDS%20ABSIC\\_FINAL%202007.pdf](http://www.cmu.edu/iwess/workshops/absic_dec_2007/BIDS%20ABSIC_FINAL%202007.pdf)

[http://www.usgbc.org/Docs/Archive/MediaArchive/207\\_Loftness\\_PA876.pdf](http://www.usgbc.org/Docs/Archive/MediaArchive/207_Loftness_PA876.pdf)