

Green Buildings Pay

Do Green Buildings Pay Off?



The PNC Financial Center in Pittsburgh was one of the green buildings analyzed.



Edited by Brian Edwards

GREEN BUILDINGS PAY

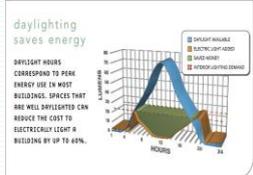
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Direct Benefits of Green Building

- Lower fuel bills
- Market advantage
- Fewer health risks
- Greater productivity

—Brian Edwards

Any proof?



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Typical Urban Utility Rate Structure

Figure IV-1. PG&E A-6 Time of Use Rate Schedule (simplified)

Customer Charge	Season	Time-of-Use Period	Energy Charge (per kWh)	1/4/01 Energy Surcharge (per kWh)	8/1/01 Energy Surcharge (per kWh)	Total Energy Charge (per kWh)	"Average" Total Rate (per kWh)
Single phase service per meter/day +\$0.26612 Polyphase service per meter/day +\$0.34426. Plus Meter charge +\$0.22341 per day for AB or AEX, +\$0.06571 per day for A6WV	Summer	On Peak	\$0.23258	\$0.01000	\$0.10064	\$0.34322	\$0.14487
		Part Peak	\$0.10288	\$0.01000	\$0.04551	\$0.15839	
		Off Peak	\$0.05618	\$0.01000	\$0.03551	\$0.10169	
	Winter	Part Peak	\$0.11562	\$0.01000	\$0.04551	\$0.17113	
		Off Peak	\$0.07169	\$0.01000	\$0.03551	\$0.11720	

Source: <http://www.pge.com/tariffs/Commercial/Current.xls>

Green Buildings have reduced loads at peak times.

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New Study Highlights the Financial Value of Green Buildings

More productive workplaces are achievable at a price comparable to conventional buildings.

“The Business Case for Green Building: A Review of the Costs and Benefits for Developers, Investors and Occupants,” examines the possibility of attaching a financial value to the cost and benefits of green buildings. It concludes that investments can be recouped through operational cost savings.

WORLD GREEN BUILDING COUNCIL

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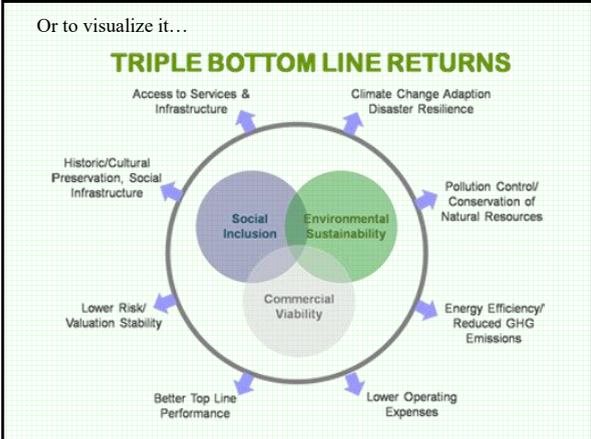
Key findings include:

- **Design and Construction Costs:** Research shows that building green does not necessarily need to cost more, particularly when cost strategies, program management and environmental strategies are **integrated into the development process right from the start.**
- **Asset Value:** As investors and occupiers become more knowledgeable about and concerned with the environmental and social impacts of the built environment, buildings with better sustainability credentials will have increased marketability. In fact, studies from around the world **demonstrate a pattern of greener buildings being able to more easily attract tenants and to command higher rents and sale prices.**

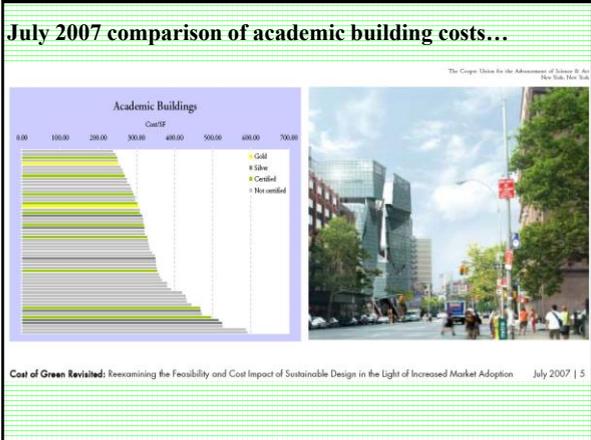
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- **Operating Costs:** Green buildings have been shown to save money through **reduced energy and water use and lower long-term operations and maintenance costs**. The energy savings alone typically exceed any cost premiums associated with their design and construction within a reasonable payback period.
- **Workplace Productivity and Health:** Research shows that the green design attributes of buildings and indoor environments can **improve worker productivity and occupant health and well-being, resulting in bottom line benefits for businesses**.
- **Risk Mitigation:** Sustainability risk factors can significantly affect the rental income and the future value of real estate assets, in turn affecting their return on investment. Regulatory risks have become increasingly apparent in countries and cities around the world, including mandatory disclosure, building codes and laws banning inefficient buildings.

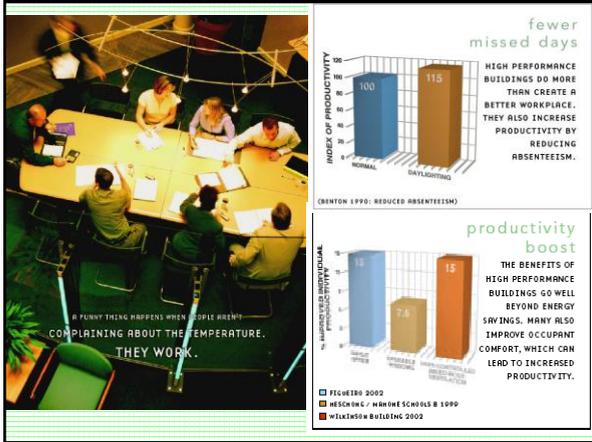
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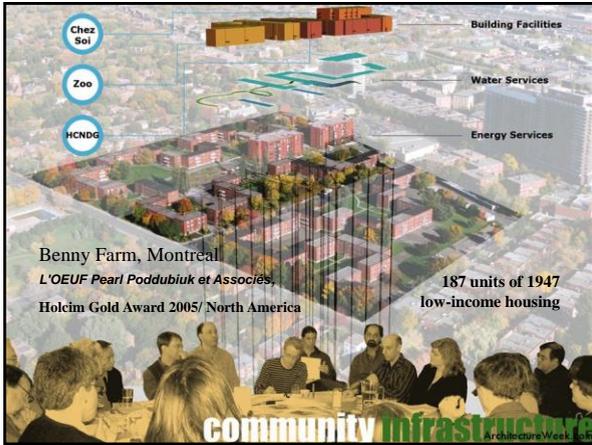
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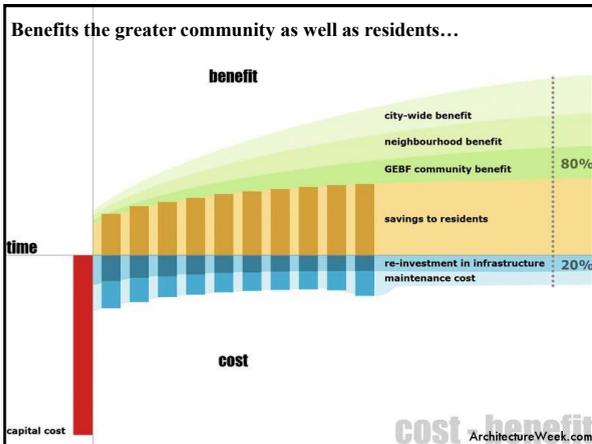
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Virgin trains

It's win, win
Are we acting responsibly?
Share your views and you could win a pair of First Class tickets.

Tell us now

Corporate Social Responsibility... what's it all about?
Corporate social responsibility is the belief that a company needs to be responsible for its actions – socially, ethically, and environmentally.

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Government agencies are seeing the need to set examples...

AIArchitect best prac

06/2004 **GSA Recommends Healthy, Flexible, Connected Workplaces**
reprinted from Innovative Workplace Strategies

key findings

Compared to legacy stock buildings, GSA's high-performance buildings show:	Compared to industry benchmarks, GSA's high-performance buildings show:
23% energy use	43%
28% water use	35%
23% building operating expenses	10%
9% waste landfilled	not tracked
2% overall tenant satisfaction	1%

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30 Year Costs of a Building

Construction 2%
O & M 8%
Personnel 92%

Strategy:
Integrated green design reduces construction costs

design versus construction

BUDGETING FOR EARLY COLLABORATION CAN BE ACCOMPLISHED BY SHIFTING FUNDS FROM CONSTRUCTION TO DESIGN. THIS ALLOWS FOR TOTAL COSTS TO REMAIN CONSTANT, BECAUSE INCREASED DESIGN INTEGRATION CAN LOWER CONSTRUCTION MATERIAL COSTS EQUIVALENTLY.

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