

Let's Change the Discussion

Why Today's
Business Owner
Can't Afford
NOT to Build
Green!



Presentation Overview

- The Business Owner's perspective
- Decision-making process and goals
- Project overview
- Financial analysis
- Contact info & additional materials

Business Owner Background

- Non-profit organization
- Administers, & implements energy efficiency and renewable energy services
- 145 employees and growing
- Leased office space since 1980

Decision-Making Process

- Board/staff analysis & decision to build (9/04)
- Big-picture goals:
 - Functional
 - Comfortable/Healthy
 - Sustainable (LEED Gold; emphasis on energy)
 - Affordable

Process

- Bids and selection of project team (6/05):
 - Project Manager
 - Commissioning Agent
 - Design/Build Team
- Design charrettes with Board, staff, project team
- Agreement on LEED targets (yes, no's, and maybe's)



Process

- Initial designs with options and costs
- Trade-off analysis using original “owner requirements,” LEED scorecard, and lifecycle costs as guideposts
- Final “Guaranteed Maximum Price (GMP)”

Project Overview

- 34,500 ft² office bldg
- LEED Gold
- 40-45% less energy
- 30-35% less water
- 95% recycled construction waste
- Completed on time (9 mo) and under-budget



Efficient Lighting Design

- East-west orientation for natural light
- Sunshades & light shelves
- Photo & occupancy sensors
- Solatubes
- Light colors



Renewable Energy

- 19 kW Photovoltaics
- Solar panels – hot water
- 100% renewable energy purchase



Other Sustainability Features

- Use of wood from storm-damaged trees
- 3 rain gardens
- Small rooftop garden
- Recycling program for carpet and ceiling tiles
- Low VOCs; increased fresh-air intake
- Public transport access
- Bike-friendly



Financial Analysis

Very Affordable First Cost

- **\$120/sq ft construction cost (in 2006-07)**
- Additional costs:
 - Design = \$10/sq ft
 - Site work = \$12.50 sq ft
 - FFE = \$12/sq ft

Good Return on Investment

- Estimated incremental cost of “green”
 - \$11/sq ft; \$10/sq ft after efficiency incentives
- Energy Savings
 - \$22,000/yr; estimate = \$700,000 over 20 years
- Simple Payback
 - 12-15 years (thru energy savings)
- Return on Investment = 20%

More difficult to quantify benefits:

- Employee health gains (reports of reduced allergies)
- Productivity improvements (fewer absences, better morale, better lighting, etc)
- Employee recruitment value
- Public relations/visibility
- Lower maintenance costs
- Higher appraisal value

The Questions

- WECC built a functional, healthy, comfortable, and sustainable office building for a very affordable first cost.
- Why are we even asking what's the “incremental” cost and payback for “green”?
- Why would health, comfort, and sustainability be considered “add-ons”?

Let's Change the Discussion!

New baseline: a functional, healthy, efficient, sustainable building!

New question: “What’s the incremental cost and payback for additional design upgrades/features?”

proving the value of energy efficiency



For more information:

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