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Subject: **Small Business Perspective on High Performance Building (HPB)**

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OUTLINE

- Challenges.
- Surveys.
- Articles.
- Suggestions.
- Strategies.
- Small Steps.

CHALLENGES

- To construct a more energy performance building (beyond what the local codes required) with a minimum cost impact (minimum additional cost impact).
- The “perceived” notion that HPB will require an additional time required to construct equals to additional financial to the project cost.
- Very limited understanding of HPB limits the use of the non-traditional construction materials.

SURVEYS

- The on-line survey result done by The International Facility Management Association (IFMA) partnering with Johnson Controls in April 18th, 2007 (targeting energy management decision-makers) concluded the following:
 - (1) Planning on implementing Energy Efficiency Investments improvements in the next year.
 - (2) “Cost savings are considerably stronger motivation for achieving energy efficiency that is environmental responsibility”.
 - (3) Expect the payback of investments between two and five years.
- Survey findings by PNC Bank (from PRWeb, October 30, 2008), survey was conducted by Artemis Strategy Group:
- “Saving money is at the root of environmental efforts among the nation’s small and mid-size business owners.”

ARTICLES

- REITs Prepared for High Energy Prices (January/February, 2001 Article)
- Global Trends in Sustainable Real Estate: An Occupier’s Perspective
- PRWeb: Small Business Owners On Environment: First Priority Is Saving Money, Not Mother Earth.
- Appendix H: Summary Paper of the Johnson Controls *Energy Efficiency Indicator Research Report (2007)*
- CES: Harvesting Tax Benefits of Green building Incentives: Energy-efficiency credits and deductions are sprinkled throughout the Code by Ralph S. Watson II (AICPA Journal, August 2009)
- ENERGY STAR: Putting Energy Into Profits: ENERGY STAR Small Business Online Guide.

SUGGESTIONS

- Educate local small building owners, small business owners that HPB will reduce operating costs.
- Contact IFMA Representative.
- Create a list of available financial assistance and/or tax incentives for small business owners to have their facility to be a better performance facility.
- Financial Assistance from local jurisdiction/federal in a form of grant.

- Advocate with local government to provide a tax incentives from local jurisdiction/federal for facility improvements to a better performance building.
- Advocate for a simplify tax incentives for performance building.
- Advocate a discount loan rate to finance energy efficient improvements.
- Provide a real cost of comparison of HPB versus other construction (conventional) materials/ways.
- Simplify the process for a small business owner to have a HPB.
- Provide the list of “which dollar-for-dollar yield far greater energy savings and pollution prevention”. (“Off the Charts-E-Newsletter, Summer 2006).
- Provide a list of minor updates to the building that could improve the overall building performance.

STRATEGIES:

- Provide a list of energy management that only have a cost premium of between 3% to 5% to the total construction cost (Based on a survey done by Pacific Northwest National Laboratory-PNNL 17502: “About one-third to one-half of the respondents indicated a willingness to pay a cost premium of between 3 and 5 %”).
- Provide a list of investments on Energy Managements which could give the payback between two to five years (based on IFMA Energy Awareness Survey Results – July, 2002)
- Possibly provide website link to “Putting Energy Into profits: “Energy Star” Small Business Online Guide” or partnership with ENERGY STAR to educate small business owners.

SMALL STEPS

EXTERIOR ENERGY MANAGEMENT:

- Install canopy to provide shade.
- Plant native trees or other native landscape plants in the property.
- Locate deciduous type trees to provide summer shade and let winter sun to come through.

INTERIOR ENERGY MANAGEMENT:

- Use low VOC Paint.
- Install “cradle-to-cradle” carpet tile, ceiling tile.
- Install light color roller shades (3%-5% openness factor). First priority will be the southern exposure, then the western exposure.
- Install window day-lighting film.
- Install light sensor (especially at existing restrooms).
- Install programmable thermostat (adjusted HVAC controls).

- Install a proper insulation distribution in walls, ceilings, and roofing (higher R-value).
- Replace HVAC equipment with “High-Efficient” unit.
- Replace paper towel dispenser with sensor hand-dryer.
- Replace manual faucet with “sensor” faucet.
- Replace water closet/urinal with water efficient water closet/urinal.
- Tightening a building by locating air leaks in the windows, doors, walls and roofs.
- Replace any damage exterior door threshold and weather stripping, sealing and caulking on windows.
- Replace single-pane windows with double or triple-pane windows.
- Replace non-insulated exterior door with the insulated one.
- Install a revolving door is possible.

F.F. & E ENERGY MANAGEMENT:

- Purchase refurbished furniture.
- Install movable/demountable partition system.
- When replacing any equipment, acquire “Energy Star” label equipment.

OTHERS:

- Educate employees to turn off equipments at the end of the day.