

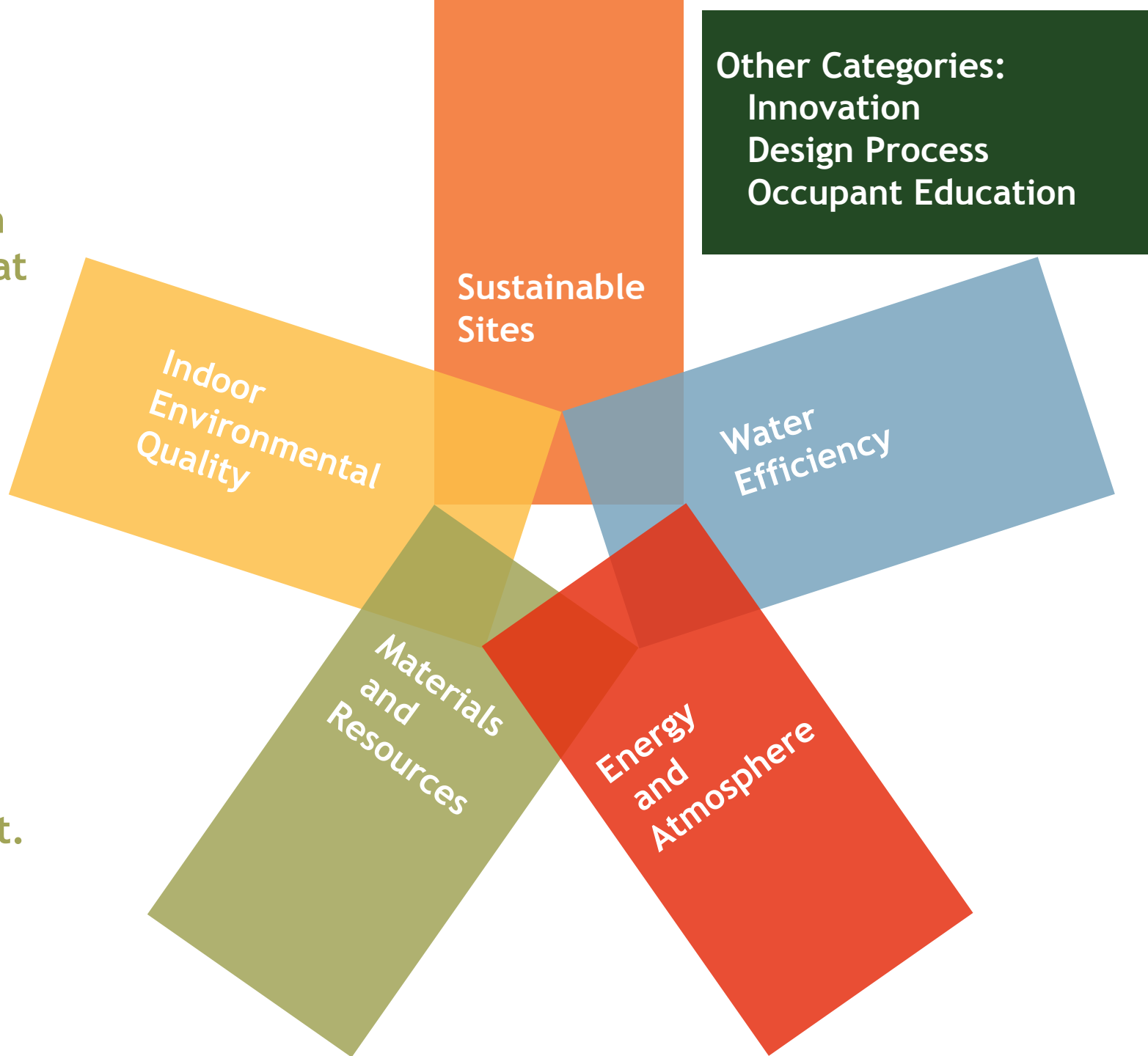


***ENCOURAGING GREEN:
INCENTIVES AND
POLICIES TO
ENCOURAGE GREEN
BUILDING IN THE
PRIVATE SECTOR***

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What is green building?

Design and construction practices that meet specified standards, resolving much of the negative impact of buildings on their occupants and on the environment.

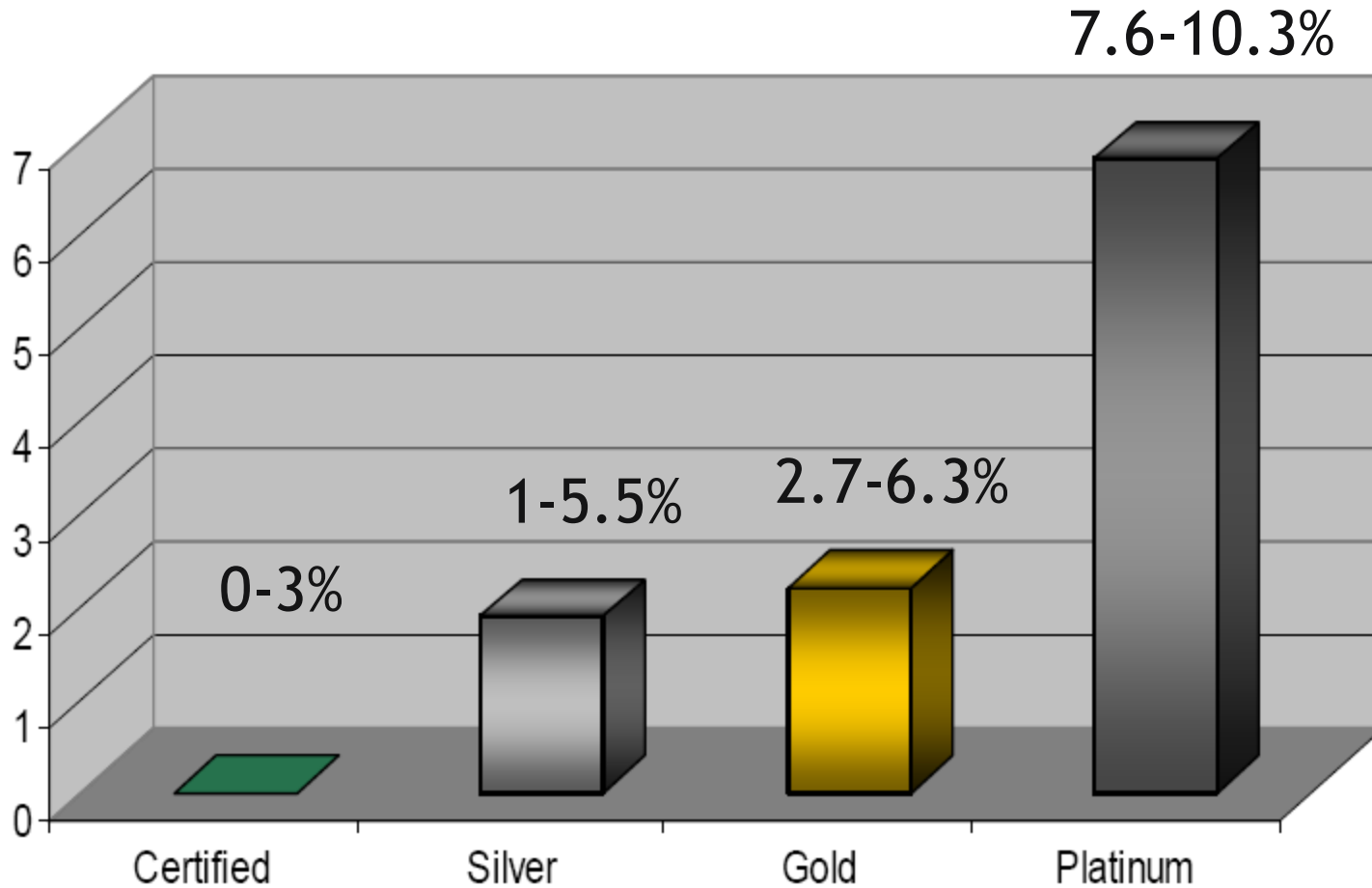


COMMUNITY BENEFITS OF GREEN BUILDING

- ◉ Studies show that environmentally friendly buildings have the community benefits:
 - Lower emissions and lower demands on systems:
 - Stormwater
 - Domestic water
 - Electricity
 - Fossil fuels
 - Reduced energy and water consumption (by as much as half).
 - Enhanced community connectivity.
 - More economically viable.
 - Enhanced community sustainability.

TYPICAL COSTS OF GREEN

Extra Costs in Percentage to Build Green



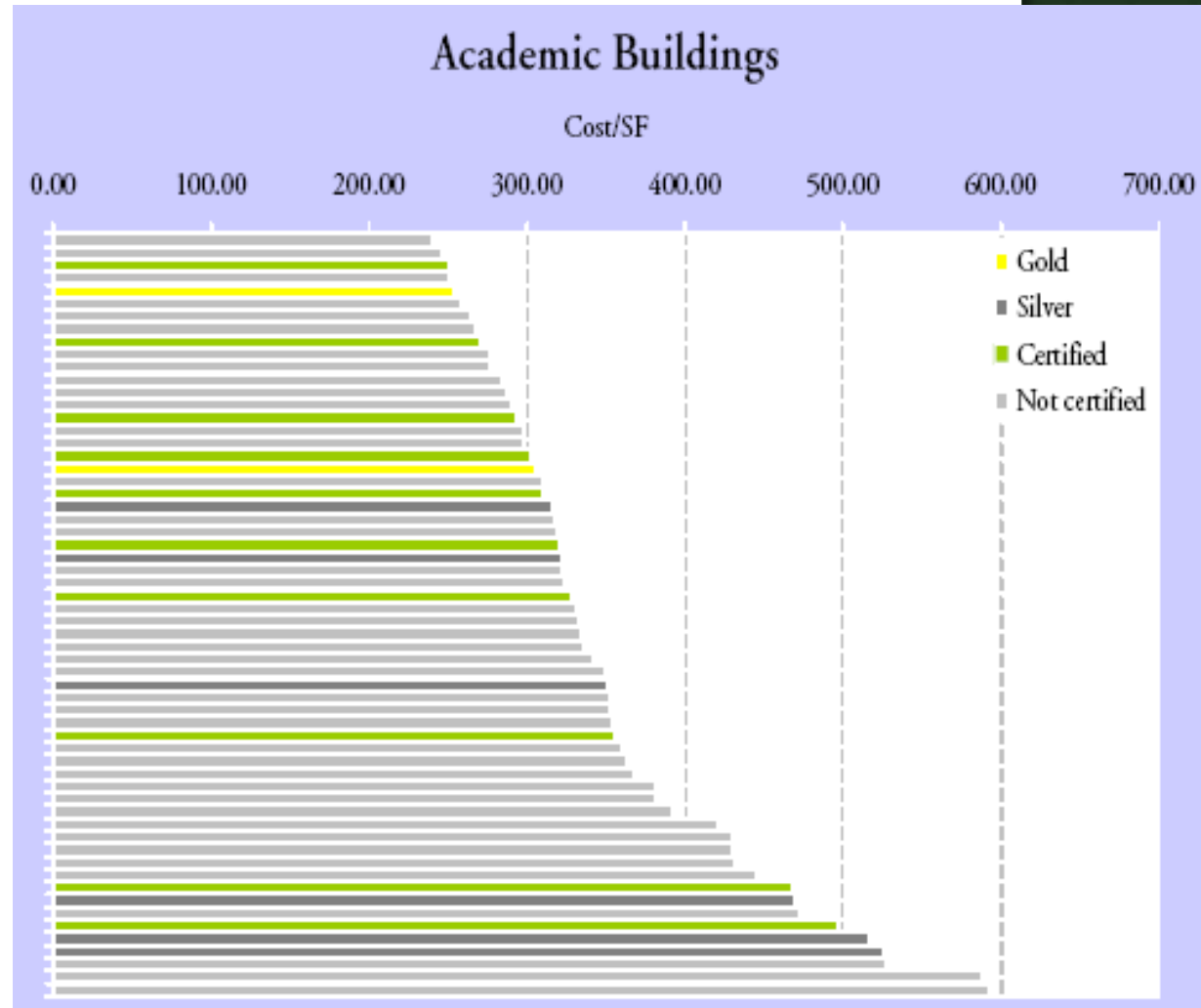
Source: USGBC, 2006 & Miller et al, 2008

TYPICAL COSTS OF GREEN

- ◎ **Extra costs come in two categories:**
 - **Soft costs** - Added design fees, documentation of green building, energy modeling, development of special plans during construction, and the registration and certification of project.
 - **Hard costs** - Added costs of green materials, higher efficiency HVAC equipment, added controls and automation, renewable energy systems, water saving equipment, additional insulation and better windows, and stormwater BMPs, and vegetated roofs.

COSTS OF BUILDING GREEN

- LEED seeking academic buildings are scattered broadly through the population, with no significant difference in the average costs of LEED seeking and non-LEED seeking buildings.
- Silver buildings do tend to fall in the higher range, both within the population of green buildings and in the overall population, while the Gold buildings are in the lower range.
- Gold projects by and large seemed to have kept costs low by using simple approaches to sustainability, rather than adding technologies to achieve green.



GREEN INCENTIVES

- ◎ Common Incentives:
 - Tax Incentives
 - Bonus Density
 - Expedited Permitting
 - Grants (including fee subsidization)
 - Loans
 - Technical Assistance/Design Assistance
 - Permit Fee Reduction
- ◎ The incentive must be geared to local needs and requirements and generate the appropriate response.

TAX INCENTIVES

- ◎ Tax incentives are varied:
 - Corporate Tax / Gross Receipts Tax
 - Income Tax / Property Tax
 - Sales Tax / Local Taxes
- ◎ Taxes are the most robust and widely used incentives.
- ◎ They are flexible and can be applied at all levels and for specific green activities.
- ◎ Different tax incentives should target specific sectors of the building industry.
- ◎ They should last long enough for large projects to be brought to completion.

BONUS DENSITY

- In return for green building, jurisdictions have implemented:
 - Height bonuses
 - Floor/area ratio (FAR) bonuses
 - Reductions in landscaping requirements
 - Counting of green roof space as landscaping/open space
- Bonus density programs are valuable because developers want to increase floor space on projects in order to enhance profitability.
- Bonus density must maintain comprehensive green requirements and therefore preserve the exclusivity of the incentive.
- As green building becomes more commonplace, municipalities may need to reexamine the stringency of the requirements for density bonuses and increase them concordantly.

EXPEDITED PERMITTING

- ◎ Streamlining the permitting process for building, plan, and site permits can save green developers substantial time and money.
- ◎ Permit streamlining programs offer jurisdictions the ability to increase tax revenue while supplying the development community with a valuable resource.
- ◎ In order for expedited permitting programs to be successful, staff should also have a comprehensive understanding of the green rating systems utilized within a city/county.

GRANTS

- ⦿ Jurisdictions may also consider grant programs, which can offset some of the increased development costs that arise from a green building project.
- ⦿ Grants can be used to subsidize the cost of certification or as lump sum amounts applied to the total cost of the building.
- ⦿ These incentives are typically awarded in a single, monetary contribution. However, grant programs raise many of the same concerns as tax abatements and therefore should be designed with enough flexibility for all parties to benefit.

LOANS

- ◉ States and municipalities can establish a loan fund to be used specifically for green improvements. This type of program requires an initial investment and start-up costs, but generally these incentives have proven profitable in the long run.
- ◉ Jurisdictions can use performance contracting to provide loans at reduced interest rates to developers that agree to build to specified green standards. This method appeals to developers who can repay the loan through increased appraisal value of the green building as well as owners who are able to repay the loan through future energy savings.

TECHNICAL ASSISTANCE/DESIGN ASSISTANCE

- ⦿ Through training, education, and workshops, fosters a culture of sustainable design throughout the community.
- ⦿ This can be much more effective than formal legislation and regulations.
- ⦿ In Illinois, SEDAC is available along with ComEd and Ameren New Construction Programs.

PERMIT FEE REDUCTION

- ⦿ This option is almost exclusively for use by cities rather than states and counties.
- ⦿ In return for reaching specific levels of LEED or other green rating systems, several jurisdictions waive or partially reimburse the application, building, or permit fees charged.
- ⦿ This directly affects the party funding the construction of a building, so it can be a particularly attractive incentive to those with a short term view.

FINANCING GREEN

- ◎ Current grants and incentives available to reduce the hard and soft costs of green:
 - Green Roofs Grant (\$10/sf up to \$100k/50%).
 - Community Renewable Energy Program (50% of costs between \$250 - \$500k).
 - ComEd *Smart Ideas* New Construction Program (up to \$100k for incorporating electrical eff).
 - Ameren *Act on Energy* New Construction Program starting in Spring 2010 - Custom now.
 - Federal Energy Efficient Commercial Building Tax Deduction (EPAAct 2005 - \$1.80/sf).

CONCLUSIONS

- ◉ Owners and builders can be encouraged in the appropriate direction with focused incentives and rewards.
- ◉ Incentives need to match the various development business models and capture the wide spectrum of builders, developers, owners and operators.
- ◉ The development community must be assured that the incentives will still be in effect when their project is complete.
- ◉ Incentives must be easy to understand, simple to pursue, and strong enough to make the whole process worthwhile.
- ◉ Financial incentives can buy-down real and perceived costs and incentivize market transformation.