



edifici a energia QUASI Zero

case passive • sostenibili • in classe A



Ancona, 18 aprile 2012

Auditorium G. Mantovani

Ex Ente Fieristico Regionale

**INTERVENTO DI ALBERTO BALLARDINI -
HABITECH**



Commercial LEED Registered Projects

Total Currently Registered

32,007*

© U.S. Green Building Council, 2011

*As of September 2011

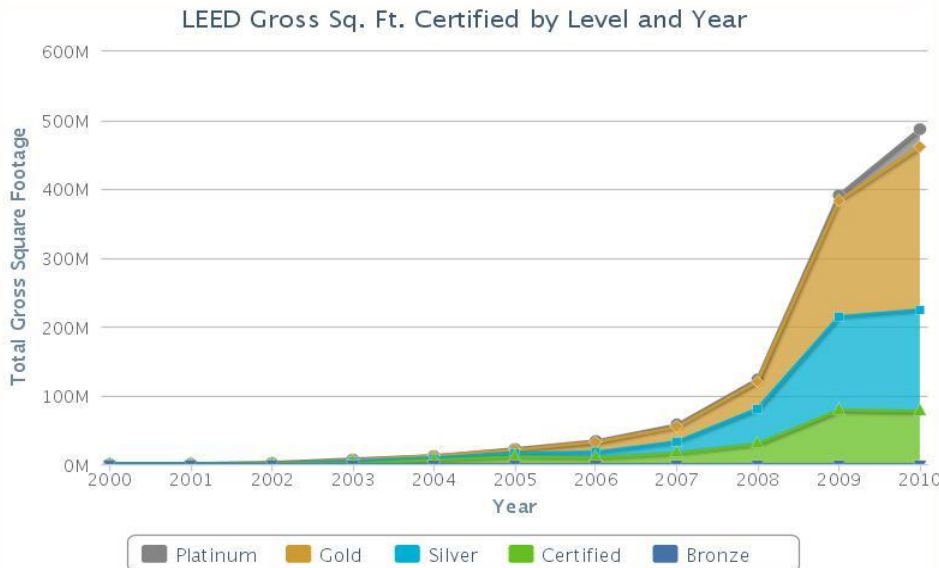
Commercial LEED Certified Projects

(Cumulative)

10,476*

© U.S. Green Building Council, 2011

*As of September 2011



Hines



Baxter Deutsche Bank

Morgan Stanley



Microsoft



Siti Sostenibili

Priorità
Regionali

Efficienza
nell'uso dell'acqua

Energia
& Atmosfera

Materiali
& Risorse

Qualità
dell'Ambiente
Interno

Innovazione
nel Design



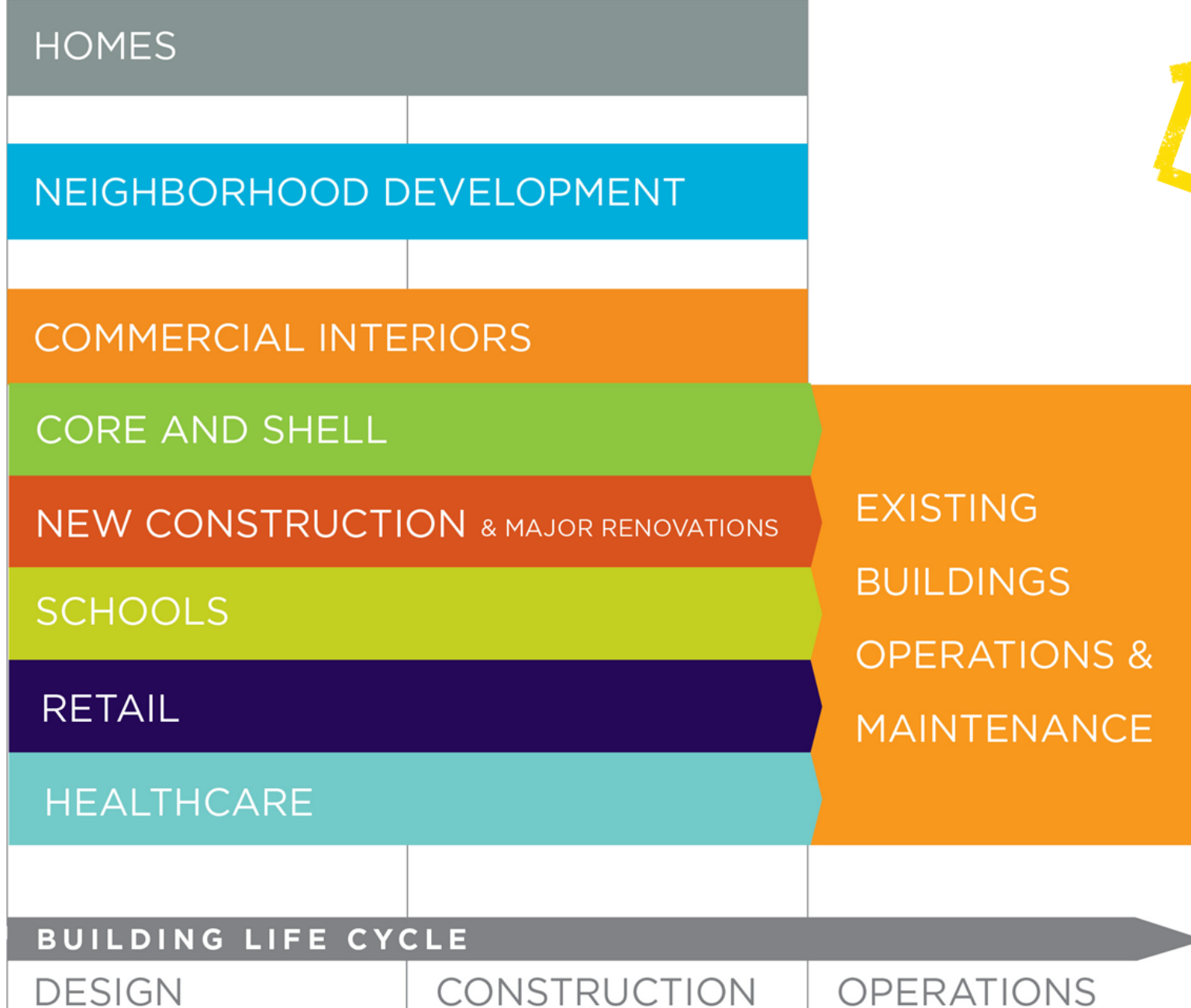
PLATINUM 80+ punti

GOLD 60 - 79 punti

SILVER 50 - 59 punti

CERTIFIED 40 - 49 punti





LEED-NC

whole building

one event

design &
construction

capital
budget

NC

LEED-CI

part of a building

some events

design &
construction

capital
budget

CI

LEED-EB:O&M

whole building

ongoing
process

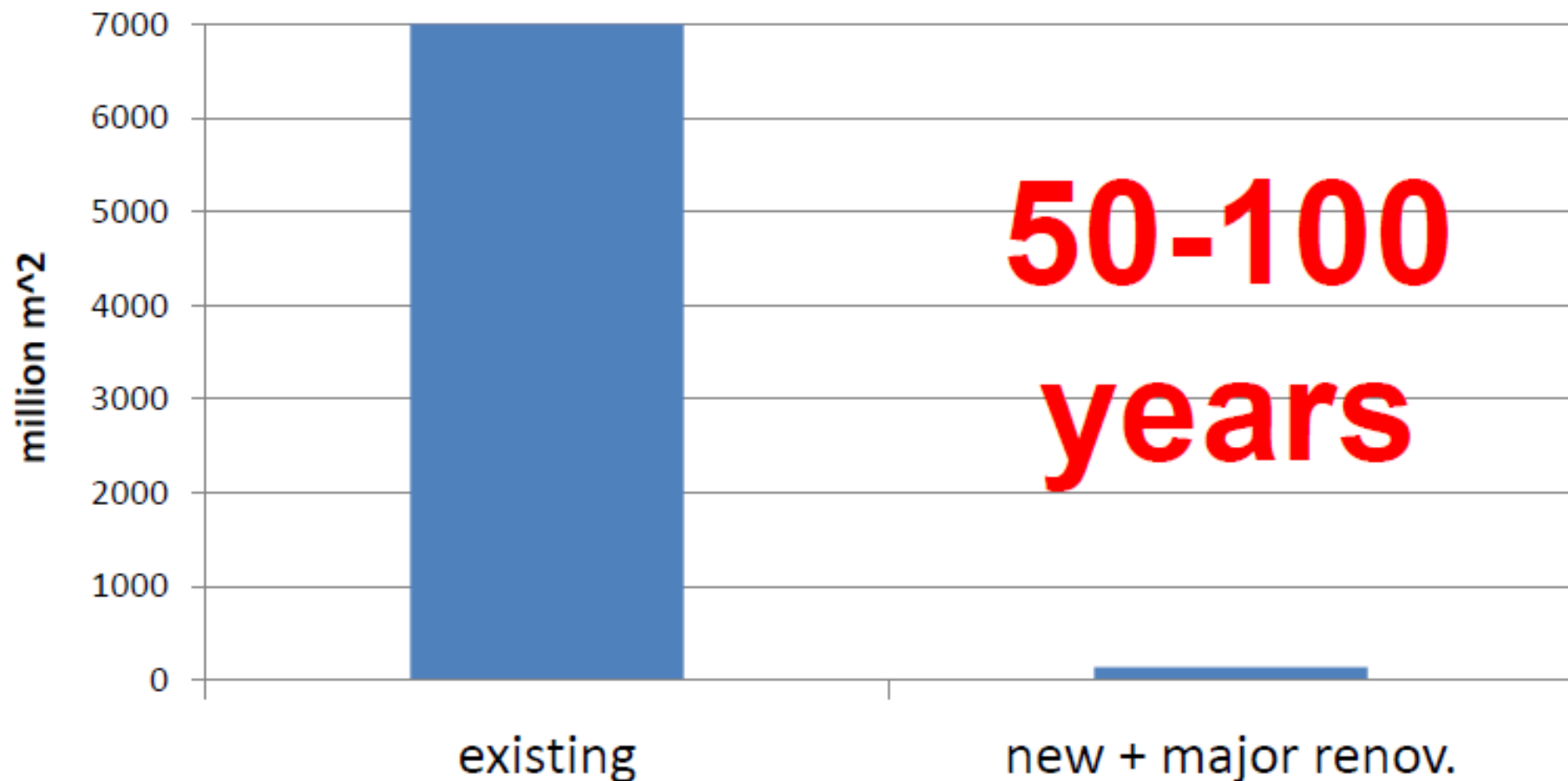
life of the
building

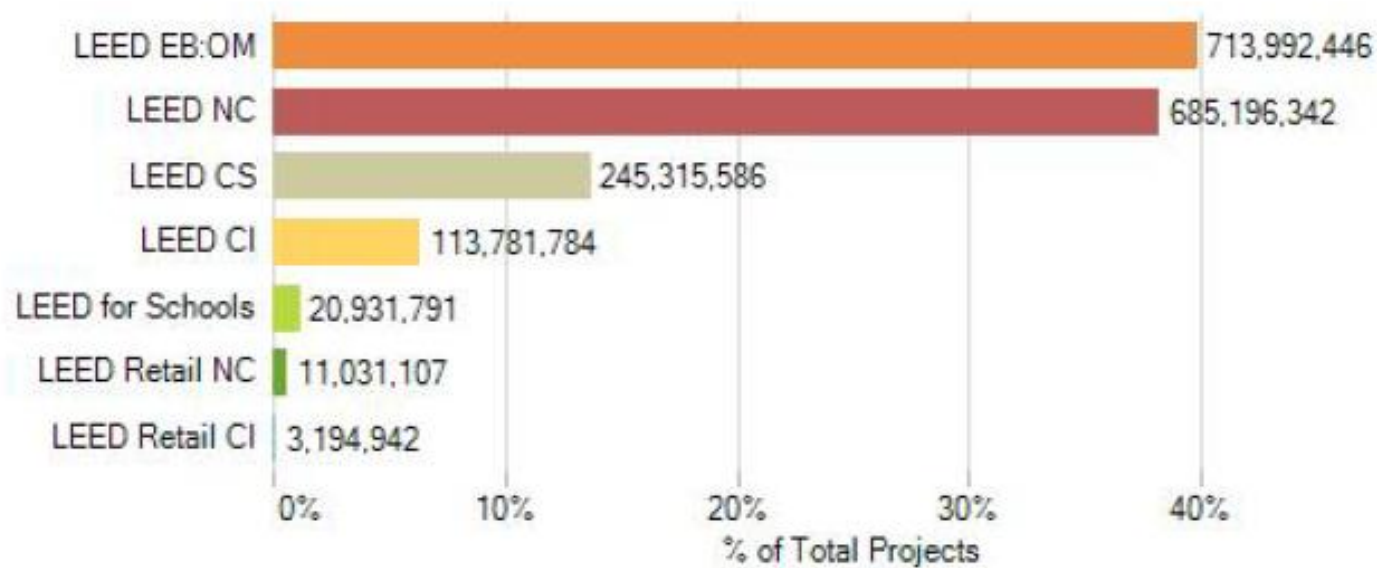
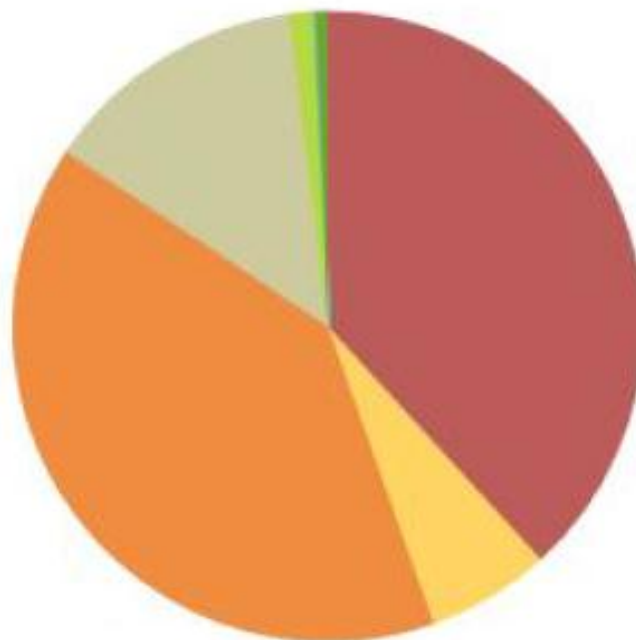
operating
budget

EB

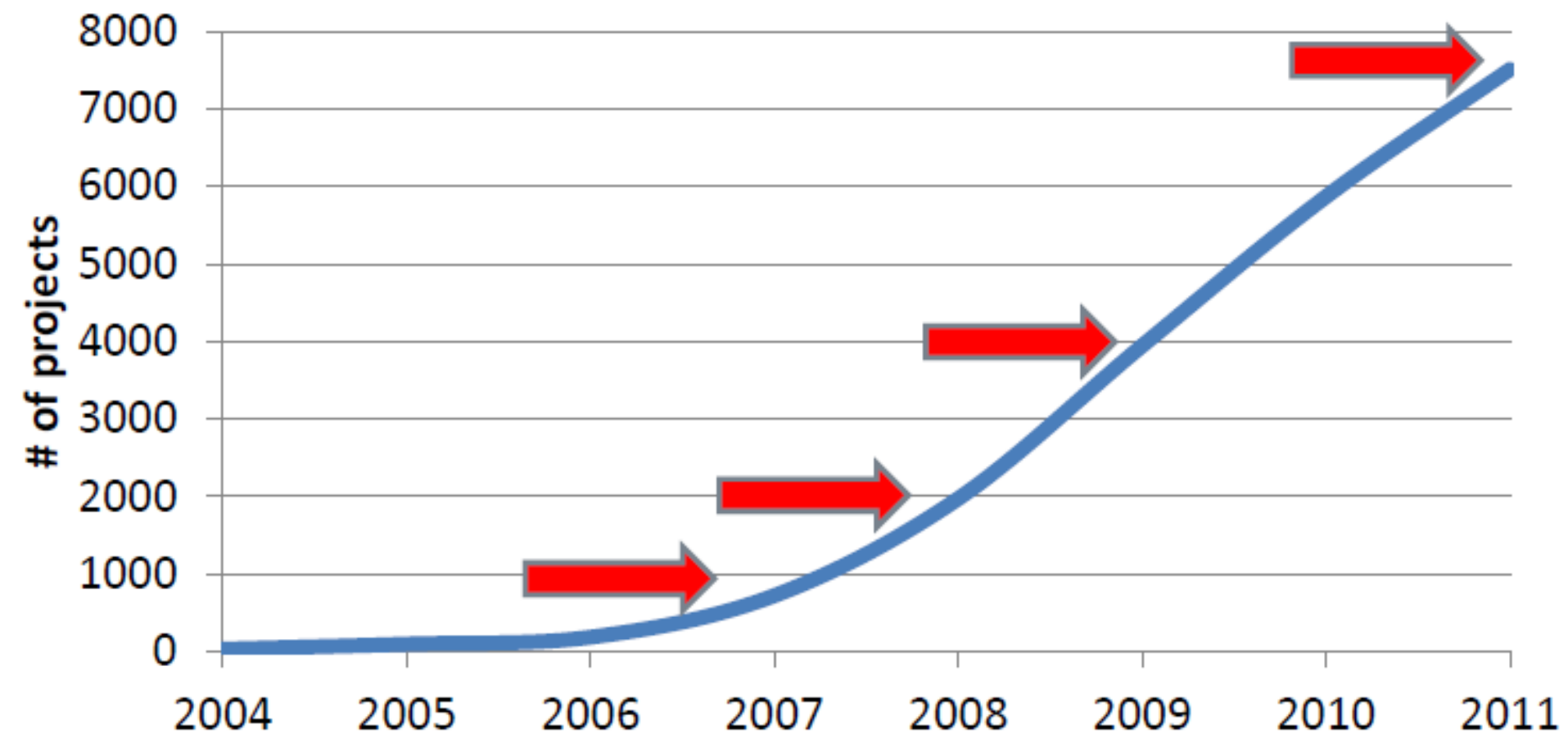


U.S. Commercial Buildings (2009)





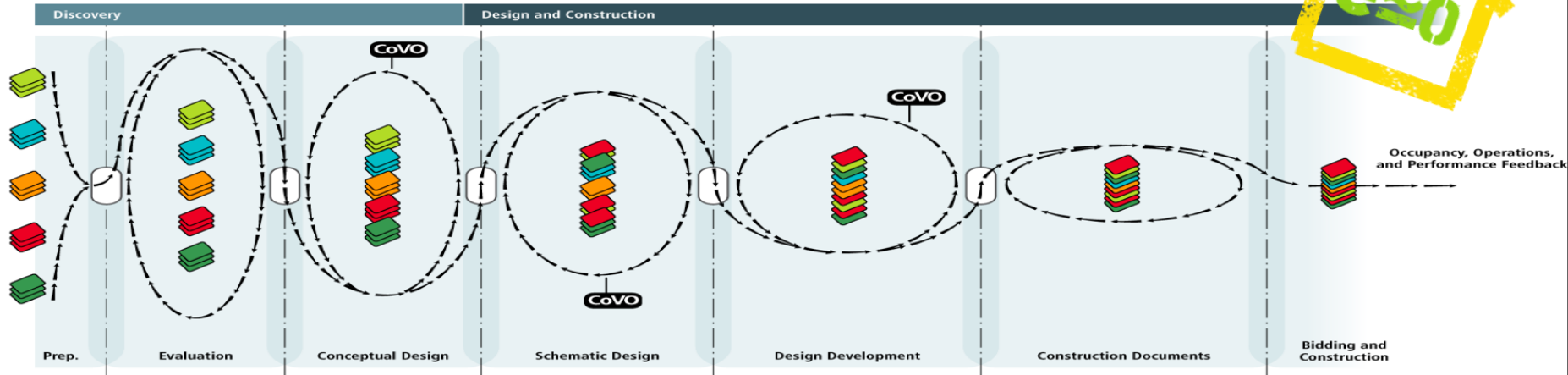
LEED-EB: O&M market growth



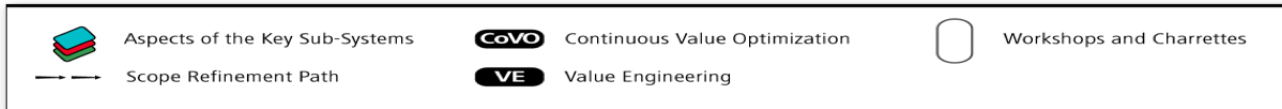
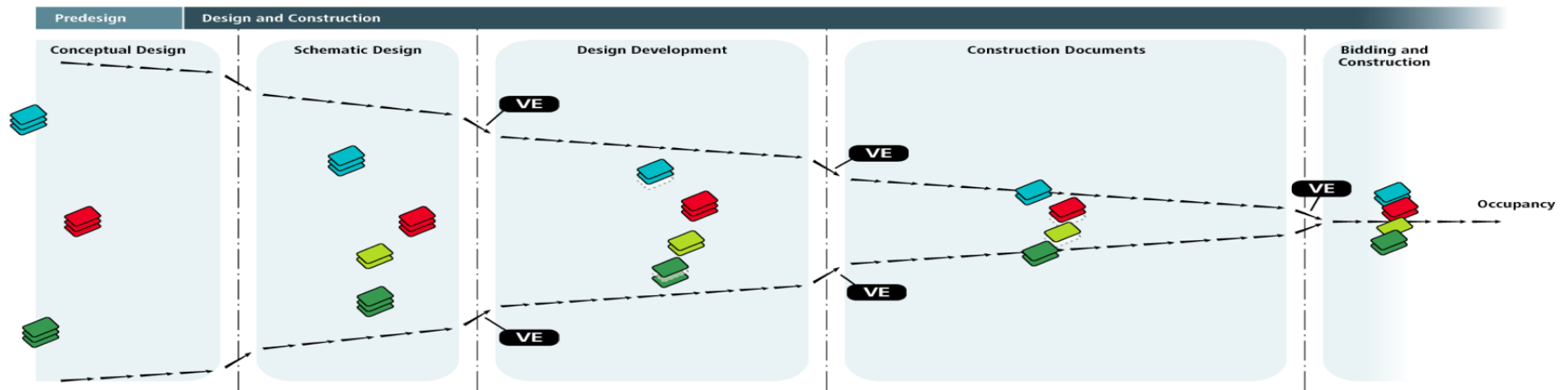
PROGETTAZIONE INTEGRATA



Integrative Process



Traditional Process









Il Commissioning di un'opera consiste nel verificare che essa:

- sia conforme alle specifiche del Committente e ai dati di progetto
- sia in condizioni di svolgere correttamente le funzioni richieste
- è obbligatorio per tutti i sistemi energetici dell'edificio
- deve essere affidato a un tecnico indipendente da quanti si occupano di progettazione, direzione lavori e realizzazione dell'edificio

(RETRO) COMMISSIONING



(RETRO) COMMISSIONING

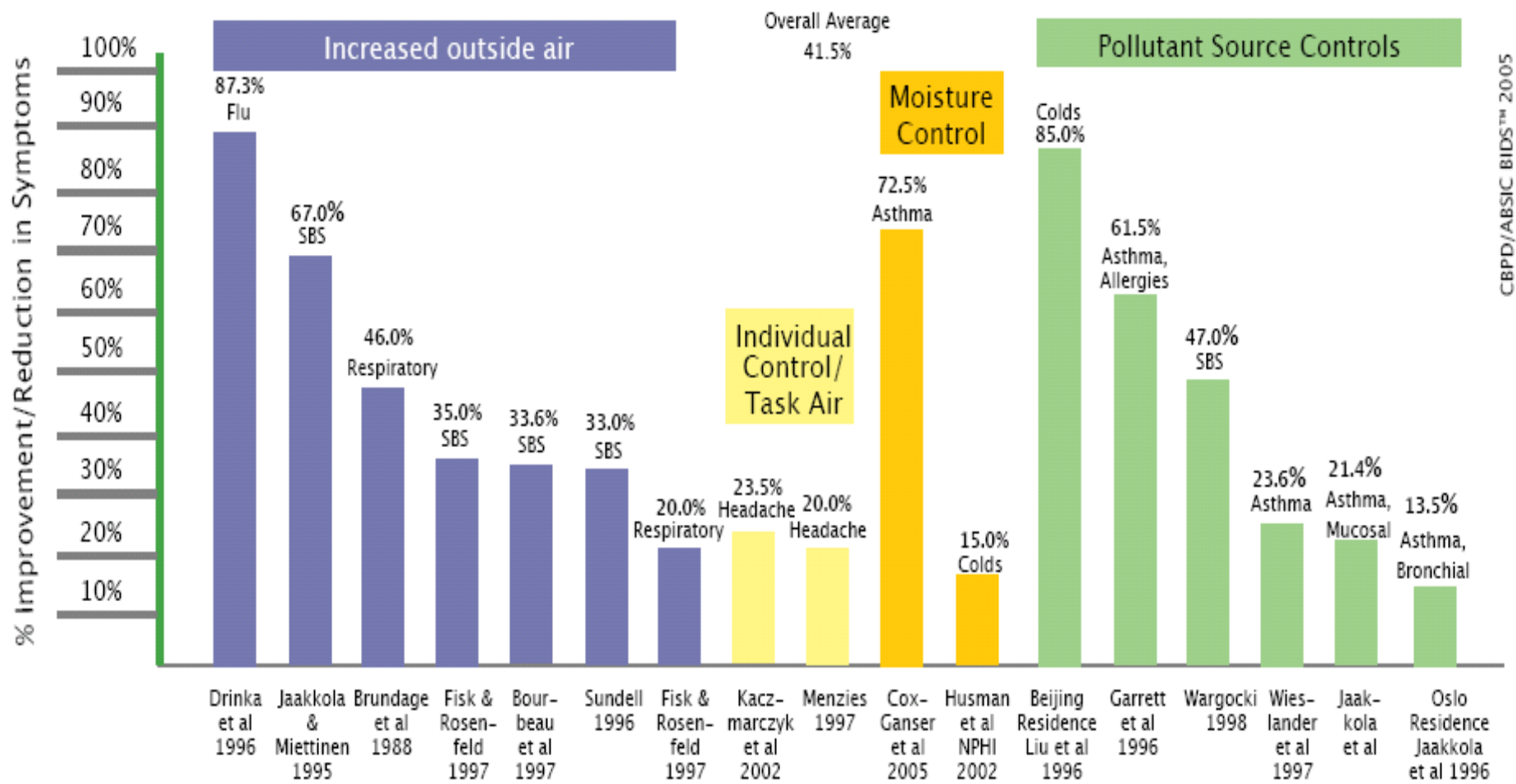


(RETRO) COMMISSIONING





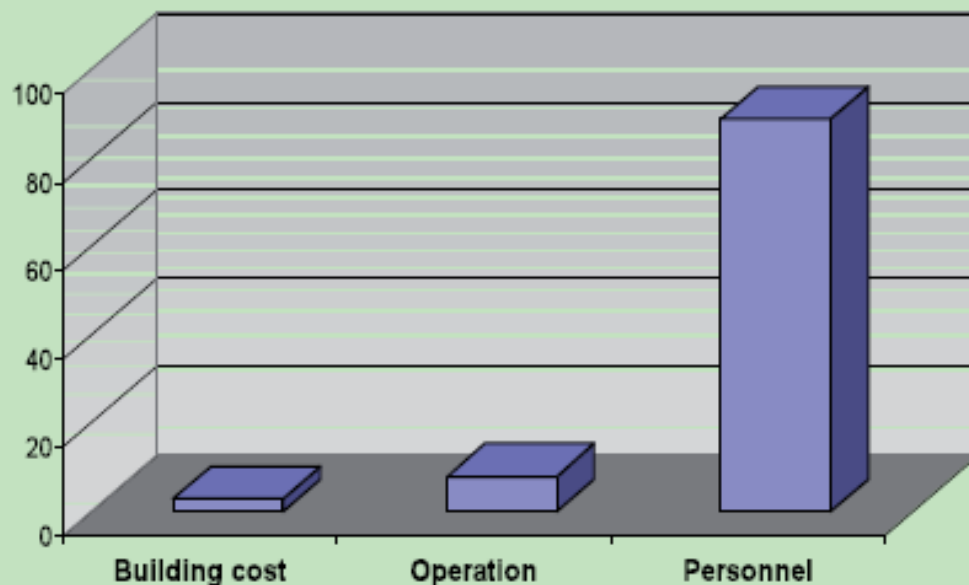
Figure B: Health Gains from Improved Indoor Air Quality



QUALITA' AMBIENTE E PRODUTTIVITA'



30-year life cycle costs



- Illuminazione naturale e viste verso l'esterno
- Miglior ventilazione
- Controllo individuale su ventilazione e illuminazione
- Comfort termico

CONTROLLO
INDIVIDUALE DELLA
TEMPERATURA
INCREMENTA LA
PRODUTTIVITA' DEL
3.6%

L'ILLUMINAZIONE DI ALTA
QUALITA' E PERFORMANCE
INCREMENTA LA
PRODUTTIVITA' DEL
6.7%



Green companies earn more 'green,' new study shows

SHANNON CHAPLA • DATE: MARCH 26, 2012

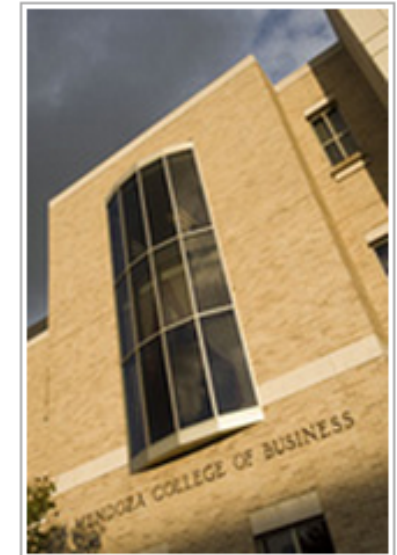
POSTED IN: ACADEMICS AND RESEARCH



Using LEED-certified (Leadership in Energy and Environmental Design) buildings increases revenue generated by bank branches even when they offer the same products and services, according to a new study co-authored by University of Notre Dame management professors [Edward Conlon](#) and [Ante Glavas](#).

In their study of 562 PNC branches (93 LEED, 469 non-LEED), "The Relationship between Corporate Sustainability and Firm Financial Performance," Conlon and Glavas found that PNC employees who work in LEED-certified branches are more productive and engaged in their work.

Although they're not yet certain if it's because LEED buildings are more attractive to visit or because their employees are more satisfied, and consequently providing better service, Conlon and Glavas find that sustainability equals a big difference to the bottom line at LEED bank branches— \$461,300 per employee after controlling for other variables that influence performance (e.g., consumer net worth, employee demographics, market demographics, size and age of branch, marketing spend).



IL VERO COSTO E' NON FARLO



**BAXTER SEDE CENTRALE
ROMA, ITALIA**

100% energia proveniente
da fonti rinnovabili
25% diminuzione dei
consumi energetici
30% riduzione dei consumi
dell'acqua potabile

LEED® prestazioni

Baxter Sede Centrale
Roma, Italia

LEED for EB:O&M v2009
Certificata il 23 Marzo 2011

Silver **56***

Sustainable Sites 17/26

Water Efficiency 5/14

Energy & Atmosphere 23/35

Materials & Resources 3/10

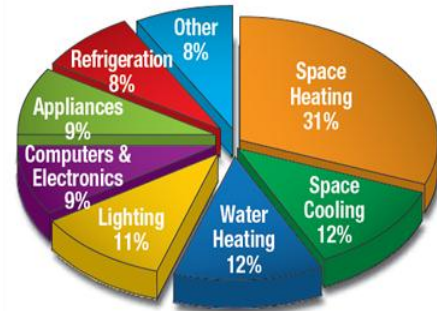
Indoor Environmental Quality 1/15

Innovation & Design 4/6

Regional Priority 3/4

* massimo punteggio: 110 punti

Prima azienda farmaceutica certificata LEED® EB:O&M v2009 in Europa



18 · Procedures for Commercial Building Energy Audits

PRELIMINARY BUILDING USE ¹

Average Hours/Week 42.5 Average Weeks/Year 52
Average Number of Occupants During Normal Occupied Period 800
After Hours Cleaning (y/n) Yes

OVERALL BUILDING SCHEDULE

Schedule during months of January to December

Days	M	T	W	Th	F	Sat	Sun	Hol.
Hours Open	8.5	8.5	8.5	8.5	8.5	24	24	24
Hours Closed	15.5	15.5	15.5	15.5	15.5	24	24	24
Peak no. of occupants	810	810	810	810	810	0	0	0
Avg. no. of occupants when open	800	800	800	800	800	0	0	0





Adobe Towers – San Jose, CA

Over \$1,000,000/year
energy savings

Water irrigation: 4 million
liters/year savings

Waste diversion: 32%
lower solid waste

Payback time < 1 year

Return > 100%/year



- LEED EB Platinum Certified
- Owned by Adobe Systems, managed by Cushman & Wakefield