



# LEED Basics

Presented by  
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1. Green Building? Why?

2. The Basics of LEED

3. The Future of LEED

# What Is Green Building?



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LEED BASICS



**WHY BUILD GREEN?**



## The Triple Bottom Line

PEOPLE



PLANET

PROFIT

Why Build Green?

## PEOPLE BENEFITS

### 1. Improve occupant health and comfort

- Reduction in indoor pollutants have a direct and positive effect on occupants with respiratory ailments such as asthma.
- More than 17 million Americans have asthma, and we spend 93% of our time indoors!

### 2. Reduce absenteeism and turnover

- Healthier buildings result in less sick days taken on average
- Green buildings have been shown to improve recruitment and retention of quality employees.

### 3. Improve occupant performance

- Student performance is substantially better in daylit schools.

## PROFIT BENEFITS

### 1. Competitive costs

- Integrated design can result in lower costs through trade-offs.
- LEED buildings typically have a low added first cost of 1-2%, which usually result in long-term savings.
- LEED certified spaces lease faster and at a slightly higher rate with lower operation & maintenance bills to worry about.

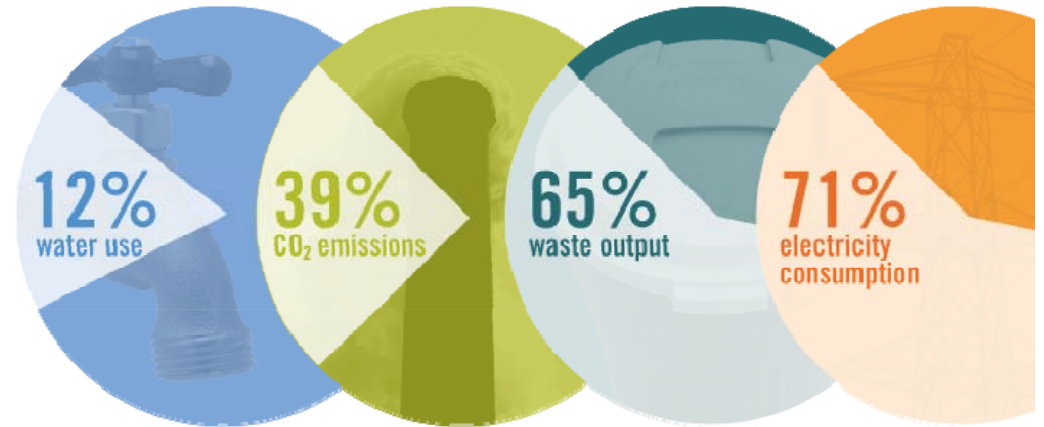
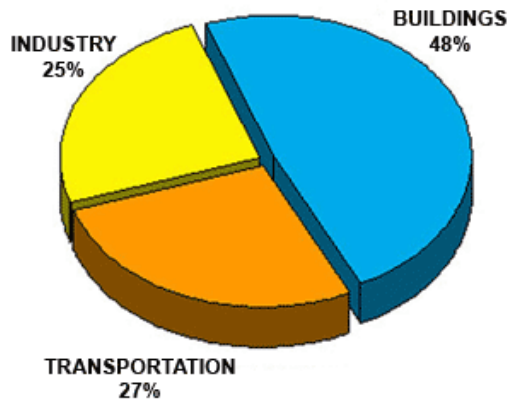
### 2. Reduced operating costs

- green buildings average 35% more energy efficient than standard buildings, and 40% more water efficient.

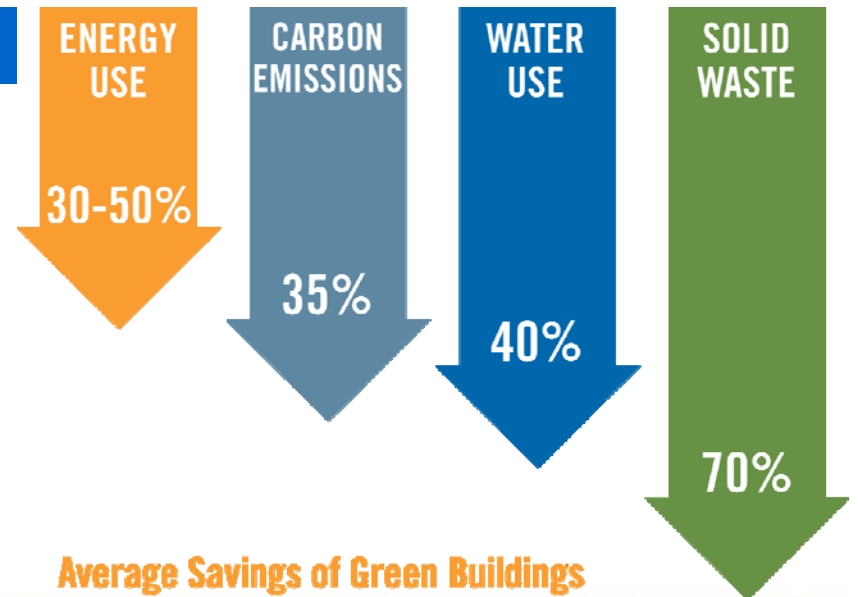
### 3. Increase retail sales with daylighting

- Studies have shown ~40% improvement in sales.

# PLANET



## WHAT IS THE IMPACT OF CERTIFICATION?



Why Build Green?



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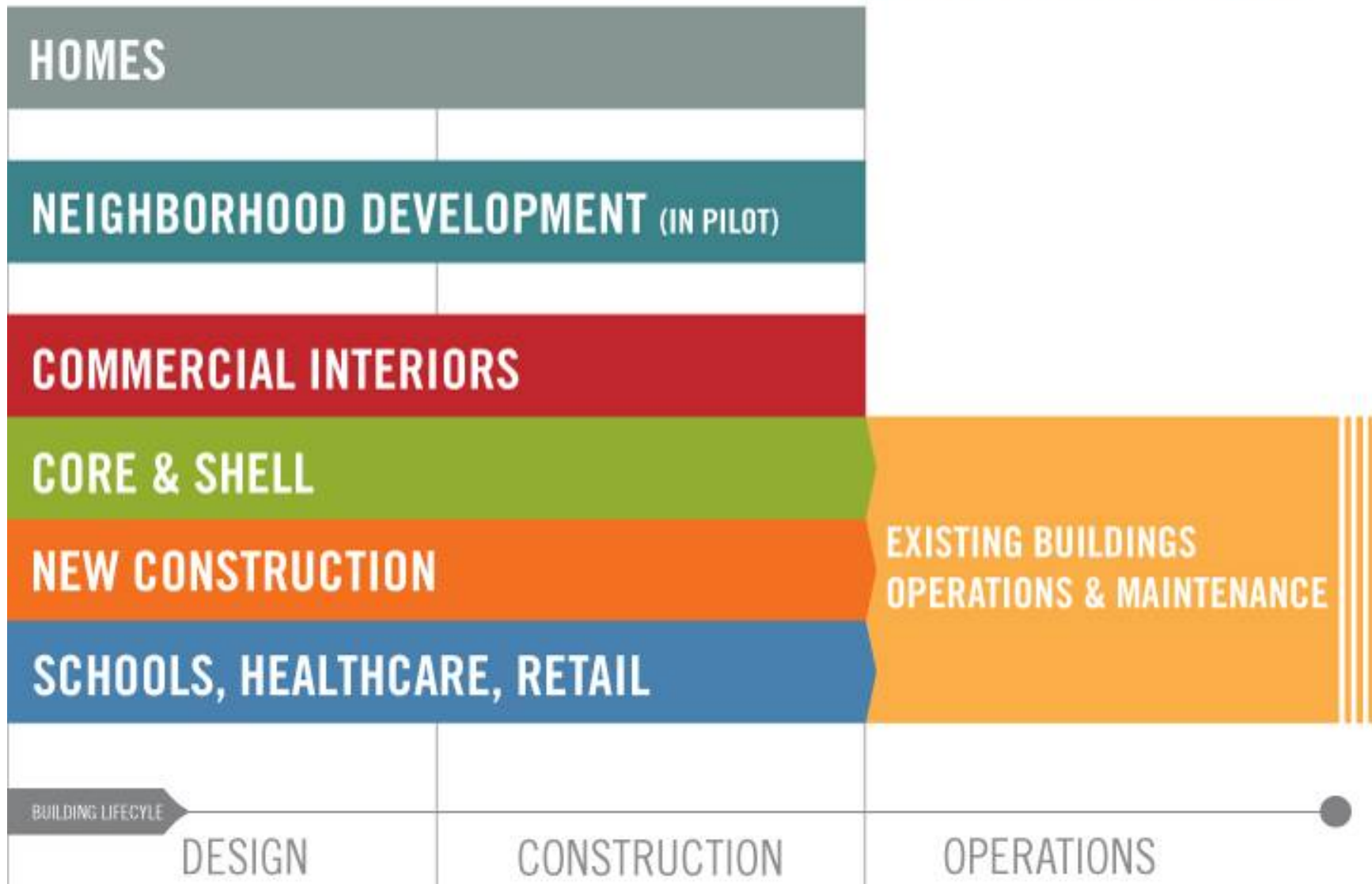


# Leadership in Energy and Environmental Design

A leading-edge system  
for certifying the  
greenest performing  
buildings in the world



# LEED address the complete lifecycle of buildings:



# Steps to LEED Certification

REGISTER YOUR PROJECT



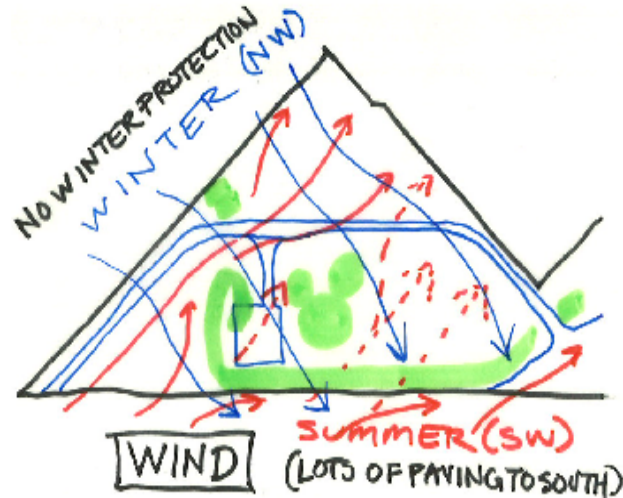
TRACK PROGRESS &  
DOCUMENT ACHIEVEMENT



APPLY FOR CERTIFICATION



## SUSTAINABLE SITES

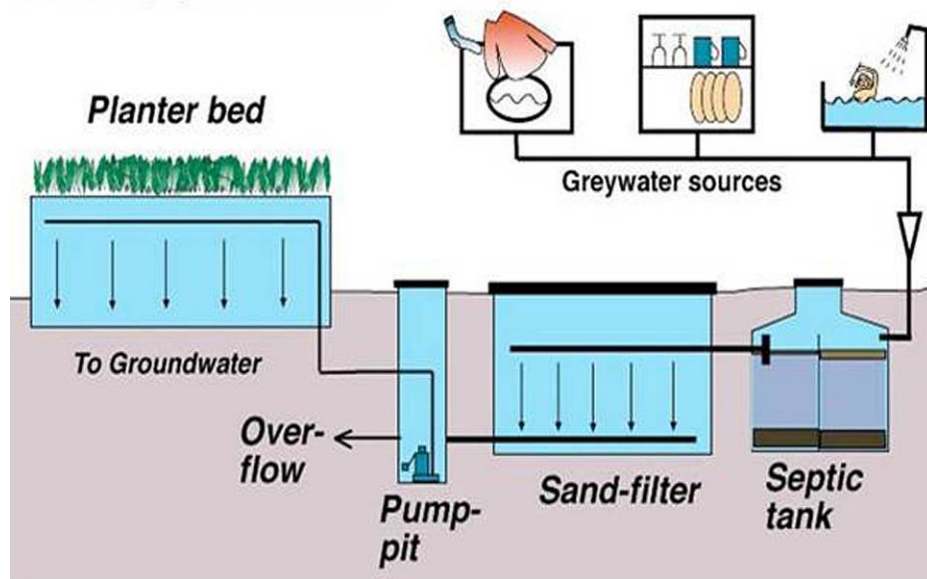


1. Encourage community development and higher density
2. Reduce strain on local ecosystems through smart planning and sensitive stormwater strategies.
3. Use simple strategies to take advantage of what a site naturally provides: air, light, soil, water.

## WATER EFFICIENCY

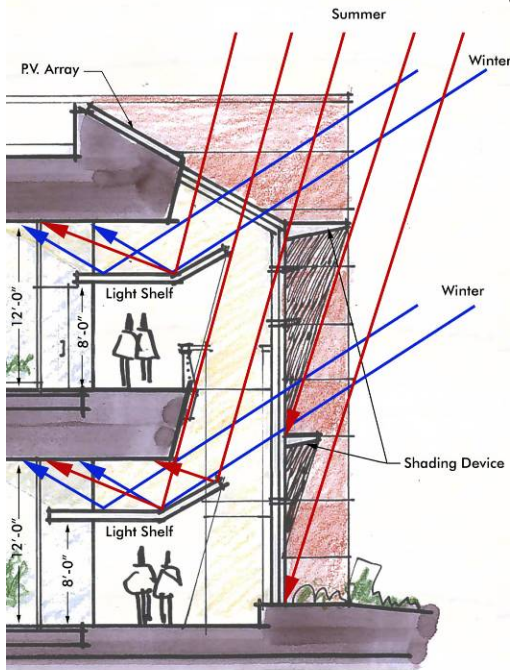
1. Reduce on-site water use by utilizing efficient plumbing fixtures
2. Improve building water output through capturing and treating greywater and rainwater for irrigation, toilet flush, and other uses.
3. Infiltrate storm-water onsite by using permeable paving, bio-swaales and raingardens.

*Advanced greywater treatment*



## ENERGY EFFICIENCY

1. Reduce overall energy footprint through use of daylight, motion sensors, high-efficiency equipment, building commissioning, etc.
2. Collect energy for distribution through use of PV and wind, and reduce energy through solar-hot water and ground-heat pumps.
3. Measure energy use to improve building operation over time



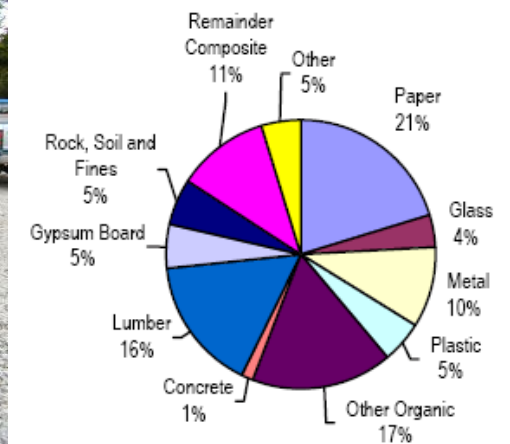
## MATERIALS & RESOURCES



1. Reduce use of virgin materials through using reclaimed and recycled materials, with preference given to regional manufacturers
2. Reduce landfill waste by recycling and reusing materials removed from the construction site.

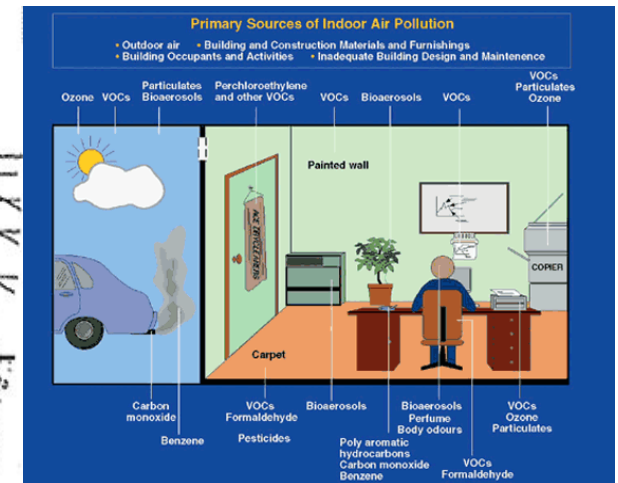
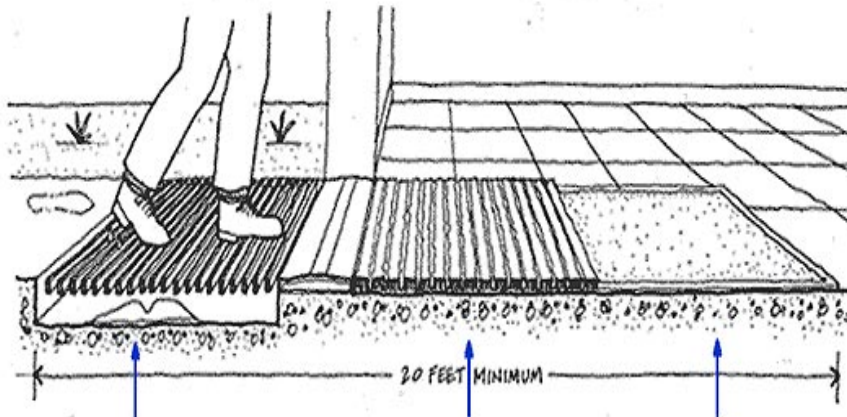


Figure 3: Composition of Construction Waste



## INDOOR ENVIRONMENTAL QUALITY

- Improved access to natural light and views reduces stress, improves memory, and reduces dependence on artificial lighting.
- Utilize increased outside air in mechanical equipment.
- Provide more heating, cooling, and lighting controls to occupants.
- Views to the outdoors results in less frequent and shorter breaks.
- Use new construction materials with low or no VOC content.



# INDOOR ENVIRONMENTAL QUALITY



LEED BASICS

## INNOVATION IN DESIGN

1. Utilize LEED Accredited Professionals on the design and construction teams whenever possible
2. Innovate new credit criteria beyond those covered by the LEED checklist
3. Enhance performance beyond basic LEED credit requirements.



## THE FUTURE OF LEED

1. LEED AP version 2.2 – exam registration cutoff on March 31<sup>st</sup>, 2009.
2. LEED Accreditation will change to include a variety of levels:
  - **Accredited Professionals** Those who have been involved in the Certification process
  - **Associate Professionals** Those who know the basics of LEED, but have not worked on LEED projects
  - **Legacy Professionals** Existing APs who have not worked on LEED projects
  - **LEED Fellows** Those with a notable level of service
3. LEED version 2009 will be released by ~June 2009
4. New version of LEED will incorporate regionally weighted credits, increased performance criteria, and a simplification of the various construction-market categories (CI, NC, CS, etc).

## Get Involved: As an Individual

- Learn ([www.usgbc.org/education](http://www.usgbc.org/education))
- Join a chapter ([www.usgbc.org/chapters](http://www.usgbc.org/chapters))
- Attend Greenbuild ([www.greenbuildexpo.org](http://www.greenbuildexpo.org))
- Become an advocate
- Become a LEED AP ([www.gbci.org](http://www.gbci.org))
- Pursue LEED certification in your building projects ([www.usgbc.org/leed](http://www.usgbc.org/leed))
- Purchase a LEED Reference Guide ([www.usgbc.org/leed](http://www.usgbc.org/leed))



## Get Involved: As an Organization

- Join USGBC National ([www.usgbc.org/membership](http://www.usgbc.org/membership))
- Pursue LEED certification in your building projects ([www.usgbc.org/leed](http://www.usgbc.org/leed))
- Become an Education Provider ([www.usgbc.org/epp](http://www.usgbc.org/epp))
- Encourage your employees to become LEED APs ([www.gbci.org](http://www.gbci.org))

