

# GREEN BUILDINGS FOR COOL CITIES



## OVERVIEW

- **Sierra Club – US Green Building Council Partnership**
- **Green Building Basics**
- **Recommended Local Green Building Policies**
- **Getting Started**



# GREEN BUILDINGS FOR COOL CITIES

## Sierra Club – USGBC Partnership

- Bringing activists together to implement local green building initiatives
- *Green Buildings for Cool Cities: A Guide for Advocating for Local Green Building Policies* (available at [www.coolcities.us](http://www.coolcities.us) and at [www.usgbc.org/government](http://www.usgbc.org/government))
- Coordinated and supported activities in 2010

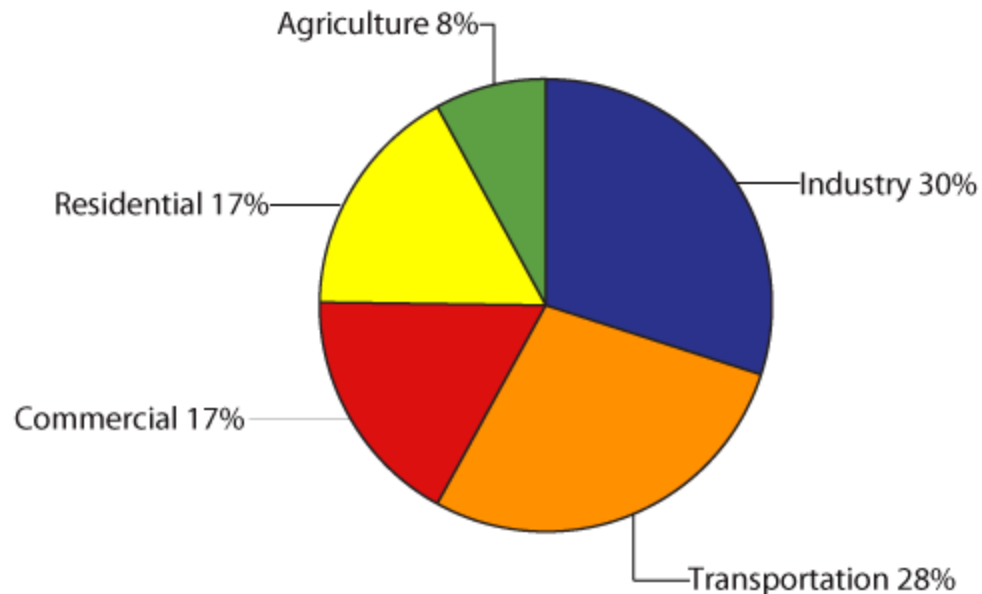


# GREEN BUILDINGS FOR COOL CITIES

## Impact of Buildings on the Environment

- Operating, heating and cooling buildings accounts for **nearly 40% of the greenhouse gas emissions and 70% of electricity use in the United States**
- Making buildings more energy efficient is a **key solution to curb global warming and cleaner energy economy**

United States, 2004



Total Emissions\* = 7,074 MMT CO<sub>2</sub>E

\* Net Emissions (Sources + Sinks) = 6,204 MMT CO<sub>2</sub>E

\*\* High GWP Gases include: HFCs, PFCs, and SF<sub>6</sub>

Data expressed in Million Metric Tons of Carbon Dioxide Equivalents (MMT CO<sub>2</sub>E)

Source: US EPA Inventory of Greenhouse Gas Emissions and Sinks, 2006.

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## Green Buildings

- Designed and constructed to reduce impact on human health and the environment
- Include energy-efficient heating, cooling, lighting, and water systems
- High-performance insulation, windows, doors, appliances, and sustainable construction materials
- Have or easily suited to renewable power systems



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## Measurable Benefits of Green Buildings

- 26% less energy consumed
- 33% fewer greenhouse gas emissions
- 13% lower maintenance costs
- 8%-9% lower operating costs
- 7.5% increase building value
- 3.5% increase occupancy ratio
- 7.9 million jobs over next 4 years



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## Green Building and LEED

- USGBC's LEED rating system allows projects to earn points based on specific green building criteria
- The points determine certification, ranging from Certified, Silver, Gold, and Platinum
- Over 200 localities use LEED as a benchmarking tool

### REDUCED ENERGY USE IN GREEN BUILDINGS AS COMPARED WITH CONVENTIONAL BUILDINGS

	Certified	Silver	Gold	Average
Energy Efficiency (above standard code)	18%	30%	37%	28%

Source: Capital E Analysis<sup>3</sup>



# GREEN BUILDINGS FOR COOL CITIES

## Cool Cities-USGBC Guide to Local Green Building

- Provides our organizations' joint recommendations for promoting green buildings in your community
- Step-by step approach to best practices that address the diverse needs of communities big and small, from coast to coast
- Policy guide available at <http://coolcities.us> and [www.usgbc.org/government](http://www.usgbc.org/government)



# GREEN BUILDINGS FOR COOL CITIES

## STEP ONE: GETTING STARTED – Leading by Example and Expanding the Green Building Market

- I. Green Building Standards for New Construction and Major Renovation of Municipal Buildings
- II. Non-Financial Incentives for Commercial and Residential Buildings
- III. Green Building Standards and Incentives for Schools and Affordable Housing

## STEP TWO: RAISING THE BAR – Increasing Standards and Encouraging Private Development

- I. Green Retrofit Standards for Existing Municipal Buildings
- II. Higher Standards for New Construction and Major Renovation of Municipal Buildings
- III. Financial Incentives for Commercial and Residential Buildings

## STEP THREE: ADVANCED – Greening Our Cities through Smart Financing and Building Codes

- I. Cost Effective Home Energy Efficiency Financing
- II. Better Building Codes



# GREEN BUILDINGS FOR COOL CITIES

## Step 1: Getting Started - Leading by Example

- Green building standards for new and major renovations of municipal buildings
  - Clayton, MO requires all new construction and major renovations of city-owned, occupied, or funded buildings over 5,000 sq. ft. to earn LEED Silver Certification



# GREEN BUILDINGS FOR COOL CITIES

## Step 1: Getting Started - Leading by Example (con't).

- Green building standards for schools and affordable housing
  - Anchorage requires all new school buildings and major building renovations over 20,000 sq. ft. to achieve LEED Certified
  - Washington, DC requires all publicly-funded affordable housing residential projects over 10,000 sq. ft. to meet green building standards



# GREEN BUILDINGS FOR COOL CITIES

## Step 1: Getting Started - Expanding the Green Building Market

- Non-financial incentives for commercial and residential buildings
  - Chicago, IL expedites the permitting process for projects that incorporate innovative green building practices, including LEED certification



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## Step 2: Raising the Bar – Increasing Standards for New and Existing Municipal Buildings

- Greensburg, KS requires all new city-owned buildings greater than 4,000 sq. ft. to earn LEED Platinum, making it the first city in the U.S. to create such a standard
- Portland, OR requires retrofitting all existing municipal buildings to LEED Silver standard



# GREEN BUILDINGS FOR COOL CITIES

## Step 2: Raising the Bar – Encouraging Private Development

- Financial incentives for commercial and residential buildings
  - El Paso, TX provides grants for commercial projects greater than 5,000 sq. ft. and multi-family projects that obtain LEED certification.



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## Step 3: Advanced – Smart Financing and Building Codes

- Cost-effective home energy efficiency financing
  - Babylon, NY's Revolving Loan Fund allows residents to get energy efficiency upgrades at no up-front cost and pay back over time through energy savings
  - Adopting stronger energy-efficiency building code standards (Houston, Albuquerque)



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## Getting Your Local Campaign Started

- Connect with your local partner
- Finding local USGBC contacts ([www.usgbc.org/Chapters](http://www.usgbc.org/Chapters))
- Finding local Cool Cities contacts ([www.coolcities.us](http://www.coolcities.us))
- Also inquire at [cool.cities@sierraclub.org](mailto:cool.cities@sierraclub.org) and [publicpolicy@usgbc.org](mailto:publicpolicy@usgbc.org)



# GREEN BUILDINGS FOR COOL CITIES

## Getting Your Local Campaign Started

- Organize first partnership meeting in 2009
- Invite other community partners
- Review the Guide to local green building policies
- Find out which green building policies are in place in your community
- Choose a policy to implement as your campaign goal in 2010



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## Putting Together Your 2010 Organizing Plan

- Determine how your policy goal can be implemented in your community (administrative action by Mayor? city council? Regulatory authority)
- Prepare your “ask” and approach your Mayor
- Announce your campaign and its goal to media with press conference, news release, Op-Ed

\*Please note Cool Cities materials may only be used for administrative actions



# GREEN BUILDINGS FOR COOL CITIES

- Gather information about local green buildings – savings on energy, costs, and emissions
- Give presentations on green buildings to educate public and public officials (model PPT)
- Mark calendar for organizing local Green Building Tour event in March 2010 (national coordination)
- Brainstorm other activities (e.g. public workshop, local awards, etc...)



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## Additional Resources

- Register at Cool Cities website to receive campaign updates and opportunities ([www.coolcities.us](http://www.coolcities.us))
- Visit the Green Building Forum for more resources: <http://coolcities.us/ccforum/viewforum.php?f=30>
- Review the Playbook for Green Buildings + Neighborhoods ([www.greenplaybook.org](http://www.greenplaybook.org))
- Find all the green building education you need at <https://www.usgbc.org/CourseCatalog/CourseCatalog.aspx>
- Contact [cool.cities@sierraclub.org](mailto:cool.cities@sierraclub.org) and/or [publicpolicy@usgbc.org](mailto:publicpolicy@usgbc.org) with questions and for further assistance



# GREEN BUILDINGS FOR COOL CITIES

## Working Together

Whether your community will be taking its first step or is looking to strengthen its commitments to green buildings, you can lead your community towards a healthier, more productive and greener future.



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