

# The Center for Environmental Innovation in Roofing

- Vision & Mission
- Organization
- Activities
- Why Roof Green?

**Dr. James L. Hoff**  
Research Director

## Building Opportunities

New Organization. Innovative Solutions. Fresh Vision.



816 Connecticut Ave, NW , Fifth Floor  
Washington, DC 20006

**Toll Free** 866.928.CEIR  
Fax 202.380.3378

[www.RoofingCenter.org](http://www.RoofingCenter.org)

# Vision

“The Center for Environmental Innovation in Roofing is dedicated to promoting the development and use of environmentally responsible roof systems. The Center's core purpose is to establish a forum that will draw together the entire roofing industry into the common cause of advancing and increasing the knowledge base of environmentally friendly, high performance roofs.”

# Mission

## Advancing Sustainable Roofing Systems by...

- Coordinating and encouraging research
- Serving as an information resource
- Providing industry advocacy
- Expanding market opportunities



# The Center for Environmental Innovation in Roofing Organization

- Non-Profit 501(c)(6)
- Washington-based
- Member-supported
  - Founding members
  - Roofing manufacturers / distributors
  - Roofing contractors
  - Roofing organizations
  - Roofing design professionals
  - Students

# Founding Members

Carlisle Construction Materials

Duro-Last Roofing, Inc.

Firestone Building Products

Performance Roof Systems, Inc.

Sika Sarnafil, Inc.

Tremco, Inc.

William Collins

NRCA / Roofing Alliance

Penn State University

Advanced Green Technologies

DC Taylor Company

DRI Companies

Nations Roof, LLC

Tecta America Corp.

# Executive Staff

Craig Silvertooth

Executive Director

Mary Mai

Director, Corp. Relations

Open

Director, Govt. Relations

Dr. Jim Hoff

Director, Research

Dr. Michal Bartko

Senior Researcher

# Current Activities

- **Organization**
  - Executive board and working committees
  - Expanded membership base
- **Education**
  - NRCA “SpecRight” program
  - “Greening of the Rooftop” program
- **Advocacy**
  - Extension of energy investment tax credits
  - Extension of commercial building energy efficiency deductions
  - Expansion of DOE / EPA research agendas
  - Coordination with building-related non-profits

# The Center for Environmental Innovation in Roofing

## Research Areas of Interest

- **Sustainability / Durability**
  - Life cycle assessment
  - Continuous commissioning
- **Energy Efficiency**
  - Calculation tools
  - Holistic systems
- **Cool Roofs & Cool Roof Alternatives**
  - Vegetative roofs
  - Cool ballast
  - Ballast / vegetative / reflective hybrids

# The Greening of the Rooftop

## Module 5

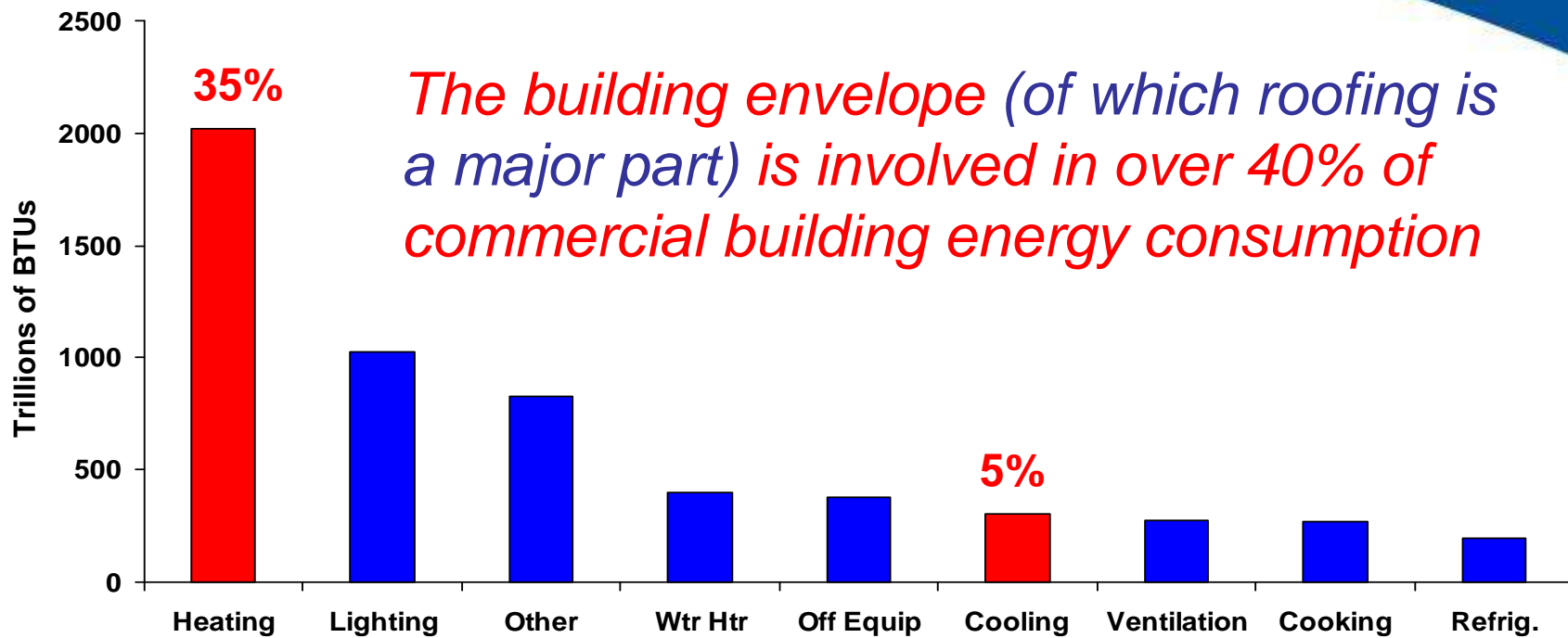
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# Why Roof Green?



# Commercial Buildings and Energy Consumption

## The Building Envelope Opportunity

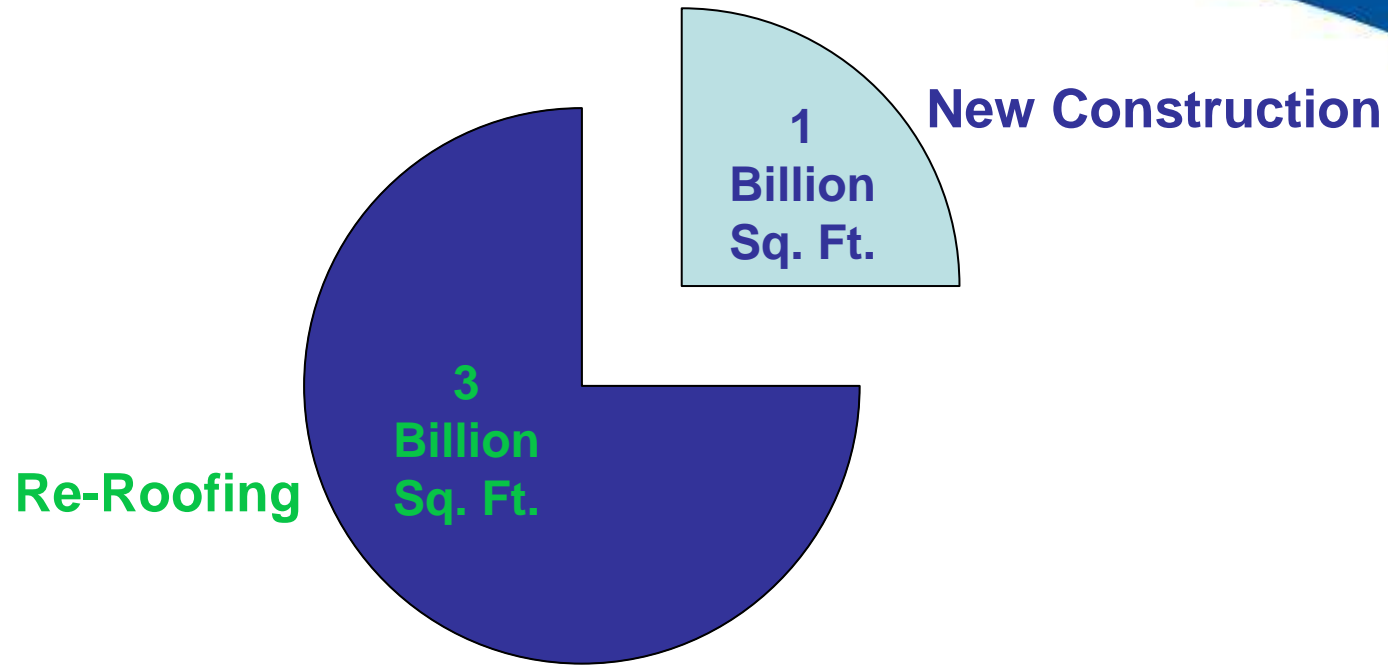


Commercial Building Energy Consumption by End Use



## The Energy Efficiency Opportunity

# Low Slope Commercial Roofing



**North American Low-Slope Roofing Market  
(Billions of Square Feet, 2006)**

# Low Slope Commercial Roofing

**Four billion square feet** of new low-slope roofs are installed each year that can be designed and installed to....

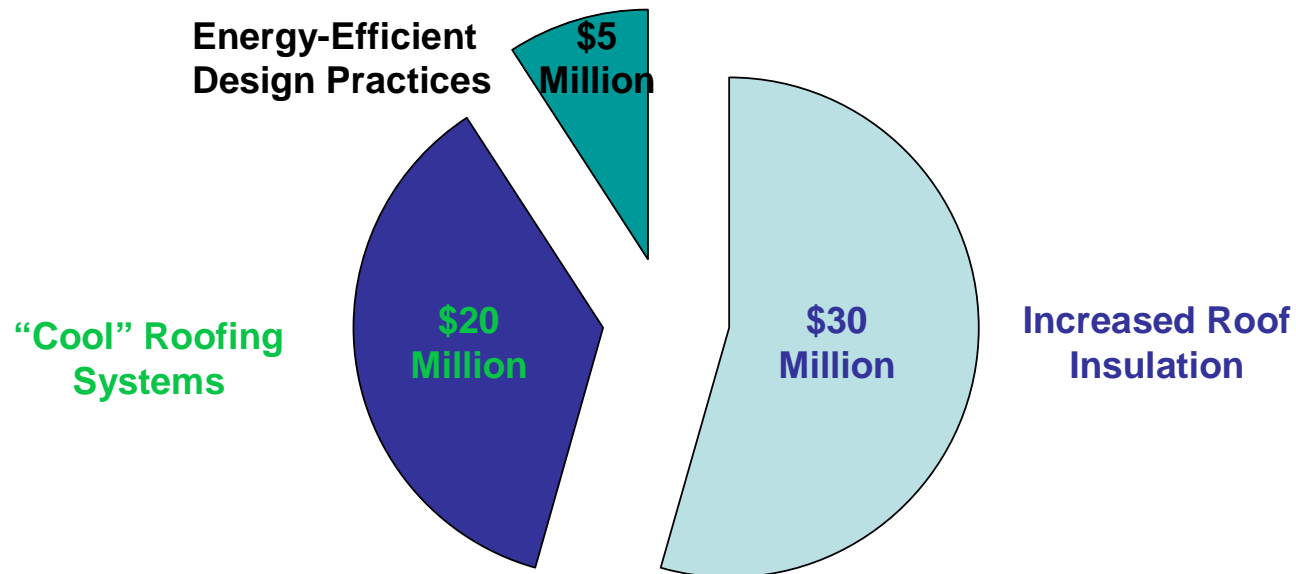
- ***Reduce building energy consumption***
- ***Mitigate the Urban Heat Island Effect***

... provided these roofs are specified to accomplish these goals.

# The Roof Energy Savings Opportunity: Conservative Estimate – 1st Year Savings

***The Immediate Opportunity:  
\$55 Million Annually***

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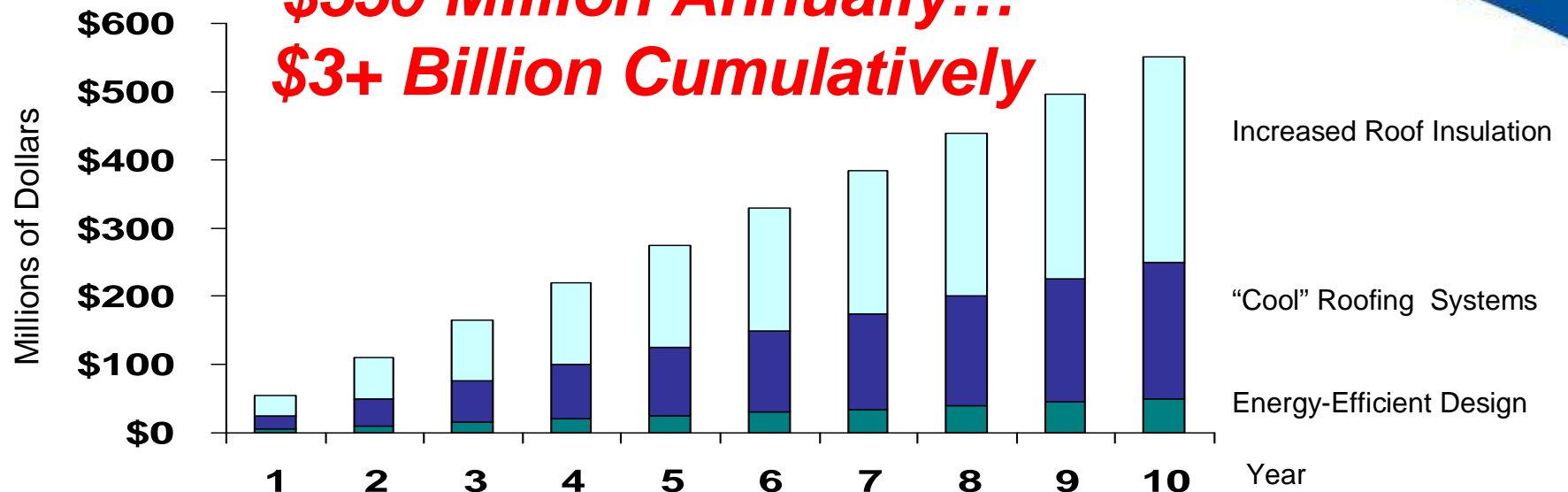
**Potential Annual Energy Savings for  
4 Billion Square Feet of New Low-Slope Commercial Roofing Installations  
(2006 Dollars)**



Source: TEGNOS Research Inc. Assumes 1) Insulation increased to ASHRAE 189.1P recommendations above current ASHRAE 90.1- 1999 standard 2) Cool roofing systems installed in ASHRAE Climate Zones 1-4, 3) Best industry practices implemented, including staggered multiple insulation layers

# The Roof Energy Savings Opportunity: Conservative Estimate – After 10 Years

**The Opportunity after 10 Years:  
\$550 Million Annually...  
\$3+ Billion Cumulatively**



**Annual Potential Energy Savings for  
4 Billion Square Feet of Low-Slope Commercial Roofing Installations  
(2006 Dollars)**



Source: TEGNOS Research Inc. Assumes 1) Insulation increased to ASHRAE 189.1P recommendations above current ASHRAE 90.1- 1999 standard 2) Cool roofing systems installed in ASHRAE Climate Zones 1-4, 3) Best industry practices implemented, including staggered multiple insulation layers

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# Contact the Center

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Mary Mai, Corporate Relations Director ([mary@roofingcenter.org](mailto:mary@roofingcenter.org))

Jim Hoff, Research Director ([jhoff@roofingcenter.org](mailto:jhoff@roofingcenter.org))

