Agenda

- Cooper Industries & Cooper Lighting
- The Opportunity
- Drivers of Energy Efficient Lighting
- Cooper Lighting Capabilities
- Benefits of Energy Efficient Lighting
- Tools & Resources
  - Translating Energy Savings into $ Savings
- Case Study
  - Results
- LED Opportunity
- Summary
Cooper Industries & Cooper Lighting
Cooper Industries is a worldwide manufacturer of electrical products, tools and hardware.

- Operating eight divisions, nearly 100 manufacturing locations, and sourcing centers in China, Mexico, India and Eastern Europe.
- Distribution Facilities Across United States, Canada, Mexico.

- Committed to environmental responsibility
  - Illustrated by eight guiding principles
  - Acknowledged by Cooper’s Environmental Excellence Awards.
Cooper Lighting is one of the world’s largest manufacturers of commercial, industrial, institutional, roadway and residential luminaries.

Committed to energy solutions with energy efficient lighting systems for existing structure retrofits and new construction.

Unparalleled lighting expertise, resources, and field support to close specifications and seal bids.

Full Line of Energy Solutions
Cooper Lighting Product Portfolio

Leadership Brands…

Commercial & Industrial

Residential

Area / Site Utility

International

Broad Portfolio Of Industry Leading Products
**Cooper Lighting Strength**

**Market Leadership**
- Specification Strength with the engineering and architectural community
- Positioned to win in growth markets (Retrofit, Healthcare, Cold Storage)
- World Class Training and LED Center
- Influencing and guiding NEMA Lighting Standards

**Brand Strength**
- Halo “The #1 Brand in Recessed Lighting” for the last 10 years
- Continually recognized by leading organizations on product / innovation
  - Healthcare: Fail-Safe Visual Therapy Luminaire ADEX (Award for Design Excellence)
  - Metalux Modular FBay: ADEX (Award for Design Excellence)
  - iO Lighting LED Track: radii 38 named Best of Category winner in the Track, Low-Voltage, Cable & Rail Systems category

**Technology Leadership**
- Commitment to innovation & strong commercialization
  - LED Products – 50% of new product pipeline
  - Launching 45 new products in 2009
  - New product vitality > 25%
- Technical expertise and capabilities

**Dedicated**
- Best trained Field sales team in lighting spaces (applications, layouts, energy savings, LEED, CEU credits): *Platt U*
- Collaborating on expanding Energy Pipeline opportunities: “*stimulu*$”

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**Strategies & Go-To-Market Approaches**
Energy Opportunity
Inefficient Lighting Systems are Common…

- Lighting represents up to 40% of your electricity bill. Commercial Electrical Use by Technology.
- 80% of buildings have lighting systems installed pre-1986.
- 20% of buildings have some level of upgraded lighting technology.

Fact: most buildings use outdated and inefficient lighting systems.

Increasing Energy Demand and Prices…

- US Electricity Demand
- 6.0 Billion kilowatthours
- Historical and Projected

Source: Edison Electric Institute

Energy Generates Results In All Economic Cycles

- Energy codes driving new lighting products (IECC ~ 1 watt per sq. foot)
- 5x Green Building Demand – including all government buildings to be LEED certified
- Annual retrofit market opportunity with conversion rates:
  - 1% Commercial / 5% Industrial ~ $1B
  - 2% Commercial / 10% Industrial ~ $2B

...Create Opportunity for Lighting Upgrades

- Lighting & Controls Provide Best ROI
  - 49%
  - 47%
  - 31%

Lighting
Controls
All Other

Source: DOE
Market Drivers/Monetary Benefits

- Energy Independence and Security Act of 2007 signed by Congress and President Bush December 2007 and includes lamp, ballast, and system efficiency requirements
- Mercury Vapor
  - 2005 Energy Policy Act bans importing or manufacturing Mercury Vapor ballasts and fixtures supplied with MV ballasts as of 1/1/2008
- Metal Halide
  - Probe Start Metal Halide 150W-400W Luminaires must be Pulse Start MH effective 1/1/2009
- Incandescent Reflector Lamps
  - Efficiency standards for BR, ER, and BPAR lamps between 2.25" (18/8) and 2.75" (22/8) in diameter with a rated > 40W effective 6/2008
  - Exemptions include BR30, BR40, or ER40 lamps rated at 65W; ER30, BR30, BR40, or ER40 lamps rated at or < 50W; R20 incandescent reflector lamps rated at or < 45W; MR16 & Halogen versions are acceptable

Added Green Value

- Last year to push existing EPAct accelerated tax deduction for energy efficient lighting system upgrades
  - One-time tax deduction based on up to $0.60/sq. ft. for one of the building systems that beat and/or exceed ASHRAE/IESNA 90.1
  - Two Types of Auditing the Application under Interim Lighting Rule: Building Area & Space by Space
  - Based on sliding scale achieve up to $0.60/sq. ft beating 90.1 2001 by 40%
    - Warehouse applications must beat 90.1-2001 by 50% to receive $0.60/sq. ft deduction
  - Lighting systems must be capital expenditures that are normally depreciated; simple lamp replacements do not qualify
  - Must be deducted during the taxable year the equipment is placed in service

<table>
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<th>Percentage of LPD reduction beyond Standard 90.1-2001</th>
<th>25%</th>
<th>26%</th>
<th>27%</th>
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<th>29%</th>
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<tr>
<td>Amount of Eligible Tax Deduction/sq. ft.</td>
<td>$0.30</td>
<td>$0.32</td>
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Market Drivers: Bragging Rights

- **Energy Star Buildings**
  - Sell for 30% higher than non-Energy Star qualified buildings
  - Energy Star buildings have higher rental and occupancy rates
  - “Energy Star Certified” recognizes top 25% energy efficient buildings
  - Widely accepted benchmark tool to measure energy consumption
  - Qualification for Energy Star Buildings is the basis for LEED EB (4 Pts)

- **USGBC LEED Program**
  - A fee-based voluntary environmental advocacy standard for the design, construction, and operation of high performance green buildings
  - Existing Buildings (EB), New Construction (NC), Commercial Interiors (CI) Programs

**Bank of America**
One Bryant Park, NYC

**Added Green Value**
ARRA: Estimated Cost by Category

- Stimulus Spending Impacts the Following:
  - Energy efficiency upgrades
  - Federal Buildings
  - Educational Facilities
  - Public Housing
  - Transportation

- $4.5B Federal Building Spending
  - Buildings of 10,000 square feet or greater require LEED certification

- Requirements:
  - Early Opportunity Engagement
  - Drive LEED Awareness / Capabilities
  - Promote Full Cooper Package

Source: Pembroke Consulting, Inc.

Full Participation in Stimulus Funded Opportunities
Quality of Light Improvement

- High Performance Lighting Improves Productivity
  - Studies show improvement averages 3% (Carnegie Mellon Study)
- Next Generation Technology Reduces Lighting System Maintenance
  - Lamp & Ballast Technology
  - Expense Reduction of 50% Possible
- Improve Facility Safety, Reduce Quality Incidents
  - Increased Visual Acuity
    “...Lower illuminances are required from lamps with good color rendering properties to achieve judgments of equivalent brightness, visual clarity, and visual satisfaction than from lamps with poorer color rendering properties.
    “...lamps with color rendering indices (CRI) of 70, 85, and 100 require about 10, 25 and 40% lower illuminances than illuminants with a color rendering index of 60, respectively, to achieve impressions of equivalent brightness.”
    The Lighting Handbook, 8th Edition, IESNA
- Building Values Increased
  - Building Valuation up to 10X Every Dollar Saved
- Environmental Benefits
  - Opportunity Equivalent of 247 Million Cars

Saving Energy is ONLY one of the Benefits of a Lighting System Upgrade
Cooper Lighting
Capabilities
Cooper Energy Efficient Programs

- Cooper provides the following services:
  - Turn-Key Energy Efficient Programs
  - Maintenance reduction and avoidance programs
  - Corporate SKU reduction programs
  - Safety and Productivity enhancement programs
  - Environmental Benefits analysis
  - Legislation and Incentive Programs
Energy Strategy

Product Breadth

Retrofit Products  Linear / Highbay  Recessed / LED  Lighting Control  Svc/Programs

Results

Bank of America
- First High-Rise to Receive LEED Platinum Certification

Animal Supply Warehouse
- $53,000 in Annual Utility Cost Savings
- Payback Period Less Than 1.2 years

Leveraging Products for Results
Energy Growth

Commercial Retrofit Market
- Huge installed base of Opportunity
- New Offerings of Commercial Retrofit Solutions
  - Class R for Architectural Market
- Energy-Savings Solutions in all Product Categories
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- New Offerings of Commercial Retrofit Solutions
  - Class R for Architectural Market
- Energy-Savings Solutions in all Product Categories

Expanding Industrial Position
- New Platforms that Deliver Greater Energy-Savings Over Conventional Fluorescent High Bays
- Updated offering of current products with improvements
  - I5/I8, HB/2HB
- Begin to Leverage LED in Key Applications
  - Cold Storage, Failsafe, Architectural

Focused Market Opportunities
- High Energy Cost/Rebate Markets
  - Northeast, West Coast, Stimulus/Utility Opportunities
- Vertical Market Focus
  - Schools, Healthcare, Office Building
- Controls Integration

Energy Provides Growth Opportunity in Slow Market
Energy Management

**Products/Services**

- Lighting controls
- Occupancy sensors
- High bay lighting controls
- Lighting dimming systems
- Energy management solutions

**End-Markets**

- C&I
- Education
- Healthcare
- Government

*Complementary to existing energy efficient lighting products*

*Controls end markets reached through existing sales channels*

**Products & Systems Targeting Cost Effective Solutions For Performance And Energy Savings**
Tools & Resources
Cooper Lighting’s portfolio of tools helps work you through the steps of lighting system upgrade and guide your process from identifying the opportunity to seeing the savings!

- **Energy Efficiency Tools**
  - Energy Efficiency Tool Kit
  - Payback Proposal Development Software
- **Online Product Information**
  - Specifications
  - Photometry
- **Lighting Layout Calculators**
- **Sales Support**
  - International & Domestic

A Proven Process for Success
Find Out” WHAT’S NEW” with Cooper Lighting!

Cooper’s E-Tools Supports Energy Empowerment
Case Study Results
An international provider of print and related services, engaged Cooper to manage a North American Lighting Upgrade program

- **Customer Needs**
  - Save Energy
  - Reduce Maintenance Costs
  - Improve Lighting Quality positively impacting production processes

- **Program Scope**
  - Program initiated in 2005, continues today
  - 58 Sites, representing 17.4M Square Feet
  - $10M+ Capital Project

- **Turnkey Approach**
  - Needs Assessment
  - Lighting Audits & Analysis
  - Solution & Proposal Development
  - Turnkey Implementation
  - Warranty & Rebate Management

- **Program Results**
  - $5M Annual Energy & Maintenance Savings
  - 84M kWh & 44K tonnes CO2 Emissions Saved
An international provider of Gypsum, Lumber, Plywood and Paper related products, engaged Cooper to manage a North American Lighting Upgrade program

- **Customer Needs**
  - Energy Efficiency
  - Reduce Maintenance/HVAC Costs
  - Improve Lighting Quality
  - Positive impact on Production/Safety processes

- **Program Scope**
  - Program initiated in 2006, continues today
  - 33 Sites, representing 41.7M Square Feet
  - $14+ Capital Project

- **Turnkey Approach**
  - Needs Assessment
  - Lighting Audits & Analysis
  - Solution & Proposal Development
  - Turnkey Implementation
  - Warranty & Rebate Management

- **Program Results**
  - $12M Annual Energy & Maintenance Savings
  - 112M kWh & 86K tonnes CO2 Emissions Saved
**Commercial Retrofits**

### Before – 3-lamp Parabolic

- **18 cell, 3-lamp deep Parabolic**
  - Standard electronic ballast: B3321277RH-A and 735 series lamps
  - **System watts = 86 watts**
    - 59.4 lms/watt

### After – 2-lamp Retrofit Kit

- **12 cell, 2-lamp Retrofit Kit**
  - High performance T8 ballast & high-lumen 835 lamps
  - **System watts = 53 watts**
    - 88.5 lms/watt

$13+ Annual Savings per each Fixture ($0.10/kwh at 4000 hrs/yr)
LED Moving Forward
Lightfair ’09 – New Products

45 Products; ~50% LED
White LED Components

Efficiency vs. Cost

Source: DOE Report "Energy Savings Potential of SSL in General Illumination Applications (High CRI)--Dec 2006"

C&I Fixture Market by Source

LED 2%
Other
HID
CFL
Inc / Hal
Fluor.

LED 20%
All Other 80%

2008
2012 Est.

Attractive LED Fundamentals…
- Rapidly Improving Efficiency
- Significant Cost Reductions
- Long Life - Up to 50x Traditional Lamps

… Improve Adoption Rates & Sustainability Results
- Attractive General Illumination Paybacks
  - Recessed Downlights < 2 yrs
- 33% Potential Reduction in US Lighting Energy Usage by 2027
  - ~ Forty 1000MW Power Plants

Technology – Focus Shifting to Application (Luminaires)
LED Leadership

**World Class Innovation Center**
- LED R&D Center of Excellence for Cooper Industries
- Deliver Speed to Market, Quality, and Reliability for New Products

**Strategic Acquisitions**
- Execute Disciplined M&A Strategy
- Deliver Expertise, IP, and Products that Compliment Cooper Product Roadmaps

**Market Driven Product Development**
- Significant Investments - 50% of Product Development
- Create Real Value for Customers – Energy, Maintenance, Sustainability
Cooper LED Growth Plans

Building Best-in-Class Capabilities…

Technology
- Experienced, Dedicated LED Teams
- Significant R&D Investment - IP, Performance Focus

Products
- Market Driven Product Roadmaps
- Disciplined, 6σ Development Process

Supply Chain
- Capacity & Capability for Speed to Market
  - 11 in North America
  - 2 in China
- Strategic Supply Chain

Commercialization
- Leverage Expertise, Brands, Channel
- Drive Specification with Scale

Well Positioned With Capability & Capacity – Accelerating Investments
**LED Growth Opportunity**

**Recessed Downlight**
- 828 Million Units
- **vs Incandescent:**
  - Up to 75% less energy
  - Long LED Life Eliminates >40 Incandescent Replacements
- **Value:**
- **Market Opportunity @ 10% LED Penetration:**
  - **New Construction:** $1B
  - **Retrofit:**

**Street & Area Lighting**
- 131 Million Units
- **vs Metal Halide:**
  - 30-60% less energy
  - Long LED Life Eliminates >7 Metal Halide Replacements
- **Value:**
- **Market Opportunity:**
  - **New Construction:** $3B
  - **Retrofit:**

Challenging Market Conditions… with Significant Opportunities

Energy & Sustainability – Committing Resources & Reaching End Users for Results

Committed to Driving Competitiveness & Continuous Improvement

Innovation – Investing in Growth Platforms with Technology & Specification Capabilities

Acquisitions – Active & Expanding M&A Pipeline

Executing on Fundamentals for Today & Making the Investments for Sustained, Long-term Leadership