

# 2016 ESC Market Transformation Conference

Louisville, Kentucky

August 23-24, 2016





ESC  
Market  
Transformation  
Conference











Industry Impact and Future Outlook

**ESG**

Presented by  
Yang Collins, President  
Energy Services Group















































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EFFICIENCY  
CLEAN  
STRUCTURE  
EFFECTIVE  
ENERGY  
SUSTAINABLE  
MODERNIZATION  
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GALT HOUSE HOTEL  
*The Heart of Louisville*



ESC  
Market  
Transformation  
Conference

## Collaborative Delivery

NO LONGER ALTERNATIVE

- Design-Build
  - Progressive
  - Fixed Price
- Design-Build Operate
- Public Private Partnerships (P3)
- Construction Management at Risk (CMAR)





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*The Heart of Louisville*



energy  
focus

A Trusted Leader in LED Lighting

[www.energyfocusinc.com](http://www.energyfocusinc.com)

### Intellitube

- Direct Fit or Direct
- Quick and simple
- Direct Fit for plug-
- a fluorescent lamp
- Direct Wire for hig
- energy cost



**TRANE** BUILDING  
ADVANTAGE



**DISCOVER WHAT'S POSSIBLE**

BUILDING CONTROLS &  
AUTOMATION

ENERGY MANAGEMENT  
SYSTEMS & SERVICES

ENERGY PROCUREMENT &  
MANAGEMENT SERVICES

ENERGY  
CONTRACTING

RENEWABLE ENERGY &  
POWER SOLUTIONS



**ENERGY**  
**EFFICIENCY**  
**CLEAN**  
**INFRASTRUCTURE**  
**COST-EFFECTIVE**  
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**ESG** ENERGY SYSTEMS GROUP

**EDUCATION** 

**GOVERNMENT** 

**HEALTHCARE** 

**CORRECTIONS** 

**AIRPORTS** 



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**ESG** ENERGY

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**National**  
Engineering Firm with licenses across nation



**Results**  
Maximum revenues for design firms



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**Flexible**  
No hassles



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value



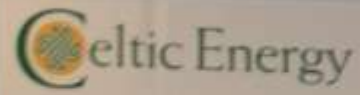


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**Markets Served:**

Federal & State Government, Municipal, School Systems, University, Hospital, Industrial, Commercial & Utility

- CEI has overseen more than \$1 Billion worth of Energy Projects in 25 States
- CEI clients are saving over \$50 Million each year



ENERGY SOLUTIONS FOR A SUSTAINABLE FUTURE



Innovative Energy & Sustainability Consulting, Planning, Management & Oversight



**Services:**

- Performance Contract Owner's Rep
- Measurement & Verification Consulting
- Commercial HVAC Consulting
- Smart Grid/Wireless Solutions
- Energy Audits, Models & Benchmarking
- CHP Resilience Strategies
- Retro-Commissioning
- GHG Carbon Reduction Plans



ENERGY SOLUTIONS FOR A SUSTAINABLE FUTURE



Federal & State Government,  
Municipal, School Systems,  
University, Hospital, Industrial,  
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- Measurements & Monitoring
- Commercial PACE Consulting
- Smart Grid/Microgrid Solutions
- Energy Audits, Models & Benchmarking
- CHP/Resilience Strategies
- Retro-Commissioning
- GHG Carbon Reduction Plans



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40K+

COOLERS &  
FREEZERS  
REPORT

1.5+

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KWH  
SAVED

NRM

20+

YEARS  
HELPING  
COMMERCE  
LIVE YOUNG

40%

AVERAGE  
REDUCTION  
OF ENERGY  
CONSUMPTION

HARVARD UN

TOTAL # OF WAIR  
COOLING & FREE

35

ANNUAL ENERGY

216,700

ON



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solutions

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sustainability  
solutions



**Intelligent**  
Conservation Systems, Inc.

The Leading Provider of  
**Correctional Water**  
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Customized  
Turn-Key Op  
Advanced R  
Outstanding

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Your success is our commitment.

**EXPENSIVE**

*energy*

**INEFFICIENT**

**WASTEFUL**

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ng, sustainable  
munities.

...and communities, attract and retain  
...your community grows, just  
...with us.



A more comfortable,  
safe and sustainable world.



**Values**

**INTegrity**  
Honest, ethical, open, and easy to do business with.

**CUSTOMER SATISFACTION**  
We have a passion for helping you save, and we're committed to the highest level of customer care. We'll do whatever it takes to make sure you're satisfied.

**EMPLOYEE ENGAGEMENT**  
We have a passion for providing excellent customer service, and we're committed to the highest level of employee engagement.

**INNOVATION**  
We have a passion for providing excellent customer service, and we're committed to the highest level of innovation.

**SUSTAINABILITY**  
We have a passion for providing excellent customer service, and we're committed to the highest level of sustainability.

**AMERESCO**

**HIGHER EDUCATION**

Facing Students through savings.

Solutions to your challenges such as rising utility costs, altered maintenance, and budget cuts.

Our innovative energy experts have assisted higher education clients throughout North America for over a decade.

**AMERESCO**

**Green • Growth**



Atlantic Energy Concepts  
Your success is our commitment.

**ASK US HOW YOU CAN SAVE**



Atlantic Energy Concepts  
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Your Key to Energy Efficient  
Lighting Solutions

AUDIT \* ENGINEERING \* INSTALLATION \* SAVINGS




ESG Better  
Challenge!

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CHARLOTTE  
ATLANTA

 ENGINEERING DESIGN

 ENERGY AUDITING SERVICES

RENEWABLE DESIGN

 COMMISSIONING

ENERGY EFFICIENCY

# GREEN

Commitment  
to  
Environmental  
Stewardship

LEED  
Energy Star Partner  
USGBC  
Sustainability

# BUILDING

Comfortable,  
Safe and  
Productive  
Environments



• Cities  
• Counties  
• C

# SOLUTIONS

Proven  
Self-Funded  
Results

*Dedicated to  
providing  
comprehensive  
solutions for your  
quality needs.*







**SYLVANIA**  
LIGHTING SOLUTIONS

SUSTAINABLE

1st Site Challenge

GEI

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ENGINEERING

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ATLANTA



ENGINEERING DESIGN



ENERGY







# Performance Services

DELIVERING HIGH PERFORMING  
BUILDINGS WITH OPTIMAL  
ENVIRONMENTS SINCE 1998

INTEGRATED DESIGN AND DELIVERY

GUARANTEED PERFORMANCE

NO CHANGE ORDERS

VENDOR INDEPENDENT

ENERGY LEADERSHIP PROGRAM



# Performance

**Performance Services**

DELIVERING HIGH PERFORMING BUILDINGS WITH OPTIMAL ENVIRONMENTS SINCE 1998

- INTEGRATED DESIGN AND DELIVERY
- GUARANTEED PERFORMANCE
- NO CHANGE ORDERS
- VENDOR INDEPENDENT
- ENERGY LEADERSHIP PROGRAM

ENERGY STAR PARTNER

**Performance Services**

# POWERSMITHS

*Optimized Performance for the Application Load*

Supporting Energy Performance Contracts with

New Infrastructure

Verified Energy Savings

Full M&V Service


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Sustainable Energy Solutions 

REDUCE ENERGY CONSUMPTION  
INCREASE SUSTAINABILITY  
CREATE A SAFER ENVIRONMENT



  
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WOMEN OWNED  
 

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Facility Solutions through savings.

Solutions to your challenges such as rising utility costs, deferred maintenance, and budget cuts.

Our innovative energy experts have assisted higher education clients throughout North America for over a decade.

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Green • Clean • Sustainable

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K-12

Facility Solutions through

Improve your classroom environment through upgrades.

Solutions to your challenges such as rising utility costs, deferred maintenance, and budget cuts.

Our innovative energy experts have assisted k-12 clients throughout North America for over a decade.

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# eProjectBuilder

ESPC Data Management Tool

In-Person Training: ESC Conference

U.S. DEPARTMENT OF  
**ENERGY**  
Energy Efficiency &  
Renewable Energy





## Vision

A more comfortable,  
safe and sustainable world.



## Values

### INTEGRITY.

Honesty, fairness, respect, and safety are of the utmost importance.

### CUSTOMER SATISFACTION.

Our future depends on us helping to make our customers successful. We are proactive and easy to do business with. We offer expert knowledge and practical solutions, and we deliver on our promises.

## Increasing energy and operational efficiency.

Johnson Controls provides street lighting, wastewater, building equipment, controls, security, integration, automation, management, and financing for better building efficiency.

## Building healthy, strong, sustainable communities.

Well-maintained communities attract and retain residents. As your community grows, your economy flourishes.

g energy  
tional

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We foster a culture that promotes excellent performance, teamwork, inclusion, leadership and growth.

### INNOVATION.

We believe there is always a better way. We encourage change and seek the opportunity it brings.

### SUSTAINABILITY.

Through our products, services, operations and community involvement, we promote the efficient use of resources to benefit of people and the world.



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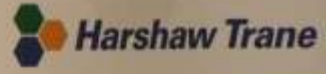




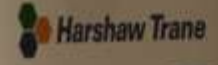
**ESC Selfie  
Challenge!**

Upload your conference selfies on  
the Energy Services Coalition  
Facebook page

GREEN GROWS  
**GREEN**




**see**   
sustainable • energy • environment



**Harshaw Tran**


GREEN GROWS  
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**see** 

sustainable + energy + environments

 **Harshaw Trane**



**Harshaw Trane**









GREYHOUND HOTEL  
The Heart of Cincinnati

  
ESC  
Market  
Transformation  
Conference

Doug Miller  
Steve Miller  
Todd Miller







Gay House Hotel  
The Heart of Louisville

ESC  
Market  
Transformation  
Conference

### Energy Programs and...

- Energy Star Challenge
- EPA Top 25 City List
- Energy Star Certification Program
- Louisville Energy Alliance
- Johnson Controls ESP
- Energy Work Group



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*The Heart of Louisville*



John Boyd

Maria Koetter

Billie Hardin

Joe Wolford



**Energy**  
Programs and Projects Overview

- Energy Star Challenges
  - EPA Top 25 City List
- Energy Star Certification Program
  - Louisville Energy Alliance
  - Johnson County ESMC
  - Energy Risk Group







## Kentucky Fun Fact:

- All Reynolds Wrap Aluminum Foil is produced in Louisville, KY
- Founded in 1919

## Kentucky Fun Fact:

- Mammoth Cave is the world's longest cave and was first promoted in 1816, making it the second oldest tourist attraction in the United States. Niagara Falls in New York is the first.





LADIES


TAKE THE LEAD



ESC Market Transformation Conference





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Christine Keck

Josh Howes











Christine Keck

Josh Howes

Donald Gilligan

David Terr





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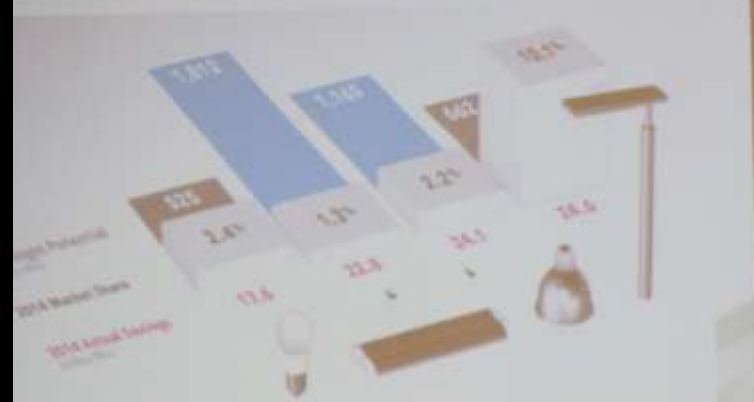
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## Why LEDs are important

can save a tremendous amount of energy – an estimated Trillion BTUs\* – and conversion has really only just begun



Data presented at Strategies in Light, March, 2016 by James Broderick, Ph.D., U.S. DOE













### States' Role in ePB

- Provide opportunities for ePB users to make decisions about ePB's benefits
- Agree with ePB team of appropriate information to share ESPC items and ES22s
- Encourage or require use of ePB for ESPC
- Work with ES22s and agencies to populate ePB
- Provide feedback to inform future system program user reporting needs











**TRANE** BUILDING  
ADVANTAGE

ER WHAT'S POSS

ENERGY MANAGE  
SYSTEMS & SERV

ENERGY TRACTING | RENEWABLE  
POWER

energy

energy  
focus

**LINEAR  
FLUORESCENT  
RETROFIT  
LED LAMP**

ntellitube.

- Direct Fit or Direct Wire Applications
- Quick and simple lighting upgrade
- Direct Fit for plug-and-play replacement of a fluorescent lamp



**TRANE** BUILDING  
ADVANTIA

DISCOVER WHAT'S I

BUILDING CONTROLS &  
ENERGY

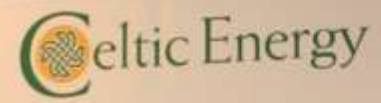
ENERGY MANAGEMENT  
SYSTEMS & SERVICES

ENERGY  
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RENEWABLE  
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Consulting, Providing Energy  
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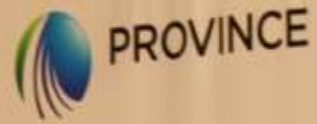


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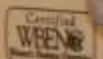




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INCREASE SUSTAINABILITY  
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