

High Performance Building Congressional Caucus Coalition

Developing and Implementing Necessary Technologies

Evan Gaddis

President & CEO

June 15, 2010

WHY HERE ? - NEMA AND ITS MEMBERS ARE A VALUABLE ALLY To Commercial Enterprise, Industry, Consumers, & State, Local, & Federal Government

Asking For Legislative and Policy Support

That Will Result In...

- Building Star
 - HR 5476 and S 3079
- Commercial Building Tax Deduction
 - HR 4226 and S 1637
- Code Enforcement
- Building Labeling
 - Energy Star
 - Home Star
 - HR 5019 and S 3434
- Federal Personnel Training Act
 - HR 5112 and S 3250

Vast savings of annual out-of-pocket expense to consumers, business, and government

Greater **occupant productivity** per building

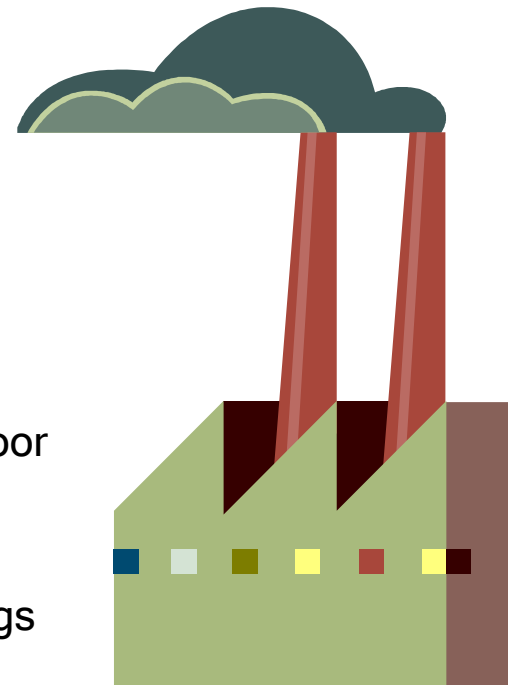
Greatly **reducing carbon emissions**

THE CASE FOR CONSTRUCTING HIGH PERFORMANCE BUILDINGS

Many Variables - Emissions, Power Use, Health, and Safety

Data from the U.S. Energy Information Administration illustrates that buildings are responsible for...

- Almost half (48%) of all greenhouse gas emissions annually
- Using 76% of all electricity generated by U.S. power plants
- Contributing to health problems such as asthma and allergies due to poor indoor environmental quality
- And, since the events of 9/11, safety has become paramount in buildings with security-related expenditures one of the fastest rising expenses.



Motivate a response from government and the private sector

THE SCALE OF THE OVERALL OPPORTUNITY IS HUGE

\$924 Billion Per Year

Segment	New Construction	Retro-fit
Federal government	\$25 billion/year	~\$4 billion/year
State & local govt	\$125 billion/year	~\$25 billion/year
Commercial & Industrial	\$170 billion/year	~\$50 billion/year
Residential	\$375 billion/year	~\$150 billion/year

Resulting in opportunities for high performance technologies in industry sectors

ENERGY EFFICIENT ELECTRICAL EQUIPMENT & SOLUTIONS SAVE Paying Big Dividends For Building Owners And The Public

\$125 billion per year spend for electricity in the private sector

- Industrial motors
- Lighting
- HVAC
- and other electrical equipment

\$25 billion per year - potential savings with energy-efficient technologies

Potential energy efficiency gain equivalents:

- Removing ~25 average-sized coal-fired power plants from service
- Or, alternatively powering all the homes in Texas

Potential reductions in carbon emissions

- 200 million metric tons per year
- Or, the same as removing the emissions of 35 million automobiles

The electro-industry offers specific help

PROVIDING NECESSARY TECHNOLOGIES THAT ARE AVAILABLE TODAY

Electrical Components And System Solutions

Building Management Systems

Advanced Metering

Infrastructure Wiring and Raceways

Motors and Motor Controls

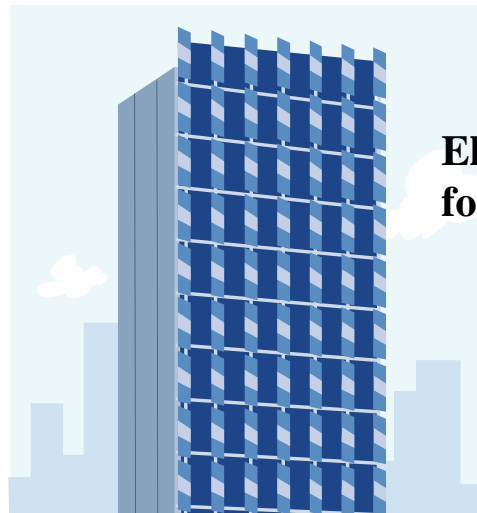
**Electrical Safety and Protection Solutions
for Equipment and Personnel**

HVAC Controls

**Signaling Protection Devices,
Security Systems, and Emergency
Systems**

Lighting and Lighting Control Systems

Distribution Transformers



So, what will enable the electro-industry?

INCENTIVES

- 💡 Necessary today because emphasis when constructing is on “first cost”
- 💡 Drive immediate demand that can positively influence creation of jobs
- 💡 Positive approach that requires investment in order to achieve
- 💡 **“Building Star”** is the correct approach because it addresses all elements of the energy efficiency lifecycle



ONGOING MONITORING AND MAINTENANCE IS CRITICAL But, Requires Up-Front And On-Going Training

**Robust Automation, Control and Monitoring of Energy Usage
can deliver up to 30% Energy Savings**
(optimize to use minimum energy and only when necessary)

SUMMARY - NEMA AND ITS MEMBERS ARE A CRITICAL ASSET But, Need A Favorable Legislative And Policy Environment

The Issues

- Incentives
- Construction
- Building Labeling
- Monitoring & Management Systems

The Government Can Help By Supporting

- Building Star & Commercial Building Tax Deduction
- Code Enforcement
- Building Labeling – Energy Star, Home Star, etc...
- Federal Personnel Training Act

Result Per Building

Vast savings of annual out-of-pocket expense to consumers, business, and government
Greater **occupant productivity**
Greatly **reducing carbon emissions**

ANNOUNCEMENT - LAUNCH OF ENERGY AWARE PROGRAM

Electronic Programmable Thermostats

NEMA members recognize importance of residential properties...



...Substantial energy efficiency and substantial energy savings opportunities

Program for significant energy efficiency in residential applications...

...through third party performance testing to the NEMA DC3 standard