

# Getting Businesses to See, Be Challenged By Their Peers

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# Agenda

- Background
- Gaps between potential and participation
- Marketing strategy
- Segmentation delivers results
- Lessons learned

# Snapshot

- 22.2% energy reduction by 2025
- 7.75% peak demand reduction by 2018
- Three Year Action Plan, 2009-2011
  - 842.3 GWH(C&I 63% of goal)
  - 260.5 MW (C&I 85% of goal)
- Three Year Plan for 2012-2014 filed
  - 1651.1 GWH
  - 247.3 MW

# Potential vs Participation

## Match

Segment	Market Potential	Participation
Education	17%	16%
Primary Metals/Heavy Manufacturing	28%	29%

## Gaps

Segment	Market Potential	Participation
Offices	33%	13%
Restaurants	8%	1%
Grocery Stores	6%	3%
Chemicals & Allied Products	13%	3%

# Marketing Strategy

- Customer services
- Education and training
- Audits
- Case studies
- Blitz
- Program incentive bonus

# T12 Case Study



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# Education & Information Approach

**AEP OHIO**  
Part of American Electric Power  
AEP Ohio Energy Solutions

## T12 Fluorescent Lamps to be Phased Out in 2012

**Key Points**

- New federal lighting standards will eliminate most commercially available T12 lights after July 2012.
- For facilities using T12 lamps, maintaining outdated lighting systems will become more difficult.
- Energy savings and incentives can offset the costs of upgrading to more efficient lighting products.



Source: <http://www.aep.com>

If your facility is still using T12 fluorescent lamps, you may want to consider a lighting upgrade. Why? New federal lighting performance standards that take effect on July 14, 2012 will virtually eliminate most commercially available T12 lamps from the market.

The new lighting standards are the result of energy conservation requirements contained in the Energy Independence and Security Act of 2007. The standards apply to all 4-foot, 6-foot, and U-shaped fluorescent lamps and require minimum efficacies in lumens per watt (see this U.S. Department of Energy [fact sheet](#) for details). Most currently available T12 lighting products cannot meet these new standards and will no longer be manufactured or sold in the United States after the July 2012 deadline.

The impact of the new standards will be felt by facilities across the country. The National Lighting Bureau estimates that as many as 500 million T12 fixtures are still in place. (NLB 2011) Although there is no requirement for facilities to immediately upgrade from T12 lights, maintaining outdated lighting systems will become more difficult and expensive after replacement components are no longer available.

T12 lamps are an older and inefficient technology and more efficient alternatives, such as T8 and T5 lamps, are widely available. These lighting alternatives not only save energy, they last longer and provide better light quality. Simply replacing a standard T12 lamp and ballast with a T8 lamp and electronic ballast can result in energy savings of up to 40%, according to the Consortium for Energy Efficiency.

Although upgrading a lighting system can be expensive, state and local rebates and incentives can help to offset upfront costs and shorten the return on your investment. Search the [Database of State Incentives for Renewables & Efficiency \(DSIRE\)](#) for programs available in your area. In addition, your lighting upgrade may qualify for the [Commercial Building Tax Deduction](#), which allows building owners to claim up to 60 cents per square foot of building space in tax incentives for installation costs.

**References**

National Lighting Bureau (NLB). "Too Few Commercial Lighting Decision-Makers Use the Cash for 'Counter-Lighting' Program and We All Pay," Says National Lighting Bureau. 2011.

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- Informative
- Low key
- Emails from customer service
- All business accounts



# Segmentation Began at Schools

## T12 Fluorescent Lighting Phase Out

### Incentives Reward Energy Efficiency & Boost Bottom Line For Schools

**Did you know?** The U.S. Department of Energy has mandated that T12 fluorescent lamps be phased out of production as early as July 2012.

**Now is the time and AEP Ohio is here to help.** It's time to replace inefficient T12 lighting systems with lighting that is energy efficient. Save money on electric bills and create a brighter, more pleasant learning environment.

**Schools can start saving now.** When a school district replaces T12 fluorescent lamps and magnetic ballasts with T8 fluorescent lamps and electronic ballasts, the energy savings of 30 to 40 percent begins immediately and will be evident on your first electric bill after installation is complete. Adding occupancy sensors and timers to classrooms and offices further reduces energy usage.

Through Oct. 1, 2011 schools receive an additional 10 percent incentive on T12 to T8/T5 lighting retrofits from AEP Ohio.

Summer  
T12 Bonus!



Bright, energy efficient T8 lamps are helping the Eastern Local Schools save about 30-40% on their electric bills. From AEP Ohio will never be higher than they are now.

### Project Spotlight

**Eastern Local School District**  
Located in Pike County (Ohio), Eastern Local Schools saw the chance to become more energy efficient with the help of incentives from AEP Ohio and Ohio House Bill 364. The district replaced outdated lighting, added lighting and HVAC sensors and installed variable frequency HVAC drives. The results speak loud and clear to the bottom line. The district is realizing approximately \$3,000 per month in electric bill savings in addition to nearly \$22,577.15 in project incentives paid by AEP Ohio.

"Our contractor knew all about the AEP program, which had incredible incentives for our district."

- Rodney Schilling,  
Eastern Local  
District Treasurer

"H.B. 364 offered a loan mechanism for financing. Our contractor knew all about the AEP program which had incredible incentives for our district," said Rodney Schilling, treasurer of the Eastern Local School District.



### Project Spotlight

**Ohio Valley School District**  
This Adams County (Ohio) school district chose energy efficiency as a way to boost its bottom line. The installation of T8 lighting systems (replacing inefficient 400-watt metal halide fixtures) in the high school and elementary school gymnasiums along with two HVAC rooftop unit upgrades helped the district earn \$14,950 in incentives from AEP Ohio.

"We would have not been able to even consider doing the lighting projects without the AEP Ohio incentives."

-Steve Wells, LEED AP  
Facility Manager

"We would have not been able to even consider doing the lighting projects without the AEP Ohio incentives," said Steve Wells, LEED AP, facility manager for the school district. "We completed our ROI calculations and presented the district's school board with a case it could not refuse."



**There is more you can do.** Schools have other ways to save energy and increase the incentive earned from AEP Ohio. Here are just a few:

- Replace high intensity discharge (HID) lights – commonly found in gyms and auditoriums – with T8 or T5 high output fixtures
- Replace incandescent bulbs with compact fluorescent lamps (CFLs)
- Put computers to sleep with Network Power management software. AEP Ohio pays \$10 per computer
- Replace EXIT signs with L.E.D. or electro-luminescent signs that use less energy and have a longer life. AEP Ohio pays \$25 per sign

### Other School Programs

**E3 Smart** is a FREE program for schools in AEP Ohio service territory. Teachers interested in energy efficiency education for grades 5-9 may sign up for AEP Ohio's e3smart program and receive free curriculum and free efficiency items for students to share with their families. Please contact Sherry Hubbard at 614-883-7886 or [sjhubbard@aep.com](mailto:sjhubbard@aep.com) for further information.

**Fundraiser with a Twist** is AEP Ohio's CFL Fundraiser. Schools, clubs or other non-profit organizations can raise money while increasing energy efficiency awareness. Participating organizations receive \$0.50 for each working incandescent bulb that is replaced with a CFL in homes and facilities that serve elderly, infirmed or low-income customers in AEP Ohio's service territory. Contact Shari Zehala at 614-883-7887 or [szehala@aep.com](mailto:szehala@aep.com) for more information and how to participate.

Learn more. Please visit [www.gridSMARTOhio.com](http://www.gridSMARTOhio.com) or contact Gary Enama at [glenama@aep.com](mailto:glenama@aep.com) or 330-308-6142 or Al Kohler at [awkohler@aep.com](mailto:awkohler@aep.com) or 330-308-6002. Both program managers can provide more information on how your school district can save energy and money.



Built in 1967, Peebles High School was a part of the district-wide overhaul that made buildings more energy efficient by replacing T12 lighting fixtures and other measures.



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# Expanded to Offices and Restaurants

## T12 Fluorescent Lighting Phase Out

### It's Not Too Good to Be True... Energy Efficiency Measures Earn & Save Your Business Money

#### Did you know?

The U.S. Dept. of Energy has mandated that T12 fluorescent lamps be phased out of production as early as July 2012. National distributors are planning T12 equipment price increases of 5 to 20 percent in the coming months in anticipation of rising demand.

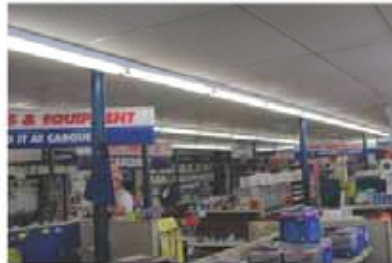
Embracing change is difficult. But this change saves you money—today and in the long run with incentives and lower electric bills.

#### Now is the time. AEP Ohio is here to help.

It's time to replace inefficient T12 lighting systems with energy efficient T8 or T5 fluorescent lighting. Save money on electric bills and create a brighter, more pleasant retail or office environment. The Business Incentives program from AEP Ohio pays you to be more energy efficient. Changing out your T12 lamps is only the start. There are incentives for occupancy sensors, LED exit signs and other measures that decrease your electric bills.

#### Start saving now.

When you replace T12 fluorescent lamps and magnetic ballasts with T8 fluorescent lamps and electronic ballasts, typical energy savings of 30 to 40 percent begins immediately. After installation is complete, your first electric bill will reflect your savings.



Lighting retrofits often increase smart reflection and productivity and decrease turnover. Increased productivity increases customer satisfaction as well.

### Energy Efficiency Tips For Office and Retail

Consistent and quality lighting are key components of any office or retail environment. The right blend boosts productivity and reduces turnover by creating a pleasing environment. Some of the most common energy efficiency measures in office and retail spaces are:

- **Lighting** – Replace T12 lamps with higher efficiency T8 and electronic ballasts to save 25 percent of lighting energy costs.
- **HVAC/VRD** – Install variable speed drives (VSDs) on fans and compressors and save 12-28 percent, depending on your application.
- **Controls and sensors** – Install occupancy sensors in storage areas and waiting rooms to reduce energy use 45-65 percent.
- **Exit signs** – Replace all incandescent exit signs with LED exit signs and save about 300 kWh per year per sign.

Always look for the ENERGY STAR® label when purchasing kitchen equipment such as commercial fryers, refrigerators, freezers, steam cookers, hot holding cabinets and salad dress dispensers and toasters. ENERGY STAR equipment is more efficient than standard equipment.

Visit [www.gridSMARTOhio.com](http://www.gridSMARTOhio.com) or contact Gary Travers at 330-308-6142 or [gtravers@trp.com](mailto:gtravers@trp.com) or Al Kubler at 330-308-6882 or [akubler@trp.com](mailto:akubler@trp.com). Both programs help you see price and start information on how your office or business can save energy and money.



## T12 Fluorescent Lighting Phase Out

### It's Not Too Good to Be True... Energy Efficiency Measures Help Your Restaurant Save Money

#### Did you know?

The U.S. Dept. of Energy has mandated that T12 fluorescent lamps be phased out of production as early as July 2012. National distributors are planning T12 equipment price increases of 5 to 20 percent in the coming months in anticipation of rising demand.

Embracing change is difficult. But this change saves you money—today and in the long run with incentives and lower electric bills.

#### Now is the time. AEP Ohio is here to help.

It's time to replace inefficient T12 lighting systems with energy efficient T8 or T5 fluorescent lighting. Save money on electric bills and create a brighter and more pleasant environment for your business. The Business Incentives program from AEP Ohio pays you to be more energy efficient. Changing out your T12 lamps is only the start. There are incentives for occupancy sensors, LED exit signs and other measures that decrease your electric bills.

#### Start saving now.

When you replace T12 fluorescent lamps and magnetic ballasts with T8 fluorescent lamps and electronic ballasts, typical energy savings of 30 to 40 percent begins immediately. After installation is complete, your first electric bill will reflect your savings.



Opening a restaurant is energy intensive. AEP Ohio offers customer incentives that offset the capital investment and actually pay for equipment in the long run.

### Energy Efficiency Tips For Restaurants

Restaurants are energy-intensive. Lighting and cooling consume most of the electricity in a setting where customer comfort is vital to success. Here are some other common energy savings strategies for restaurants:

- Install occupancy and daylight sensors in break rooms, restrooms, walk-in coolers, kitchens and closets; AEP Ohio pays \$0.10 to \$0.12 per connected watt.
- Install LED Exit signs which use 20 percent less energy (Exit signs are 12W); AEP Ohio pays \$26 per sign.
- Add VFDs to your kitchen exhaust systems; AEP Ohio pays \$60-\$800 per horsepower.
- Replace your old air conditioning unit with a high efficiency unit and receive \$50-\$60 per ton with an additional bonus for going above the minimum ENERGY rating.
- Replace your fan motor with a high efficiency fan motor and receive a \$100-\$200 incentive per unit.
- Replace your T12 case lighting with LED refrigeration case lighting; AEP Ohio pays \$60 per foot.

Always look for the ENERGY STAR® label when purchasing kitchen equipment such as commercial fryers, refrigerators, freezers, steam cookers, hot holding cabinets and salad dress dispensers and toasters. ENERGY STAR equipment is more efficient than standard equipment.

Visit [www.gridSMARTOhio.com](http://www.gridSMARTOhio.com) or contact Gary Travers at 330-308-6142 or [gtravers@trp.com](mailto:gtravers@trp.com) or Al Kubler at 330-308-6882 or [akubler@trp.com](mailto:akubler@trp.com). Both can provide more information on how your restaurant can save energy and money.



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# T12 Marketing



There's a lot of money tied up in your lighting.

Switch to energy-efficient T8 or T5 lighting and save up to 33% a year on your energy costs. Plus, right now, save even more with incentives from AEP Ohio business energy efficiency programs. Call 855-829-9624 or visit [gridSMARTOhio.com](http://gridSMARTOhio.com) for more information.

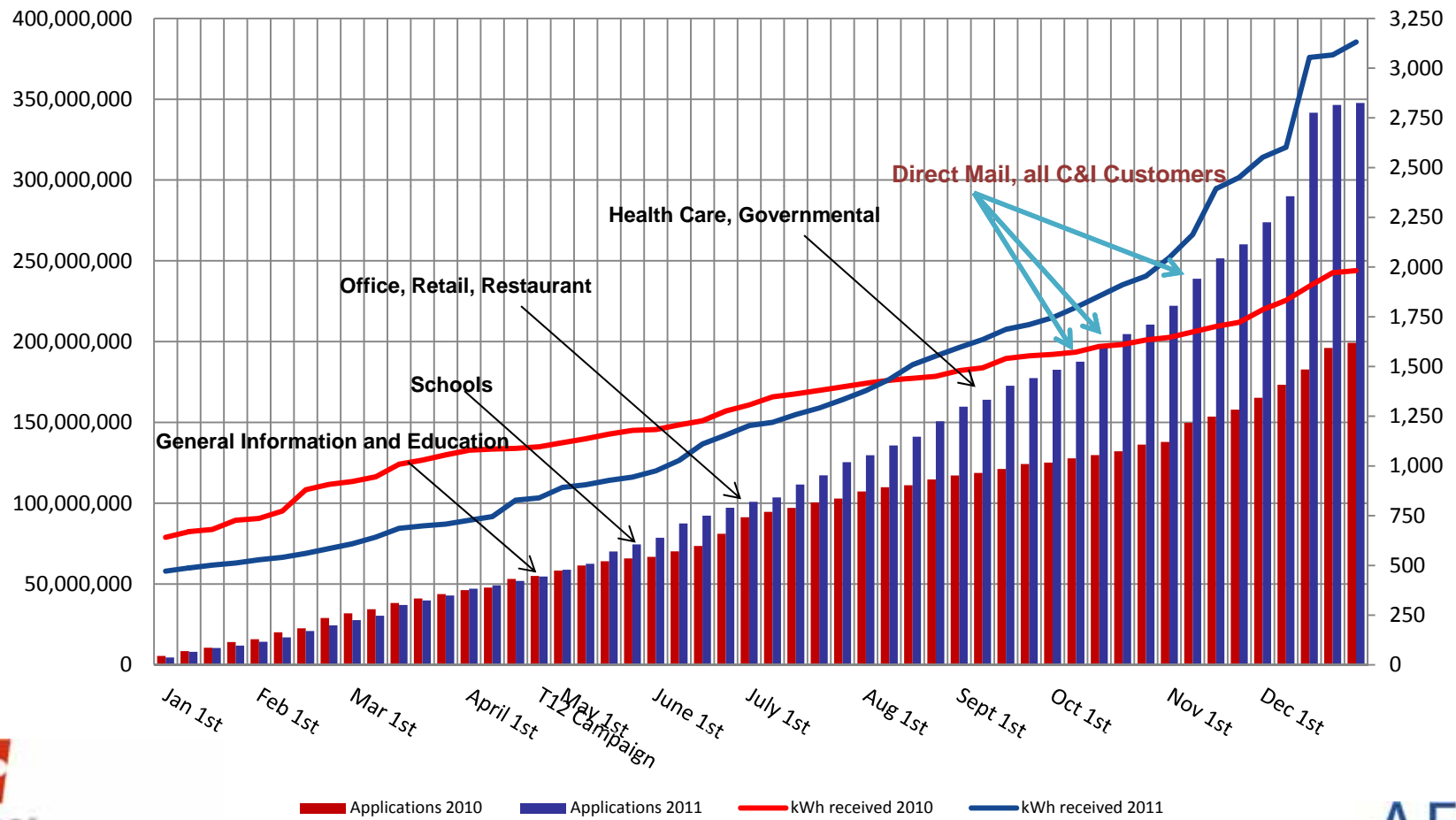


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# Results

## Marketing Effects on Program Participation Cumulative Application Count and YTD kWh Savings



# Going Forward

- New approaches
  - Segmentation
    - Water/wastewater seminars
    - Data centers
  - On-line application
  - Continuous improvement
  - Energy efficiency auction
  - Retro-commissioning

# Wrap Up

- Challenges on the horizon
  - Efficiency goals are increasing.
  - Standards are being raised.
- No substitute for understanding customer behavior.
- Better understanding coupled with solid execution delivers results.

# Thank You

Sherry Hubbard, AEP Ohio

Andrew McCabe, AEP Ohio

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John Shen, KEMA Services, Inc.





## Save the Date

May 15-17, 2012

**AESP's Spring Conference  
Baltimore, MD**

Oct. 15-17, 2012

**AESP's Fall Conference  
Long Beach, CA**

Jan. 28-31, 2013

**AESP's 23<sup>rd</sup> National Conference  
Orlando, FL**

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