

Business Energy Programs

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The logo for The Dayton Power & Light Company, consisting of the letters "DP&L" in a bold, white, serif font, centered within a blue oval shape.

DP&L

Why Business Rebates?

May 2008 – Ohio Senate Bill 221

DP&L S.B. 221 Targets

	2009	2010	2011
% of Energy Delivered	0.3%	0.8%	1.5%
DP&L MWh Goal	44,933	118,606	222,386
DP&L MW Goal	32	56	80

Targets are cumulative and reach 22% by 2025

These targets will be achieved using a portfolio of:


- Energy Efficiency
- Demand Response
- Advanced Metering Infrastructure (AMI)
- Smart Grid Development

DP&L Business Rebate Programs

2010 Business Rebate Program Goals

Energy	Demand
35,886 MWh	8.7 MW

Rebates Include:

- Incentives for energy efficiency upgrades and equipment
- Array of eligible project categories and opportunities
 - Rapid Rebates
 - Custom Rebates
 - New Construction Rebates 
- **\$2.68 Million in incentives for 2010**


What Measures are Eligible for an Incentive?

Rapid Rebates:

Lighting

- Fluorescent Lighting Retrofits
- Sensors and Controls
- LED Traffic and Exit signs

HVAC

- Efficient Air Conditioning
- Water Cooled Chillers
- Heat Pump Water Heaters
- Geothermal
- Thermal Storage 

Motors, Drives and Air Compressors

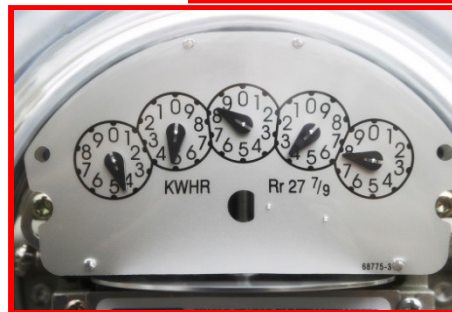
- NEMA Premium Efficiency Motors
- Variable Frequency Drives
- Variable Speed Air Compressors
- Efficient Pumps

Custom Rebates:

- Efficiency improvements not captured by the Rapid Rebates
- Industrial Process Improvements

Ineligible Measures

- ⊗ Fuel switching
- ⊗ Solar/Wind projects
- ⊗ Onsite generation
- ⊗ Demand Response
- ⊗ Residential applications (other incentives available)



What are the Incentive Guidelines?

- Applicants must be DP&L customers
- Measures must meet specifications on DP&L's website
- DP&L dispenses funding on a **first-come, first-served** basis until funds are exhausted for the calendar year

Rapid Rebates

- Pre-approval is not required for most measures
- Can apply for projects started after January 1, 2010
- **Accepting rebate applications for 2009 projects through March 31, 2010**

Custom Rebates

Pre-approval is required!!!

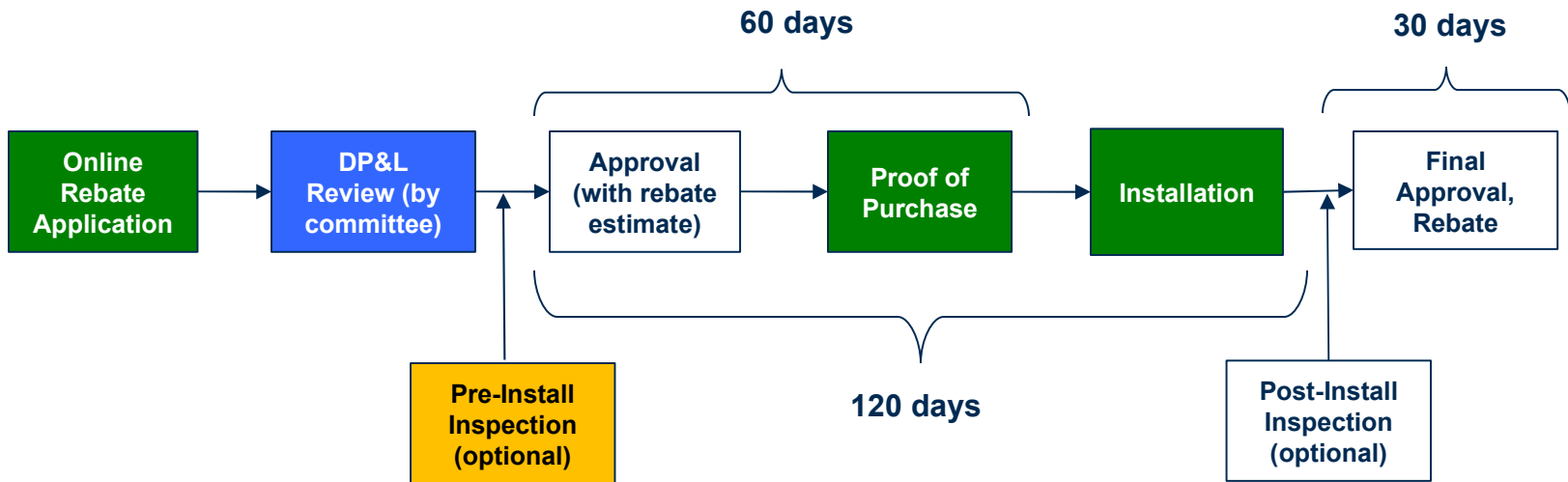
New Construction Rebates


Application must be submitted while project is in design phase




The Rebate Process

(For Rapid Rebates and Custom Rebates)



 Customer/contractor responsibility

 Custom program only

 Custom program and select Rapid Rebates

- Applicants can re-apply for funds but reapplication goes to the back of the line
- For long or delayed installations, applicants may file for an extension
- If funds are no longer available, applicants will be notified on the website while trying to complete the application

Who Gets the Rebate?

Two ways...



Customer buys the product at the regular price and DP&L provides the customer the rebate

Vendor marks down the product and DP&L provides the vendor the rebate



START / STOP SERVICE
If you're moving, call us to establish service in your new home.

PAYMENT OPTIONS
Ways to pay your monthly bill.



DP&L CONTACT NUMBERS

Report an Outage:
877-4OUTAGE (468-8243)

Customer Service:
937-331-3900
Toll Free:
800-433-8500

TTY-TTD (Hearing Impaired):
800-750-0750

APPLIANCE RECYCLING



We pick up your fridge. You pick up 25 bucks and save on your energy bill.

LIGHTING THE WAY TO SAVINGS



Turn \$1.30 in savings into \$1,252 by replacing all your light bulbs with CFLs.

Dayton Power & Light

We pick up your fridge. You pick up \$25.

And save up to \$150 a year on energy costs.

[Save Now](#)



Outage & Safety
What you should do before, during and after an outage.
> [Storm Kit](#)



Lighting the Way to Savings
Turn \$1.30 in savings into \$1,252!



Smart Climate Policy
Let's support a smart climate policy that protects the environment and customers.



Forbes 100
DPL Inc. was named one of the 100 Most Trustworthy Companies by *Forbes*.

The most current up-to-date program information is always online

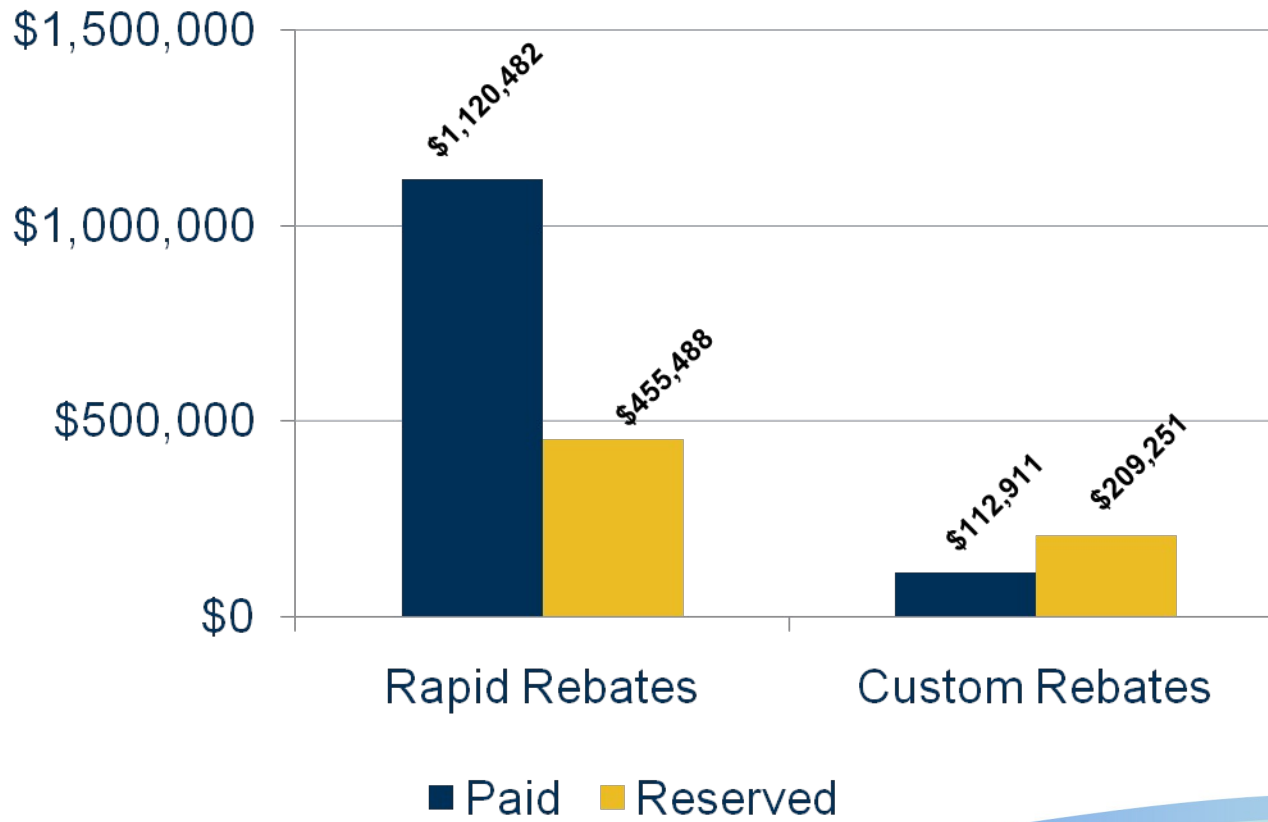
www.dpandl.com



2009 Year-End Preliminary Results

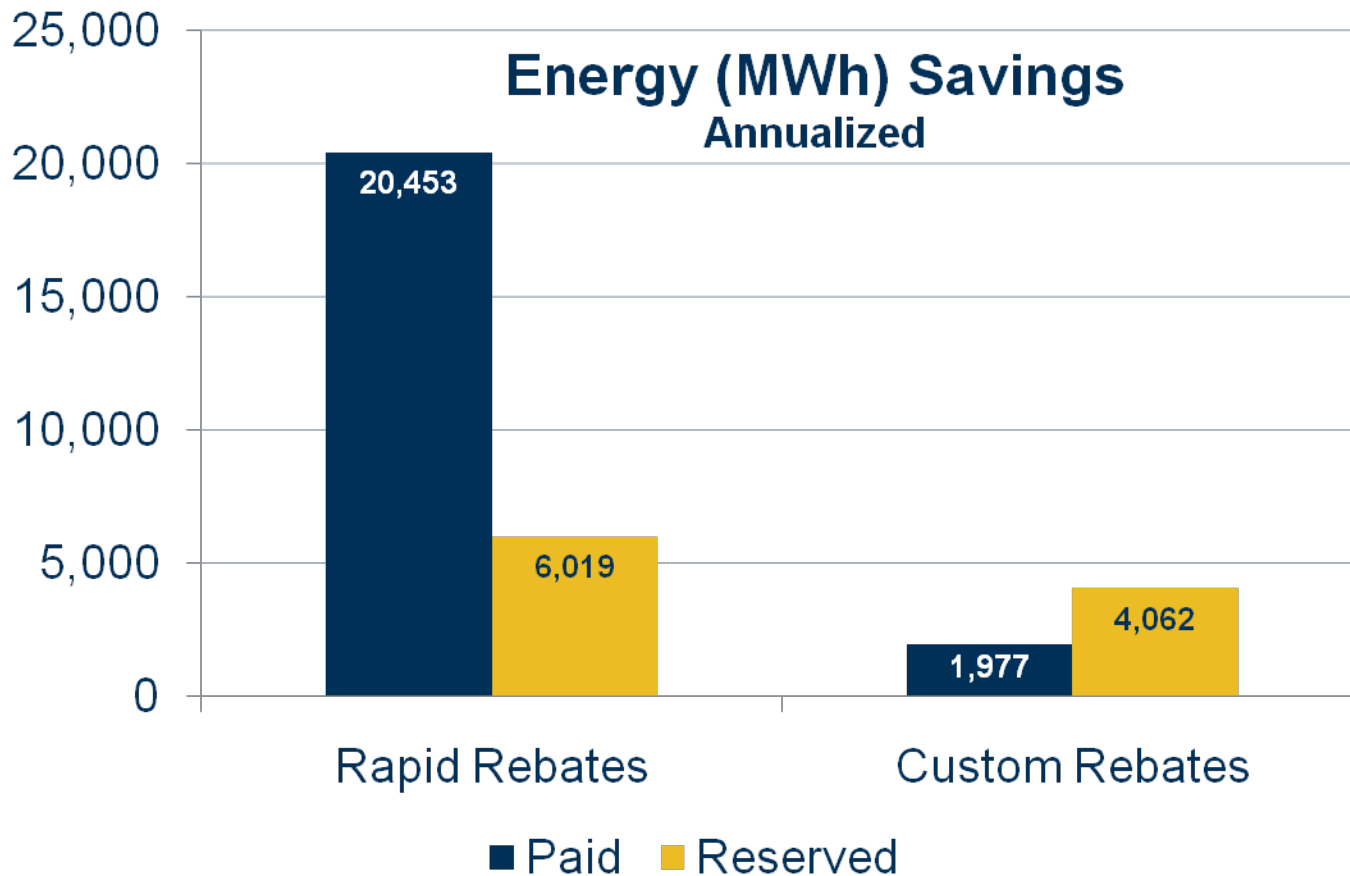
Business Rebate Programs

486 Rapid Rebate applications
57 Custom Rebate applications



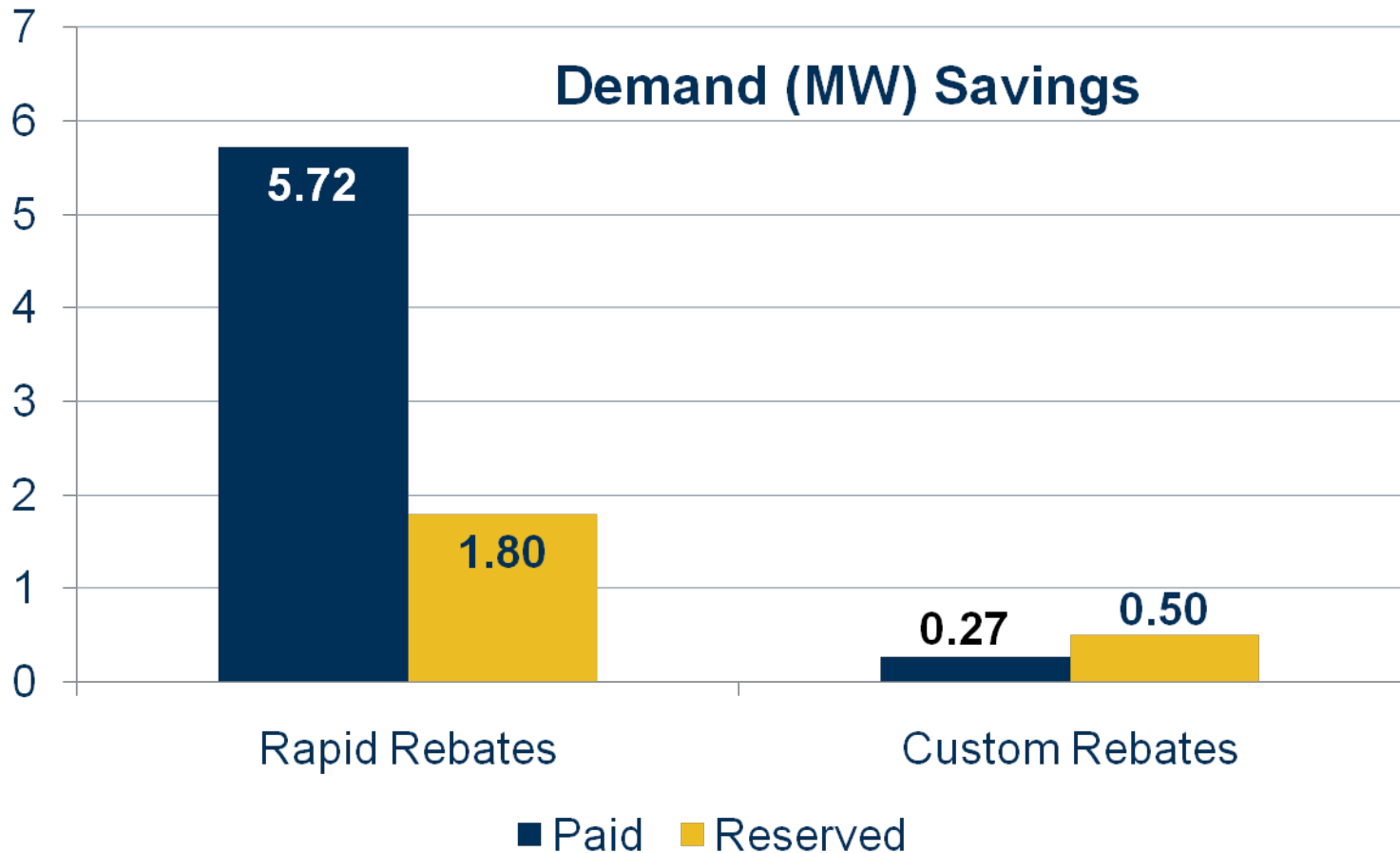
2009 Preliminary Year-End Results

Business Rebate Programs



2009 Preliminary Year-End Results

Business Rebate Programs



What do these numbers mean?

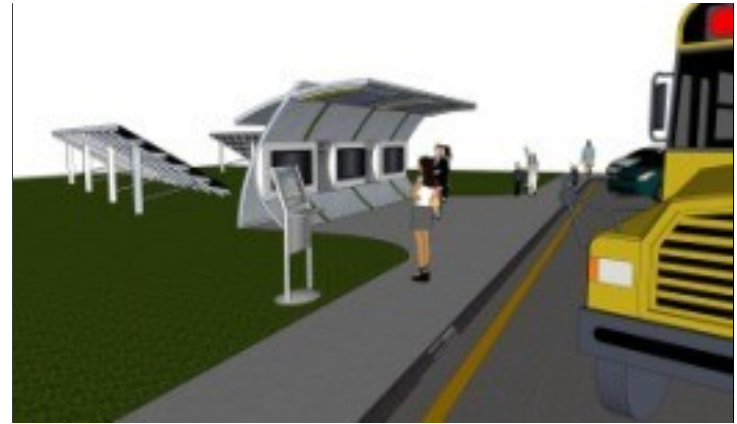
Annual greenhouse gas emissions from **2,965 passenger vehicles**



CO₂ emissions from the **electricity use of 2,014 homes** for one year

CO₂ emissions from burning **81 railcars' worth of coal**

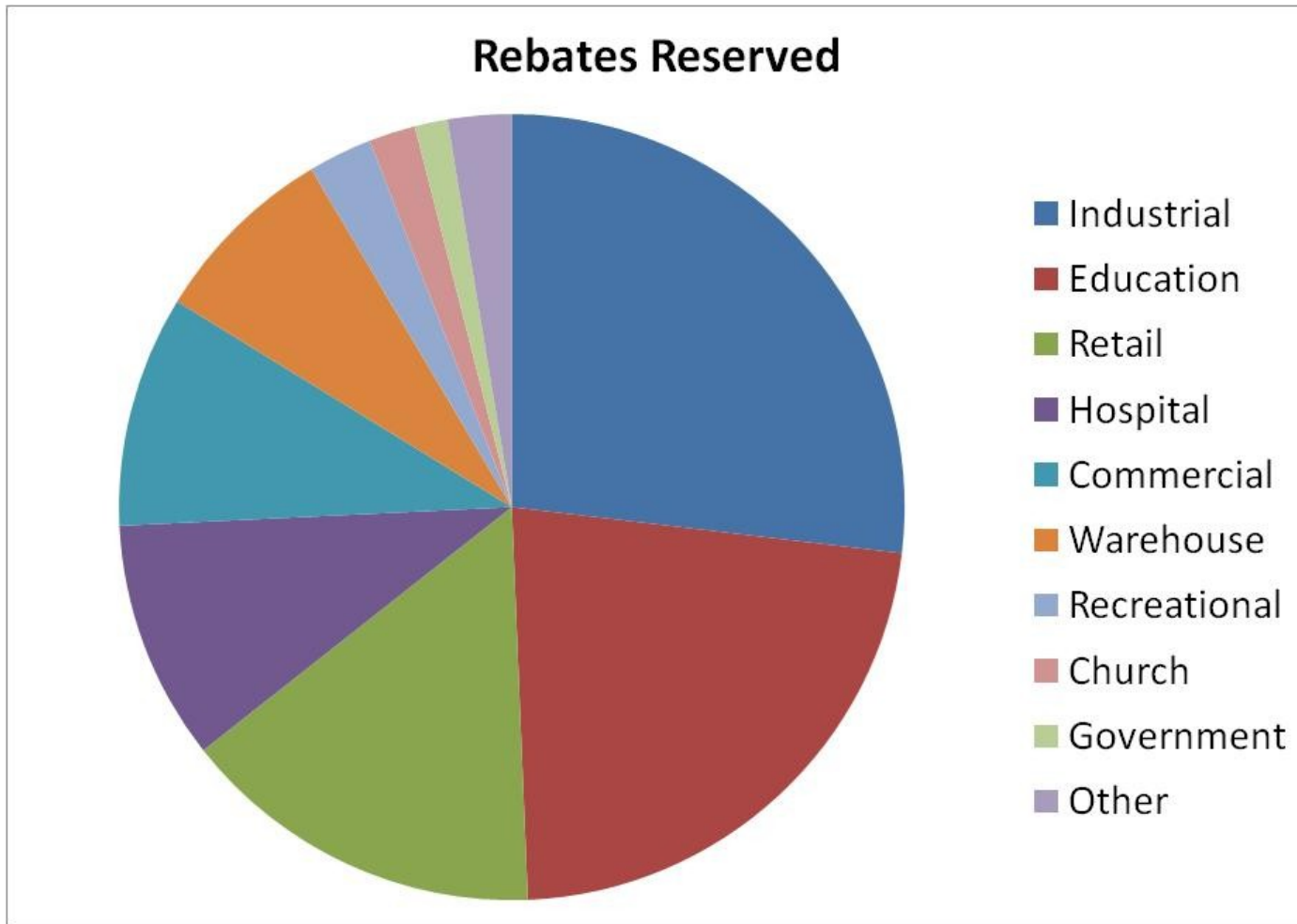
<http://www.epa.gov/RDEE/energy-resources/calculator.html#results>



DP&L Yankee substation solar array is 1.1 MW – less than 20% what business rebates achieved in energy efficiency

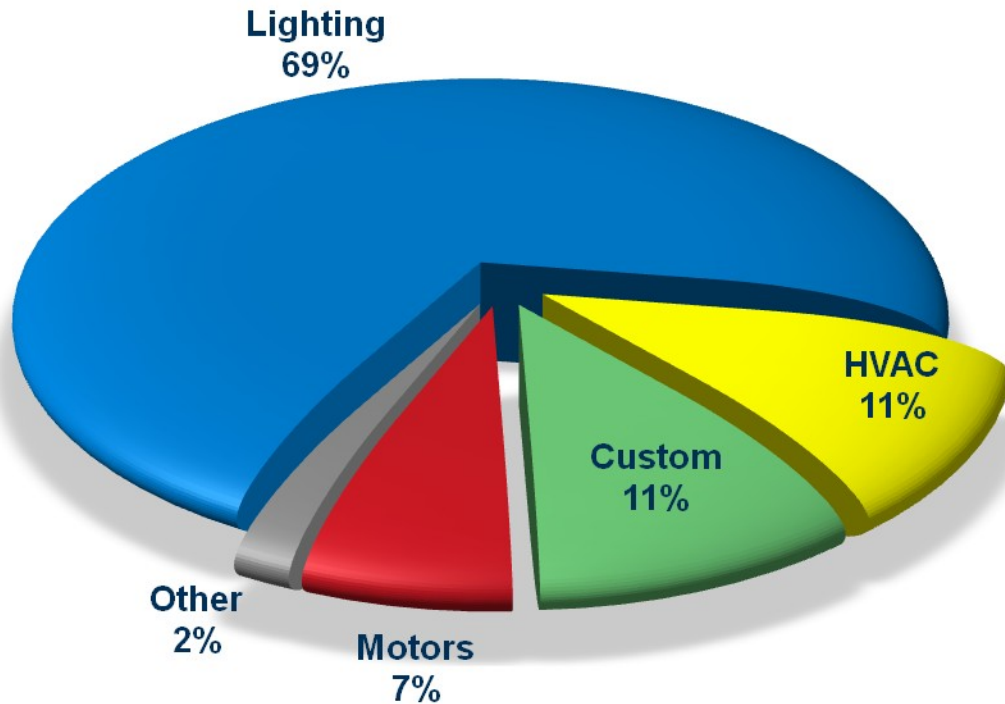
The equivalent of **~1,800 DP&L residential customers'** energy use

Rebate Distribution



2009 Business Rebate Programs

Approved Rebates by Rebate Type



Top Rebate Applications:

1. T8 High-Bay replacing HID
2. Low-Watt T8 fixture replacing T12
3. T5 High Output High Bay replacing HID
4. Water Cooled Chillers
5. LED Traffic Signals

NURSING HOME LIGHTING RETROFIT SAVES \$20,000

A CASE STUDY



Case study compliments of:

CURRENT LIGHTING:

A 100-room nursing facility has 4 lighting fixtures per room.
Each fixture has 4 T12 bulbs that are 40 watts each.
Each fixture is in operation 16 hours a day & 365 days a year.

Energy costs:

40 watts x 4 bulbs + magnetic ballast = 172 watts/fixture
172 watts x 4 fixtures/room = 688 watts/room
688 watts x 100 rooms in facility = 68,800 watts
68,000 watts / 1,000 = 68.8 kilowatts
68.8 kW x 16 hours x 365 days = 401,792 kWh annually
401,792 kWh x \$0.10/kWh = \$40,792 annual energy costs

PROPOSED LIGHTING:

A 100-room nursing facility has 4 lighting fixtures per room.
Each fixture has 4 T8 bulbs that are 28 watts each.
Each fixture is in operation 16 hours a day & 365 days a year.

Energy costs:

28 watts x 4 low ballast bulbs + electronic ballast = 84 watts/fixture
84 watts x 4 fixtures/room = 336 watts/room
336 watts x 100 rooms in facility = 33,600 watts
33,600 watts/1,000 = 33.6 kilowatts
33.6 kW x 16 hours x 365 days = 196,224 kWh annually
196,224 kWh x \$0.10/kWh = \$19,622 annual energy costs

RESULTS:

Annual energy savings of \$21,170 or \$53 per fixture!
A 1% increase in light output

PAYBACK:

Estimated costs for material and labor/ fixture	\$50.00
Less EPAct tax deduction (35%)	(\$18.00)
Less DP&L Business Rebate	(\$20.00)
NET INSTALLED COSTS	\$12.00

\$12.00 x 400 fixtures = \$4,800 investment
Payback = Investment required / net cash inflow
Payback = \$4,800/\$21,170 = .23 years or about **3 months!**



GYMNASIUM LIGHTING PROJECT SAVES \$2,000

A CASE STUDY



Case study compliments of: a DP&L Channel Partner

CURRENT LIGHTING:

A gymnasium has 20 Metal Halide light fixtures.
Each light system uses 465 watts.
Each fixture is in operation 12 hours a day.

Energy costs:

20 light fixtures x 465 watts = 9,300 watts
9,300 watts / 1,000 = 9.3 kilowatts
9.3 kW x 12 hours x 365 days = 40,734 kWh annually
40,734 kWh x \$0.10/kWh = \$4,073 annual energy costs

RESULTS:

Annual energy savings of \$2,093 or \$105 per fixture!
Energy and maintenance savings.
Evenly-distributed light.
Instant on – no warm-up period.

PAYBACK:

Estimated fixture costs (w/lens and guard)	\$200.00
Less DP&L Business Rebate	(\$50.00)
NET INSTALLED COSTS	\$150.00

\$150.00 x 20 fixtures = \$3,000 investment
Payback = Investment required / net cash inflow
Payback = \$3,000/\$2,093 = 1.43 years

PROPOSED LIGHTING:

Install (20) 6-bulb T8 Fluorescent High Bay fixtures.
Each light system uses 226 watts.
Each fixture is in operation 12 hours a day.

Energy costs:

20 light fixtures x 226 watts = 4,520 watts
4,520 watts / 1,000 = 4.52 kilowatts
4.52 kW x 12 hours x 365 days = 19,798 kWh annually
19,798 kWh x \$0.10/kWh = \$1,980 annual energy costs



2010 New Construction Program

2 Types of Incentives:

1. Lighting Power Density (LPD)
Reduction

2. Whole Building Energy
Performance Baseline
Improvements



Lighting Power Density Reduction

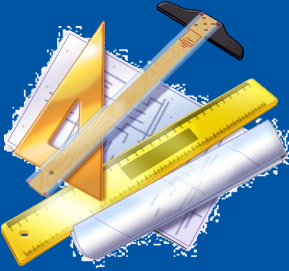
The LPD Reduction incentive encourages the inclusion or installation of lighting designs and equipment that provide quality lighting at lower installed wattages.

Lighting Power Density Reduction	Incentive Rate (\$/SF)
For each watt/SF below LPD requirements	\$0.30

$$\text{Incentive} = (\text{LPD}_{\text{baseline}} - \text{LPD}_{\text{actual}}) \times \text{area} \times \$0.30$$

Lighting Power Density Reduction - Example

A new building has 50,000 SF of manufacturing space and 3,000 SF of office space.

	“Space-by-Space” Method, ANSI/ASHRAE/IESNA Standard 90.1-2007 (Watts/SF)	Actual Design (Watts/SF)
Manufacturing - High Bay (≥25 ft Floor to Ceiling Height)	1.7	0.8
Office – enclosed	1.1	0.9

Manufacturing: $(1.7_{\text{baseline}} - 0.8_{\text{actual}}) \times 50,000 \times \$0.30 = \$13,500$

Office: $(1.1_{\text{baseline}} - 0.9_{\text{actual}}) \times 3,000 \times \$0.30 = \$180$

Total Incentive = \$13,680

Whole Building Energy Performance Baseline Improvements

The whole building baseline improvement incentive rewards those customers who design their buildings to be more efficient than a baseline building constructed to ANSI/ASHRAE/IESNA Standard 90.1-2007.

Incentive Rate Guidelines		
First Year Annual Electric Reduction	Energy Incentive Rate	Demand Incentive Rate
5-10% over baseline	\$0.05/kWh	\$50/KW
>10% over baseline	\$0.08/kWh	\$75/KW
>20% over baseline	\$0.10/kWh	\$100/KW

To be eligible for a whole building incentive, customer must provide documentation of an energy model, in accordance with ANSI/ASHRAE/IESNA Standard 90.1-2007, Appendix G.

Questions?

