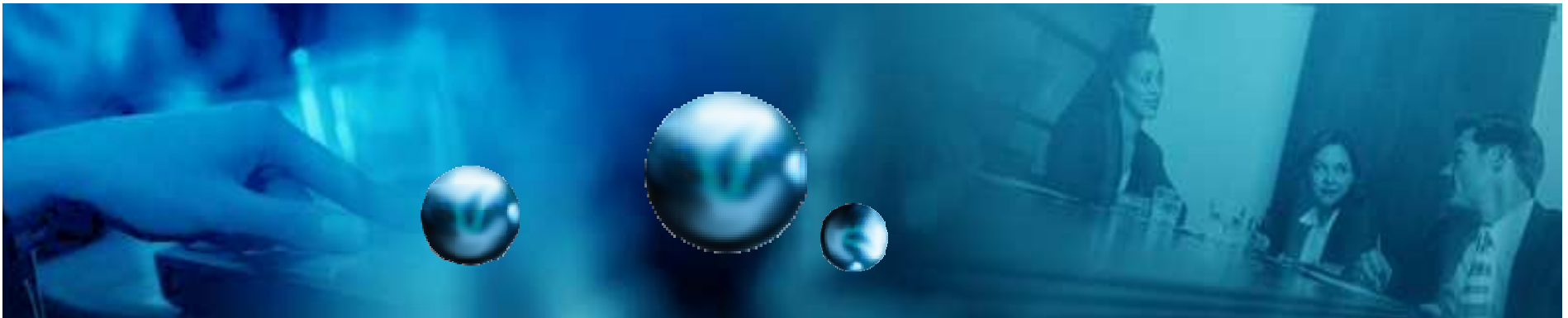


# Conservation Seminar

**ELECTRICITY RETROFIT INCENTIVE PROGRAM**

Plan on  
**ERIP**



*An electricity tune-up for your business*





# Agenda

**1. Background**

**2. Who Qualifies**

**3. Prescriptive Projects**

**4. Custom Projects**

**5. Incentive Payouts**

**6. Applying for ERIP**

**7. Questions?**



# Background

- ❖ 50 GWhs reduction in electricity consumption and demand savings of 100 MWs by the end of 2010 sought by Ontario
- ❖ Local utilities provided funding for customer Conservation and Demand Management (CDM) 2005 - Sep 2007
- ❖ Ontario Power Authority launches provincial CDM programs to be administered by local utilities



- ❖ Electricity Retrofit Incentive Program (ERIP) provides incentives for upgrading facilities and equipment to use less electricity





# Background

## *Benefits*

- ❖ Provides Financial Incentives to encourage and support the installation of energy efficient improvement projects in Existing Buildings
- ❖ Business will lower operating costs and become more competitive
- ❖ The electricity system has less load at peak demand





## Manage your peak demand

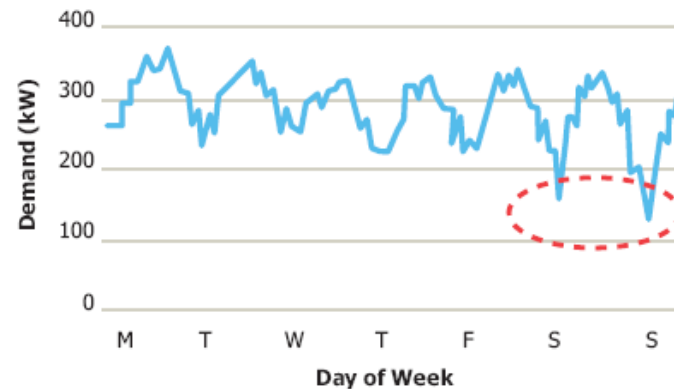
You can use the same amount of energy overall and still reduce your electricity bill. How? All you need to do is manage your business's electricity demand and draw the same amount of electricity from the system at a slower rate.

Demand charges cover the cost of the size and type of wires and equipment needed to get the electricity to your business. Drawing a lot of electricity at one time creates a higher demand. Higher demand requires additional wires and transformers that can supply electricity at the rate you draw it without overloading. So, the higher your monthly peak demand, the higher your bill.

Remember, your electricity delivery charges for the month are typically based on one 15-minute or 60-minute peak. If you can reduce your peak, you will also reduce your delivery charges.

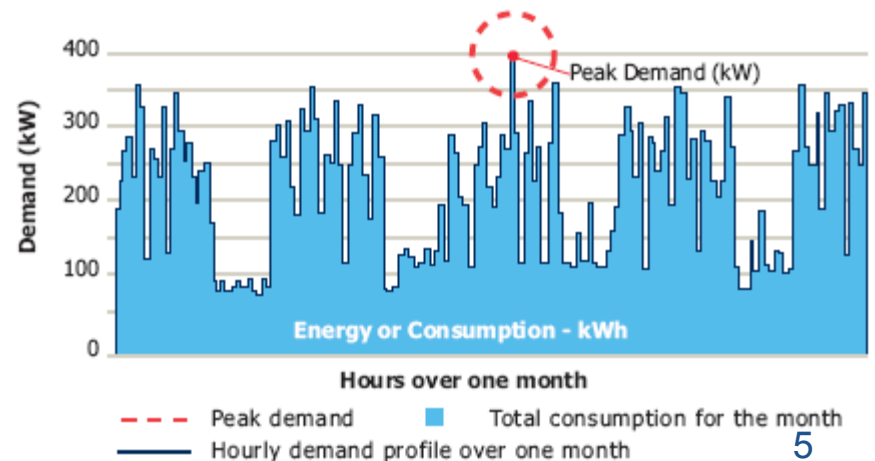
Many utilities across Ontario have programs that reward businesses for reducing the demand on the system. Contact your local utility for more information.

A demand profile can point to savings opportunities





*More savings were obvious once the electricity use profile showed that fewer lights were being turned off on weekday nights than on weekends at this grocery store.*

Your peak demand determines your monthly delivery charges





# What This Means To YOU

	 100 W Incandescent	 25 W CFL	Annual Energy Savings	Lifetime Energy Savings (based on 10,000 h lifespan)
Annual Operating hrs/yr	2,320	2,320		
Annual Energy Usage (kWh/yr)	209	52	<b>157</b>	
kWh @ 8cents	\$16.72	\$4.16	<b>\$12.56</b>	<b>\$60.00</b>
kWh @ 10cents	\$20.90	\$5.20	<b>\$15.70</b>	<b>\$75.00</b>
kWh @ 12cents	\$25.08	\$6.24	<b>\$18.84</b>	<b>\$90.00</b>

\*Source: OEB Total Resource Cost Guide, Section 5, Assumptions and Measures List September 8, 2005 - File: cdm\_assumptionsmeasureslist\_08092005.xls

## Potential Energy Savings

No. of Lamps Retrofitted	¢ / kWh	Annual Savings
1	10¢	\$15.70
100	10¢	\$1,570
1000	10¢	\$15,700



# What This Means To YOU

	2 - T12 75W (184W) 8' HO Lamps w/1 magnetic ballast	4 - T8 32W (112W) 4' Lamps w/EL ballast	Annual Energy Savings	Lifetime Energy Savings (based on 20,000h lifespan)
Annual Operating hrs/yr	4,000	4,000		
Annual Energy Usage (kWh/yr)	662.4	403.2	<b>259.2</b>	
kWh @ 8cents	\$52.99	\$32.26	<b>\$20.73</b>	<b>\$115.20</b>
kWh @ 10cents	\$66.24	\$40.32	<b>\$25.92</b>	<b>\$144.00</b>
kWh @ 12cents	\$79.49	\$48.38	<b>\$31.11</b>	<b>\$172.80</b>

\*Source: OEB Total Resource Cost Guide, Section 5, Assumptions and Measures List September 8, 2005 - File: cdm\_assumptionsmeasureslist\_08092005.xls

## Potential Energy Savings

No. of Fixtures Retrofitted	¢ / kWh	Annual Savings
1	10¢	\$25.92
100	10¢	\$2,595
1000	10¢	\$25,920



# Who Qualifies?

- ❖ General Service customers of Cambridge and North Dumfries Hydro Inc., Guelph Hydro, Kitchener-Wilmot Hydro, Waterloo North Hydro
- ❖ Tenants or owners of business premises supplied by the above Local Distribution companies (LDC)
- ❖ Pre-approved projects that result in measurable reductions in electrical peak demand





# Prescriptive Projects

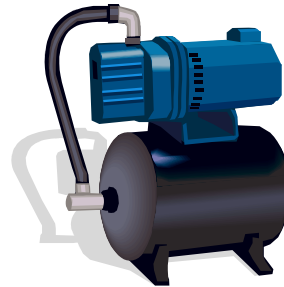
- ❖ Predefined technologies in lighting, A/C, motors, transformers and agri-business systems
- ❖ Incentive is a fixed \$ amount based on what equipment you install.
- ❖ Worksheets are provided for each prescriptive category
- ❖ Minimum Incentive Payment is \$250\*  
(\*except for MOTORS)





# Prescriptive Projects

- ❖ Can apply for pre-approval or payment
- ❖ Strongly recommend pre-approval to ensure correct technologies are being used
  - ❖ Must submit documentation supporting project details  
within 30 days of project installation completion





# Custom Projects

- ❖ Replacement of inefficient existing equipment
- ❖ Replacement of oversized existing equipment with new “right sized equipment”
- ❖ Introduction of new and efficient operation procedures and controls that result in sustained savings



- ❖ Addition of new technologies or products that improve the thermal performance of bldg envelope



# Custom Projects

- ❖ Projects are evaluated on the improvement in power and energy performance
- ❖ Incentives are based on the level of improvement-minimum savings 5kW average peak demand
- ❖ Projects must be pre approved prior to project commitment-  
No retroactivity
- ❖ Incentive-lesser of \$150/kW saved or 50% of incremental project costs or amount req'd to top-up total government & utility incentive to 50% of total project cost





# Determining kW Savings

- ❖ Base case kW<sub>s</sub> – project kW<sub>s</sub> = gross kW savings
- ❖ Gross kW<sub>s</sub> need to be adjusted to match expected operating conditions over a typical weekday
- ❖ Net kW (average on peak demand) savings result from averaging the gross kW savings over the OPA prescribed peak period
- ❖ Average on peak demand savings is multiplied by \$150 to give total incentive





# Incentive Payout

- ❖ Actual retrofit matches pre-approved application
- ❖ Evidence of implementation and verification of costs provided i.e., invoices
- ❖ Delivering kW savings on or before Dec 1, 2011
- ❖ Construction must be completed within 12 months of application approval date (cannot exceed 12 months)





# Incentive Payout

- ❖ Visual inspection by the LDC or its agent
- ❖ Provide before and after digital photos for custom projects



- ❖ *Incentives based on*

- Specific technologies (prescriptive projects)
- Power and performance improvements (custom projects)



# Recipe for Success

- ❖ All fields must be filled out in application
- ❖ Include model #'s and manufacturer names of lamps, ballasts *and* fixtures (where applicable) on worksheets
- ❖ Manufacturer spec sheets and estimates/Invoices must accompany application
- ❖ Ensure “build-up” of kW savings estimate is simple to follow
  - ❖ 3 custom worksheets should align and have matching kW savings





# Things to look out for



- ❖ If tenant or contractor: require letter from owner
- ❖ kW and kWh
- ❖ Custom calculation sheet – hours of operation match what happens in practice
- ❖ Assumed kW Savings



# Applying for ERIP

- ❖ **Visit** *LDC Website* for info and ERIP forms
- ❖ **Determine** if yours is a Prescriptive or Custom project
- ❖ **Complete** the appropriate application form and incentive worksheets for your project and specific technologies
- ❖ **Submit** the forms and supporting documentation to **LDC** for evaluation. Provide all required information (including pre retrofit picture)
- ❖ **Install** upon approval.
- ❖ **Verify** by submitting proof of payment for approved work within 30 days of installation
- ❖ **Receive** incentive cheque





# Deadlines

- ❖ Submission deadline for applications  
December 31, 2010
- ❖ Project savings results deadline  
December 1, 2011
- ❖ Improvements must remain => 36 months
- ❖ Projects must be completed within 12 months of approval



# Questions?



<http://www.camhydro.com/energy/erip.shtml>

<http://www.guelphhydro.com/erip.php>

[http://www.kwhydro.ca/erip\\_forms.asp](http://www.kwhydro.ca/erip_forms.asp)

<http://www.wnhydro.com/erip/index.shtml>



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