



PowerLogic Users Conference

**Conservation in Ontario**

**Andrew Pride, OPA**

October 26<sup>th</sup>, 2012

# Ontario Power Authority



saveONenergy<sup>OM</sup>



# Ontario Power Authority

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## Mandate

Ensure reliable, cost-effective, sustainable electricity supply for Ontario.

### Key Activities



Long-Term  
Power  
System  
Planning



Procuring  
New  
Supply



Enabling  
Conservation  
Across the  
Province



# Conservation is our first priority

✓ *Less Costly* than Building New Generation – cost to consumers is **3¢/ kWh**

✓ Helps Ontarians *Better Manage* their Energy Costs



✓ Favourable *Return on Investment* for Customers

✓ Reduces *Greenhouse Gas Emissions*

# Ontario's Conservation Targets

Targets	2015	2020	2015	2030
Demand Reduction	4,550 MW	5,840 MW	6,700 MW	7,100 MW
Energy Savings	13 TWh	21 TWh	25 TWh	28 TWh

***7,100 MW and 28 billion kWh by 2030***

*- Equivalent to removing one in five homes off the grid*

# Conservation Success

**6 million**

The number of discount coupons used by Ontarians to purchase energy efficient products since 2006; this means that on average every household in the province of Ontario has redeemed one coupon or more for an energy efficient product for their home.

**OUR LONG-TERM ENERGY PLAN:  
7,100 MW  
IN DEMAND REDUCTION AND  
28 TERAWATT-HOURS  
IN ENERGY SAVINGS BY THE  
END OF 2030**

**1,300**

The number of retail locations across Ontario that participated in the in-store coupon events programs.

Customers invested \$2.0 billion into Conservation Programs and saved \$4.0 billion in avoided costs


**336,000**

the number of old guzzling appliances collected throughout Ontario since 2006 (fridges, freezers, dehumidifiers, AC's)

**170,000**

is the number of small businesses across Ontario who have benefitted from the Direct Install Lighting program to date.

# saveONenergy - Residential



FRIDGE & FREEZER PICKUP

HEATING & COOLING INCENTIVE

*peaksaver PLUS™*

COUPONS

EXCHANGE EVENT

Buying a New Home





# saveONenergy Heating & Cooling Incentive

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- Receive up to \$650 by installing ENERGY STAR® qualified central heating and cooling system
- Over 1,300 HVAC contractors registered
- New HVAC Installation Optimization Training Incentive





# saveONenergy Fridge & Freezer Pickup

- Free pick-up and recycling of old, inefficient fridge or freezer
- Existing fridge or freezer must be 10-27 cubic feet, at least 15 years old and in working condition
- Pick-up of old inefficient window air conditioner or dehumidifier with pick-up of fridge or freezer

*The 250,000 fridge will be picked-up in November 2012*



## saveONenergy *peaksaver* PLUS®

- Enhanced program covering **more** appliances – central AC, electric pool pumps and electric water heaters
- Free in-home energy display unit to help customers better manage electricity consumption



# saveONenergy for Business

DEMAND RESPONSE

SMALL BUSINESS  
LIGHTING

RETROFIT PROGRAM

AUDIT FUNDING

EXISTING BUILDING  
COMMISSIONING

HIGH PERFORMANCE  
NEW CONSTRUCTION

PROCESS AND  
SYSTEMS

Training Opportunities

NEW HOME  
CONSTRUCTION

Social and Assisted  
Housing

## Large Retail



## Small Retail



## Industrial



## Small Office



## Large Office



## Warehouses



## Apartments/Condos



## New Home Construction



## Agricultural





## saveONenergy – Audit Funding

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Evaluate today's energy use – and identify tomorrow's opportunities.

The **AUDIT FUNDING** incentive is intended to cover up to 50% of the cost of an energy audit, based on requirements that take into account the size and complexity of the buildings.



## saveONenergy – Small Business Lighting

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The **SMALL BUSINESS LIGHTING** program offers qualifying businesses up to \$1,000 worth of **energy-efficient lighting and equipment upgrades**

### **Who can Participate?**

Businesses with an electricity demand of less than 50 kW such as clothing stores, independent restaurants, dry cleaners, medical offices, beauty salons, convenience stores, garages and other small retailers

# saveONenergy – Training and Support

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## ***Maintain and grow your savings well into the future***

Training opportunities for:

- Energy Managers
- Building Operators
- Building Commissioning Services Providers
- Low-rise Builders
- Certified Energy Manager®
- HVAC Installation Optimization





# saveONenergy – Process and Systems

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## Provides technical expertise to help you:

- ✓ Find opportunities to save
- ✓ Modernize key systems
- ✓ Take charge of energy
- ✓ Equip the team with accurate, up-to-the-minute data about energy use
- ✓ Create a real, sustainable competitive advantage through energy management best practices



# saveONenergy – Process and Systems

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## **Energy Efficiency Upgrades**

– *Our three-step feasibility and upgrade process helps you find, study and act on your best opportunities.*

1. Preliminary Engineering Study
2. Detailed Engineering Study
3. Capital Incentives

## **Energy Management and Monitoring**

- *These initiatives provide long-term support so you can maintain and grow your savings well into the future.*

1. Embedded Energy Manager
2. Monitoring and Targeting

*Funding toward 80% of actual eligible costs, of up to \$75,000 per site to purchase and install a monitoring and targeting system.*

## Conservation Fund

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- Supports new and innovative initiatives designed to enable Ontario's residents, businesses and institutions to cost-effectively reduce their demand for electricity
- Projects have touched many sectors of the economy – schools, churches, mines, retailers and new homes
- 167 projects supported since 2005
- [www.powerauthority.on.ca/cfund](http://www.powerauthority.on.ca/cfund)





## Conservation Fund: Ice Bear Project

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- State-of-the-art, high-efficiency chilling system that can be used in air-conditioning systems to reduce energy consumption
- 12 units installed in various locations, including the Toronto Zoo
- led by Toronto Hydro Electric System Ltd with partial funding from the OPA
- On average, the units saw a Peak Day Demand Reduction of 114 kW



# Race to Reduce

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- Tenants and landlords collaborate in a four-year challenge to reduce total energy use in participating office buildings by 10%
- OPA is a partner organization
- OPA initiatives at the office
  - Turning off perimeter lighting
  - Switching to more energy-efficient light bulbs
  - Powering down over the weekend
  - Installing sub-metering to track our energy use



# Questions?



## saveonenergy.ca

- consumer program:  
**saveONenergy FOR HOME**
- business program:  
**saveONenergy FOR BUSINESS**