

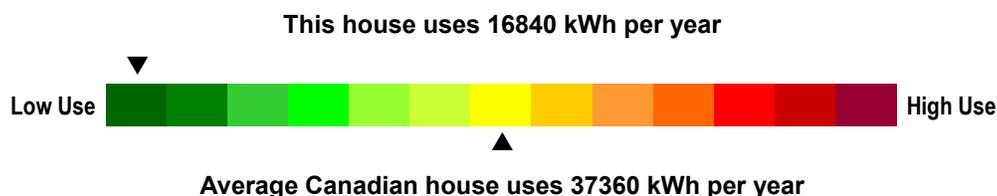
Electricity Use Evaluation Report

File number: 7U01RE88001 SAMPLE

Property Owner:

John Smith
123 Your Street,
Cobourg Ontario
K9A 1A1

Use of Electricity compared to other houses



House Characteristics and Occupancy

House Type:	Detached	Main Heating Energy:	Elec
No. of Storeys:	1	Heating system:	ASHP
Floor Area:	1200 sq ft	DHW Energy Source:	Elec
No. of Occupants:	2	Air Cond. Installed?	Yes
No. of Adults:	2	Type of A/C:	central
No. of School-age:	none		
No of Pre-school:	none		
No. Daytime occupants:	1		

The results of your electricity use evaluation shows that your house consumes about 16840 kWh per year. The average consumption for a similar type of house is 37360 kWh per year. If you follow all of the recommended equipment upgrades in this report, you can reduce your electricity consumption by up to 3.6%, saving up to 598 kWh per year.

In addition, the evaluation shows that additional savings may be possible if you are able make behaviourable changes in how equipment is used or controlled. These behavioural savings are estimated at up to 10.2% of total usage, or 1722 kWh per year.

These findings are based on a review of the use of all the products that consume electricity in your home, calculating how much electricity each one consumes per year, identifying opportunities to save electricity and estimating the potential electricity savings after these measures are implemented.

The recommendations to save energy are summarized on the following page, followed by a detailed description of how electricity is used in your home.

Notice: If you notice any discrepancies with the above description of your home, contact your service organization immediately.

Service Organization: Eco Advantage Energy Advisors Inc. Telephone: (905) 349-2387	Certified Energy Advisor: Edward Casteels
Date of evaluation: April 1, 2012	Date of report: April 1, 2012

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SUMMARY OF ELECTRICITY SAVING MEASURES

Based on the information collected on the electrical products and usage in your house, the following recommendations are made to help you save electricity:

Recommended Electric Equipment Upgrades

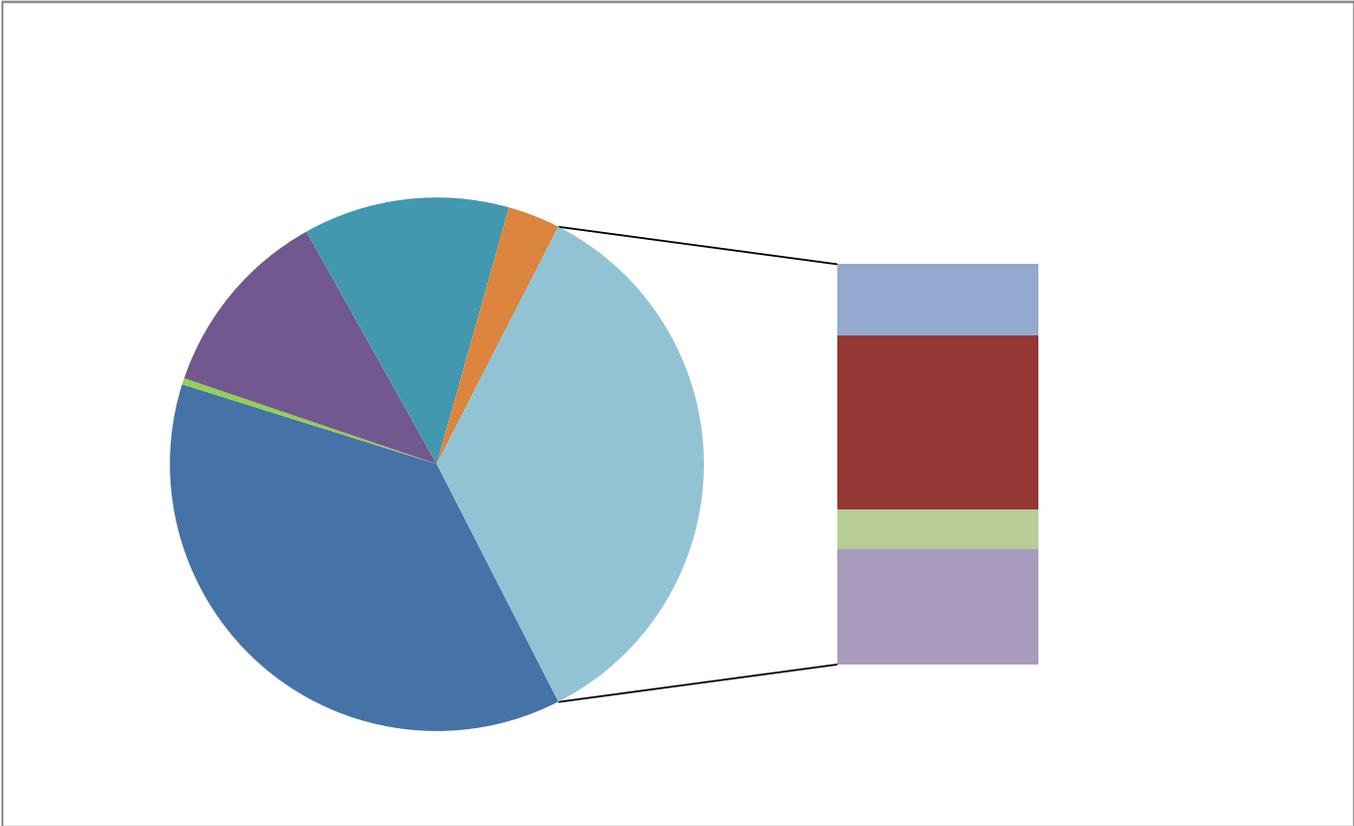
Usage Area	Retrofits	Incentives	Potential for Savings in Usage Area Max=5 Stars	Potential Savings (kWh per year)
Major Appliances	Consider replacing old appliances with energy efficient ones		★★★★★	317
Lighting	Replace high-use incandescent lamps with compact fluorescent lamps		★★★★★	142
Lighting	Replace electric garden lights with photovoltaic ones		★★★★★	139
			Total	598

Possible Savings from Behavioural Changes

Usage Area	Behavioural Change	Incentives	Potential for Savings in Usage Area Max=5 Stars	Potential Savings (kWh per year)
Major Appliances	Unplug and recycle secondary refrigerators and freezers		★★★★★	1020
Major Appliances	Use an outdoor clothes line to dry clothes (savings based on displacing 25% of dryer loads)		★★★★★	17
Home Entertainment Equipment	Use power bars to disconnect equipment when not in use (savings based on 50% reduction in standby power)		★★★	208
Office Equipment	Use power bars to disconnect equipment when not in use (savings based on 50% reduction in standby power)		★★★	459
Pumps, Pools, Spas	Install Timers or controls to reduce pump operating time		★★★★★	18
			Total	1722

ELECTRICITY USAGE SUMMARY

The following chart illustrates where electricity is consumed in your home.



The various coloured areas show the relative amount of energy consumed in each category, which have been labelled:

1. *Major appliances;*
2. *Lighting;*
3. *Domestic water heating;*
4. *Air conditioning;*
5. *Space heating; and,*
6. *Supplemental space conditioning; and,*
7. *“Other” uses .*

The “other” uses are broken down further in the column on the right, which represents *energy consumed by the following:*

1. *Home entertainment;*
2. *Office and communication equipment;*
3. *Pumps, Pools, Spas; and,*
4. *Other Miscellaneous.*

ANALYSIS OF ELECTRICITY USAGE AND SAVINGS OPPORTUNITIES

MAJOR APPLIANCES: 2,102 kWh per year, or 12.5% of total Electricity Used

The major appliances in your home are listed below, showing the approximate age and the estimated energy consumption based on the use indicated during the audit. The last column indicates the amount of energy that can be saved by replacing the appliance with a new, energy efficient unit.

Major Appliance	Number in Use	Age (of primary unit if more than one) (years)	Annual Consumption - all units (kWh per year)	Est'd. savings by replacing primary unit (kWh per year)
Refrigerator	2	12	1719	311
Clothes washer	1	12	41	6
Clothes dryer	1	12	67	
Dishwasher	1	33	35	
Electric range	1	12	171	
Microwave oven	1	12	69	
Totals	7		2102	317

Based on the findings and on the estimated savings, the following recommendations are made:

Refrigerators, Freezers and Wine Coolers:

A survey of your home indicated that there are currently 2 refrigerators with an estimated energy consumption of 1719 kWh per year.

The main refrigerator in your home is estimated to be 12 years old. Typical life expectancy for a refrigerator is about 17 years. Should you plan to replace your refrigerator, a new, similar-sized ENERGY STAR certified model will save you an estimated 311.2 kWh per year.

If it is possible, energy savings can be realized by unplugging and recycling the extra refrigerator found in your home. Potential savings are estimated at 1020 kWh per year.

Dishwashers

The dishwasher in your home is estimated to use about 35 kWh per year.

Your dishwasher is estimated to be 33 years old. Typical life expectancy for a dishwasher is about 13 years. Should you plan to replace your dishwasher, consider a new ENERGY STAR certified model.

Clothes Washer and Dryer

The clothes washer in your home is estimated to use about 41 kWh per year of electricity.

The top loading clothes washer is about 12 years old. Typical life expectancy for a clothes washer is about 14 years. Should you plan to replace your clothes washer, consider a new front-loading washer, which could save you an estimated 6 kWh per year of electricity and additional savings in water.

The clothes dryer in your home is estimated to use about 67 kWh per year of electricity.

Your clothes dryer is about 12 years old. Typical life expectancy for a clothes dryer is about 18 years. Should you plan to replace your clothes dryer, consider a new ENERGY STAR certified model.

If it is possible, energy savings can be realized by using an outdoor clothes line to dry clothes when the weather is fine. For example, if you dried 25% of the loads on a clothes line, your energy savings would be 17 kWh per year.

Stove, Oven and Microwave

The electric range in your home uses an estimated 171 kWh per year of electricity. It is about 12 years old. Typical life expectancy for an electric range is about 18 years.

The microwave oven in your home uses an estimated 69 kWh per year of electricity, and is about 12 years old. Typical life expectancy for a microwave oven is about 13 years.

LIGHTING: 533 kWh per year, or 3.2% of total Electricity Used

The amount of electricity used by your household for lighting is estimated at 533 kWh per year. The type of lighting, and number of lamps found in the survey of your home are listed below:

Lamp type	Lamp count	Energy Used	Approx. Fraction of Lighting Provided
INDOOR LIGHTING	(# of Lamps)	(kWh per year)	% of Lighting
Incandescent	41	126	14
Halogen	0	0	0
Fluorescent	12	168	86
Other	0	0	0
Indoor Lighting Subtotals	53	294	100
OUTDOOR LIGHTING	(# of Lamps)	(kWh per year)	
Incandescent	6	56	
Halogen	0	0	
Fluorescent	3	36	
Other	0	0	
Garden Lights	15	139	
Seasonal Lights (lamps & strings)	9	2	
Outdoor Lighting Subtotals	33	239	
Household Totals	86	533	

Indoor lighting uses an estimated 294 kWh per year, or about 55% of the electricity used for all lighting. The most common type of indoor lighting found in your home is incandescent, and provides approximately 14% of your indoor lighting requirements.

The outdoor lighting on your property uses an estimated 239 kWh per year of electricity, or about 45% of the electricity used for all lighting.

Replacing heavy-use incandescent lamps with compact fluorescent lamps (CFLs) or replacing incandescent fixtures with ENERGY STAR fixtures will reduce both energy consumption and significantly increase lamp life.

Incandescent lamps use about 182 kWh per year. The energy saving potential in your home is estimated at up to 142 kWh per year.

Replacing electric-powered garden lights with photovoltaic-powered ones will lower electricity consumption. Estimated savings of up to 139 kWh per year are possible.

DOMESTIC WATER HEATING: 1960 kWh per year, or 11.6% of total Electricity Used

A survey of your home indicated that domestic hot water is provided by an electric water heater. This water heater uses about 1960 kWh per year of electricity.

Your electric water is about 2 years old. Typical life expectancy is about 12 years.

SPACE HEATING & VENTILATING EQUIPMENT: 6,280 kWh per year, or 37.3% of total Electricity Used

The primary space heating system in your home is an electric ASHP with electric back-up heating. The space heating and ventilating systems uses about 6280 kWh per year of electricity.

AIR-CONDITIONING: 0 kWh per year, or 0.0% of total Electricity Used

Your house is equipped with central air conditioning. It is not used.

SUPPLEMENTAL SPACE CONDITIONING: 66 kWh per year, or 0.4% of total Electricity Used

Supplemental space conditioning equipment includes devices such as portable heaters, portable fans, ceiling fans, humidifiers and dehumidifiers. These devices are estimated to consume about 66 kWh per year of electricity.

“OTHER” ELECTRIC LOADS: 5,887 kWh per year, or 35.0% of total Electricity Used

'Other' Electric Loads include *Home Entertainment Equipment* (TVs, set-top boxes, DVD players, game controllers, etc.), *Office and Communications Equipment*, (computers, printers, portable telephones, chargers, etc.) *Pumps* (pool, whirlpool and sump pumps), various *Other Miscellaneous Devices* (coffee makers, toasters, grill, vacuum cleaners, garage door openers, water softeners, security systems, etc).

'Other' equipment in your house consumes a total of 5887 kWh per year in, as broken out in the following table:

Other Equipment Sub-Category	Est'd Total Power Usage	Est'd Stand-by Power Usage	Potential Savings
	(kWh per year)	(kWh per year)	(kWh per year)
Home Entertainment	1053	416	208
Office & Communication	2559	918	459
Pumps, Pools, Hot-tubs, Spas	589	0	18
Other Miscellaneous Equipment	1687	87	not applicable*
Totals	5888	1421	685

* **Note:** The **"Other Misc. Equipment"** category includes items such as garage door openers and central vacuum cleaner units, and is generally not suitable for disconnection as a means of reducing stand-by power.

Stand-by Power

Many electronic products such as TVs, set-top boxes, VCRs, DVD and Blu-Ray players, game controllers, etc. consume electricity even when they are in the "off" or "stand-by" settings. The reason is that some of the functions in these electronic devices require power continuously to operate the remote-control functions, memory and indicating displays and clocks. Other devices such as battery chargers for telephones, laptops, etc. consume power not only when the equipment is in use or charging, but also consume some power (although at a lower level) when the equipment is off but the charger is still plugged into the power outlet. Although these devices draw relatively little power when left plugged in, the fact that these devices are often left plugged in most of the time results in a significant 'stand-by' usage of electricity over the year.

Based on the inventory of equipment in your house, the total stand-by power consumption is estimated to be 1438 kWh per year, or 9 % of the total household electricity usage. The majority of stand-by power, 1421 kWh per year, is used by the 'other equipment' sub-category.

Home Entertainment *1,053 kWh per year, or 6.3% of total Electricity Used*

The home entertainment equipment in your house consumes approximately 1053 kWh per year, including standby power requirements of 416 kWh per year.

To reduce or eliminate standby power losses, consider using a 'power bar' with an on-off switch for home entertainment equipment that does not have to be re-programmed every time it is unplugged. Estimated savings are 208 kWh per year, assuming a 50% reduction in this stand-by power usage.

Office and Communication Equipment *2,559 kWh per year, or 15.2% of total Electricity Used*

The office and communication equipment in your house consumes approximately 2559 kWh per year, including stand-by power usage of 918 kWh per year.

Where possible, use a 'power bar' with a switch on computers, printers, scanners, routers, etc., or unplug power adapters when not in use. Estimated savings are 459 kWh/year, assuming a 50% reduction in this stand-by power usage.

Pumps, Pools, and Spas *589 kWh per year, or 3.5% of total Electricity Used*

This sub-category of equipment includes devices such as sump pumps, well-water pumps, and pumps and electric heaters associated with swimming pools, hot tubs and spas. A survey of your home indicates that equipment of this type is present, and uses about 589 kWh per year of electricity.

Power consumption of some circulating pumps can be lowered by installing a timer or other controls to reduce operating time while maintain the overall functionality. Assuming you could reduce pump operating times by 50%, your savings potential is estimated at 18 kWh per year.

Other Miscellaneous Devices *1,687 kWh per year, or 10.0% of total Electricity Used*

"Other Miscellaneous Devices" include various small kitchen appliances, other miscellaneous appliances and devices (hair dryers, clocks, etc), and other items such as garage door openers, central vacuum cleaners, etc.

These "other miscellaneous devices" are estimated to use 1687 kWh per year in your home.