Welcome to

# Live Green In Plano DIY HOME ENERGY EFFICIENCY 101

# **ENERGIZE YOUR HOME**

You can make a difference!

**Energy Saving Ideas** 

There are ways to lower your utility bill, make your home more comfortable, safer and improving the indoor air quality.

Where does it start? It starts with control.

✓ Control your cost.
✓ Control your behavior.
✓ Control your contractors.
✓ Do it yourself.

# You've got the power.

What is deregulation? How does it affect you? Take control!

# COST VS USAGE

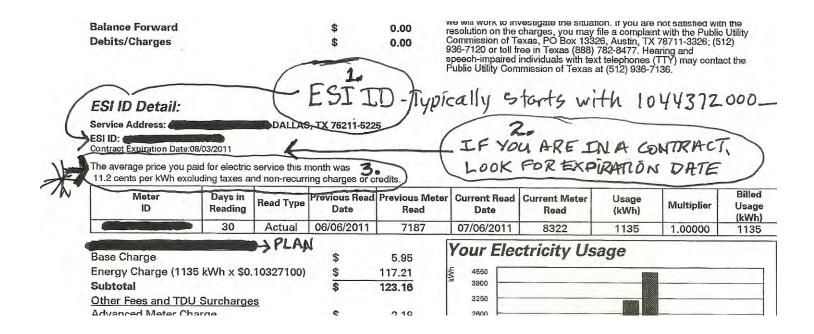
• Cost-This is the price you pay per kilowatt hour for electricity. • Usage-This is how many kilowatt hours you use during the billing cycle.

The average price your paid for electricity this month is \_\_\_\_\_cents per kwh. (kilowatt hour)

#### This sentence is on YOUR electric bill.

Ex: If you pay 14.7 cents and your neighbor pays 10.2 cents, he is paying 30% less than you! If you are paying 10 cents and he is paying 8, he is paying 20% less than you! Do the math here!

#### **PENNIES MATTER!**



#### ) Detail

Je Address: 635 HAMBRICK RD, DALLAS, TX 75218-1748 D: 10443720002671713

#### ntract Expiration Date: 07/31/2013

ne average price you paid for electric service this month was 9.6 cents per kWh cluding taxes and non-recurring charges or credits.

Meter ID	Days In Reading	Read Type	Previous Read Date	Previous Meter Read
113068974LG	31	Actual	10/28/2012	25918
XU Energy Resident's nergy Charge (1000 k nergy Charge (644 kV	Wh x \$0.06	600000)	\$ \$	66.00 34.13
ubtotal			\$	100.13
ther Fees and TDU S DU Delivery Charges	urcharges		\$	58.03
ross Receipts Reimb			\$	3.08
ubtotal ales Tax	121	Serie Ale	\$ \$	61.11 1.61

#### **ESI ID Detail**

#### Service Address: 609 HAMBRICK RD, DALLAS, TX 75218-1748 ESI ID: 10443720002671650

Contract Expiration Date: 07/13/2013

The average price you paid for electric service this month was 41.5 cents per kWh excluding taxes and non-recurring charges or credits.

Meter ID	Days In Reading	Read Type	Previous Read Date	Previous Meter Read	Re
113086304LG	31	Actual	10/28/2012	4536	11
TXU Energy Resident'	s Choice 12 <sup>s</sup>	M			
Monthly Charge			\$	9.95	10.28
Energy Charge (51 kWh x \$0.06600000)			\$	3.37	
Subtotal			\$	13.32	
Other Fees and TDU S	Surcharges				
TDU Delivery Charges			\$	7.85	
Gross Receipts Reimb			\$	0.42	
Subtotal			\$	8.27	
Sales Tax			\$	0.22	
				24.94	

#### What the heck is a kilowatt hour?

#### Before we see how much electricity costs, we have to understand how it's measured.

When you buy gas they charge you by the gallon. How much is gas today per gallon? When you buy electricity they charge you by the *kilowatt-hour (kWh).* How much is electricity? When you use 1000 watts for 1 hour, that's a kilowatt-hour. For example:

Device	Wattage	Hours used	kWh
medium window-unit AC	1000 watts	one hour	1 kWh
large window-unit AC	1500 watts	one hour	1.5 kWh
small window-unit AC	500 watts	one hour	0.5 kWh
42" ceiling fan on low speed	24 watts	ten hours	0.24 kWh
light bulb	100 watts	730 hours (i.e., all month)	73 kWh
CFL light bulb	25 watts	730 hours	18 kWh

To get kilowatt-hours, take the wattage of the device, multiply by the number of hours you use it, and divide by 1000. (Dividing by 1000 changes it from watt-hours to kilowatt-hours.) That's exactly what I did in the table above. Here's the formula to figure the cost of running a device:

wattage x hours used ÷ 1000 x price per kWh = cost of electricity

For example, let's say you leave a 100-watt bulb running continuously (730 hours a month), and you're paying 15¢/kWh.

Your cost to run the bulb all month is  $100 \ge 730 \div 1000 \ge 15$  = \$10.95.

If your device doesn't list wattage, but it does list amps, then just multiply the amps times the voltage to get the watts.

For example:

2.5 amps x 120 volts = 300 watts







Behavior is not always how you act! Be aware!





When was the last time you cleaned your coil under the refrigerator?







CFL on left is 128°





























16,000 fires annually from clogged dryers and vents!



















Account Invoice N	Number: lumber:	100010309890 055026007604	
			Additio
	\$	946.36	This invoice inditaxes and other business plans.
02/10/2013	S	946.36 CR	glad you've chos service. Want to txuexec@txu.co
0211012010	\$	946.36 CR	TX 75265-0764. at 1-800-242-91
	\$	0.00	not satisfied with Commission of 1
	\$	0.00	Texas (888)782- may contact the
	Account Invoice M	02/10/2013 \$	Account Number: 055026007604 Invoice Number: 055026007604 \$ 946.36 02/10/2013 \$ 946.36 CR \$ 946.36 CR \$ 946.36 CR \$ 0.00

#### Detail

dress: 3629 BLOSSOM TRL, PLANO, TX 75074-4108 43720003162188

e price you paid for electric service this month was 12.1 cents per kWh axes and non-recurring charges or credits.















































### What's in your attic?





### WHAT IS A HOME ENERGY AUDIT?

#### **Home Energy Audit**

A comprehensive home energy audit will 0 come with a written, detailed report. Typically, this is done thru an approved software program. The problem is, there are many software programs. REMRATE is the most widely recognized program and the primary program used for Energy Star compliance. This program is sanctioned by the National Association of Mortgage Industry. Banks sometimes use this report in determining energy upgrade compliance for new and existing homes. The tests we do on your home are the identical tests we do on a new home being built for compliance. The key here is this-there is a STANDARD to follow. Without a standard, an energy audit is whatever you and the person performing it agree on. Ask for a REM file, it's official.

#### **Home Energy Analysis**

On the other hand, we see many companies 0 advertising "energy audits". Beware, most of these companies are using it as a means of getting into your home to sell you their products without true consideration of a comprehensive home energy audit.( ie, radiant barrier, solar panels, etc) When asking about a home energy audit, be sure to clarify what it is you will be getting once the audit is complete to quantify the findings. Often times, we talk with consumers who tell us the person didn't leave them anything in writing. This is NOT good. In addition, ask for pictures. A good auditor will take photos from the beginning of the audit until it's complete documenting findings as they go. Pictures say a thousand words.

















# THANK YOU

# FOR ATTENDING LEARNOLIVEGREEN

Please complete a paper evaluation form and drop it into the collection box as you exit the theater.

#L2LG2014