

# Energy Star® Home-Based Small Business

Regardless of where your business is located, when you purchase energy you are buying a consumable supply item over which you have substantial control. E SOURCE, in their report titled "The Forgotten Majority: Small Business, Hidden Opportunities", notes, "*small businesses now account for more than half of all commercial energy consumption in North America.*" While they are substantial energy users, small businesses often miss an opportunity to improve their profitability through energy management. The Research Institute for Small and Emerging Businesses, for example, notes: "*Small and emerging businesses (SEB) typically do not have the resources to devote to energy management or to voice their concern/interests so that they are noticed by the market.*"

## Energy Star® and Your Home-Based Small Business

*Energy Star®* is a registered trademark that indicates a product exceeds the minimum Federal energy use standards or uses less energy than similar products. *Energy Star®* offers **Home Based Small Businesses** an excellent opportunity to improve their profitability.

The following chart allows you to compare your Home-Based Small Business with an average home and an *Energy Star® Home-Based Business*. This exercise will help you to identify those areas with greatest potential for the greatest savings:

Annual Energy Bill	Non-Energy Star® Home-based business	Energy Star® Home-based business	Your Home-based business
Heating	\$540	\$209	\$
Cooling	\$148	\$56	\$
Hot Water	\$132	\$66	\$
Appliances	\$253	\$169	\$
MISC.	\$204	\$204	\$
Lighting	\$99	\$50	\$
<b>TOTAL</b>	<b>\$1,376</b>	<b>\$754</b>	<b>\$</b>

(NOTE: As a rule-of-thumb, an average energy upgrade costs roughly three times what it saves in one year. Thus, based on this example, a typical home-based business could wisely spend \$1,866 on energy improvements ( $\$1,376 - \$754 = \$622 \times 3 \text{ years} = \$1,866$ ).

## Making "Your" Home-Based Business Energy Star®

Features of an *Energy Star® Home-Based Business* include:

*Energy Star® Rated Computers* - Power down when not in use. Laptops use even less energy than desktops. Energy Star® Rated Monitors have a large savings potential. Screen savers that are compatible with the monitor's power management features. Annual Energy Star labeled Cost Savings: \$19.00.

**Percentage of Total Operating Cost: 49%.**

*Energy Star® Rated Printers* - Goes into sleep mode when not in use. Annual Energy Star labeled Cost Savings: \$39.00.

**Percentage of Total Operating Cost: 65%.**

*Energy Star® Rated Facsimile Machines* - Saves 50% energy by going into a sleep mode when not in use. Annual Energy Star labeled Cost Savings: \$13.00.

**Percentage of Total Operating Cost: 52%.**

*Energy Star® Rated Copiers* - 60% savings on electricity by turning off after a period of inactivity. Annual Energy Star labeled Cost Savings – Medium Copier: \$57.00, Large Copier: \$130.00.

**Percentage of Total Operating Cost - Medium Copier: 57%, Large Copier: 58%.**

*Energy Star® Lights* – if you replace twenty 100-watt incandescent bulbs used 24 hours a day in your stairways with Energy Star® 30-watt compact fluorescent bulbs you'll save \$980 per year. The upgrade will cost you \$400. Your simple payback is \$400 divided into \$908 = 0.4 years, or under 5 months. This is equivalent to an over \$200 percent return on investment (ROI).

*Tightly sealed ducts* are crucial for energy-efficiency. In typical American homes, ducts leak 20 to 30 percent of air forced through them. This means 20 to 30 percent of the money spent to heat or cool homes is wasted. Duct systems sealed and verified by a field test can substantially eliminate these leaks.

*Energy Star® High-efficiency heating and cooling (HVAC) equipment* can account for over 50 percent of a home's total energy use. You can significantly lower your home's utility bills by choosing equipment carefully.

Reduced Air Infiltration combined with proper ventilation in a home not only reduces energy bills but also improves the quality of your indoor air. Outdoor air that leaks indoors makes it difficult to maintain comfort and energy efficiency. In addition, air leakage accounts for between 25 percent and 40 percent of the energy used for heating and cooling in a typical home. Today, off-the-shelf technologies such as house wraps, sealants, foams, and tapes reduce air infiltration. In energy-efficient homes, builders use these tools to seal the myriad of cracks and gaps in framing along with hundreds of holes for plumbing, mechanical equipment and electrical wiring.

*Energy Star® Hot Water Heater* - The average homeowner spends \$200.00 per year on water heating. *Energy Star®* rated Water Heaters can reduce this cost from \$20.00 to \$100.00 per year while also improving safety, quality and the value of the home.

#### *Energy Star® Appliances - Comparison of Energy Star® and non- Energy Star® Appliances*

	Annual Energy Cost (1)	
	Non ES (s)	ES
Refrigerators (18 – 20 C.F.) with Top Freezer	\$63.00	\$50.00
Dishwasher:		
Electric Hot Water	\$47.00	\$42.00
Gas Hot Water)	\$26.00	\$24.00
Clothes Washer:		
Electric Hot Water	\$83.00	\$39.00
Gas Hot Water)	\$32.00	\$17.00

1. Based on price of 8.6 cents per kWh for electricity or 60.0 cents per therm for natural gas.
2. Annual energy use for the Standard Model is sufficient to meet current federal appliance standards.

## **For More Information...**

**Store Locator:** The following is a website to find a store near you that features the specific Energy Star® product(s) you are looking for: [www.energystar.gov/index.cfm?fuseaction=store.store\\_locator](http://www.energystar.gov/index.cfm?fuseaction=store.store_locator). For more information on the **Michigan Energy Star® Program** for small businesses please contact:

*Mark H. Clevey, Director*  
Michigan Energy Star Small Business  
C/o Small Business Association of Michigan  
222 N. Washington Square, Ste 100, P.O. Box 16158  
Lansing, MI 48901-6158  
Tel: 800 362 5461, FAX: 517 482 420  
mhc@sbam.org www.sbam.org