

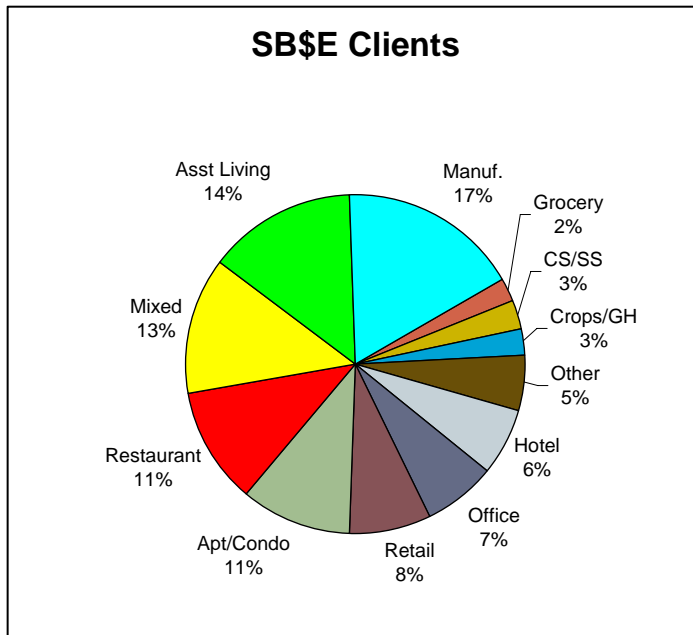
Bureau of Energy and Recycling Small Business \$mart Energy Program

The Illinois Department of Commerce and Economic Opportunity (DCEO) Bureau of Energy and Recycling houses the Illinois State Energy Office. The Bureau seeks to demonstrate the economic development benefits of energy efficiency, renewable energy, and recycling through a variety of programs and services. Bureau programs show that economic development, sustainable energy, recycling practices, and environmental protection go hand in hand.

	Annual Therms	Annual kWh	Annual MBtu	Demand kW	Annual Dollars
2005	7,092	496,686	2,403	436	\$98,732
2006	392,781	3,653,564	52,416	1,028	\$808,057

Small Business \$mart Energy Program: Implemented Energy and Cost Savings through 2006

One of the most successful programs supported by DOE SEP funding is the *Small Business \$mart Energy (SB\$E) Program*. SB\$E provides free technical assistance to businesses to reduce their cost of energy. Thirty-six businesses have already implemented some or all of the energy improvements. These businesses are saving an estimated 3.6 million kWh and 390,000 therms for cash savings of over \$800,000 per year, and it is anticipated that these numbers will increase sharply as more businesses implement the SB\$E recommendations.



The SB\$E program serves most sectors of for-profit businesses. The SB\$E client chart illustrates the various clients that are participating in the program. Although the program does not target manufacturers, 17 percent of the SB\$E clients are light manufacturers. The Bureau's Manufacturing Energy Efficiency Program provides energy efficiency technical services to large industrial clients.

Note:
 Mixed = Light manufacturing & office/showroom
 CS/SS = Convenience stores & service stations
 Asst Living = Assisted living facilities
 Crops/GH = Crops and greenhouses

The recommendations provided to clients include annual unit energy savings, cost savings, net present value of investment and monthly cash flow. DCEO reports the estimates of savings for only those recommendations that were actually implemented. As the number of clients reporting implementation increases, the associated program costs decrease for each unit of energy and dollar of energy costs saved. The cost to save a unit of energy is expressed in the table below:

Program Year	2005	2006
Return on Investment		
1 therm saved per	\$2.53	\$0.11
1 kWh saved per	\$0.04	\$0.01
1 MBtu saved per	\$7.45	\$0.83
1 kW saved per	\$41.09	\$42.48
\$1 saved per	\$0.18	\$0.05
Projects & Implementation		
Businesses Assisted	31	89
Planning Implementation	13	18
Already Implemented	8	36
Not Implementing	10	13

Comparison of Program Costs of Unit Energy Savings for Program Years 2005 and 2006

SB\$E Success Stories

The Centralia Home Center moved into a former Kmart where SB\$E recommendations adopted include high efficiency roof top units, attic insulation, lighting systems upgrade, low-e windows, and painting walls white for reflectance. These upgrades reaped an energy cost savings of over \$24,000 per year.

SB\$E provided design assistance for a new Country Inn and Suites in Tinley Park. SB\$E recommended high efficiency packaged terminal air-conditioners and low-e windows. These design modifications will save about 49,000 kWh, reduce peak electric demand by about 19 kW, and save about \$5,500 per year in energy costs.

SB\$E recommended that Tan Books & Publishers of Rockford upgrade to a high efficiency heating system. By installing sealed combustion infrared heaters in the printing shop, Tan Books is saving 122,000 therms and 101,000 kWh per year for an annual energy cost savings of \$153,000.

SB\$E provided energy analyses of seven Senior Suite properties in the Chicago area. The corporation immediately implemented many of the low cost/no cost options and is saving over \$54,000 per year by reducing their energy consumption by over 23,000 kWh and 15,000 therms.

SB\$E provided suggestions for critical airflow and humidity control of a new facility for commercial printer, Letterkraft Creative Services (LKCS). LKCS installed 120 tons of geothermal providing heating, cooling, radiant floor heat and ice melt capability for sidewalk and loading docks. Additionally, LKCS installed temperature sensitive occupancy sensors, energy recovery ventilators and daylighting to increase the energy efficiency savings.

Bureau of Energy and Recycling

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