

Table A
GFX™ Savings, Payback & Savings to Investment Ratio (SIR)
Energy Cost: Long Island, NY From “So, how’s the weather? (Newsday October 6, 2005)*

Energy Source	Conversion Efficiency	Energy Cost March 2005	Annual Energy Savings	Annual \$-Savings	Payback (yr)	SIR (3/05)
Electrical	100%	15.3¢/kWh	1353 kWh	207	1.69	9.1
R-2000/Energuide		”	1760 kWh	269	1.30	11.8
Natural Gas	76%	\$2.05/Therm (7.02¢/kWh)	60.8 Therm (1780 kWh-thermal)	124	2.81	5.5
R-2000/Energuide		”	96.0 Therm	197	1.79	8.6
Oil	55%	\$2.84/gallon (6.87¢/kWh)	60.5 gallons (2483 kWh-thermal)	172	2.04	7.5

* LIPA’s Fuel surcharge not included. Increased to 54.2% of base electric bill for last 3 months of 2005; dropping to ? in 2006.

Table B
GFX™ Savings, Payback & Savings to Investment Ratio (SIR)
(Energy Cost: New York, March 2005)

Energy Source	Conversion Efficiency	Energy Cost March 2005	Annual Energy Savings	Annual \$-Savings	Payback (yr)	SIR (3/05)
Electrical	100%	15.3¢/kWh	1353 kWh	207	1.69	9.1
R-2000/Energuide		”	1760 kWh	269	1.30	11.8
Natural Gas	76%	\$1.24/Therm (4.23¢/kWh)	60.8 Therm (1780 kWh-thermal)	75	4.67	3.3
R-2000/Energuide		”	96.0 Therm	119	2.94	5.2
Oil	55%	\$2.38/gallon (5.76¢/kWh)	60.5 gallons (2483 kWh-thermal)	144	2.43	6.3

Table C
U.S. DOE Estimates in October 1986

Energy Source	Conversion Efficiency	Energy Cost October 1986	Annual Energy Savings	Annual \$-Savings	Payback (yr)	SIR (10/86)
Electrical	100%	8.66¢/kWh	1195 kWh	103.5	2.09	7.4
Natural Gas	76%	\$6.35/10 ⁶ Btu	53.7 Therm	34.1	6.34	2.4
Oil	55%	\$1.0/gallon	53.5 gallons	53.5	4.04	3.8

Footnotes

- a. Table A corresponds to Model G3-60 GFX rated @ 60%, with an active length of 57” and L.O.A. of 60”. R-2000/Energuide savings from <http://gfxtechnology.com/R-2000.pdf>. See also DOE/EEI, PP&L evaluations @ <http://gfxtechnology.com/bundles.html> & <http://gfxtechnology.com/bundles.html>.
- b. Table B entries from Table 1, attached. Performance corresponds to a less efficient design having a 60” flattened coil offering 53% DHR-efficiency, compared to a 60” long G3-60 having a 57” coil and 60% DHR-efficiency. (See also <http://gfxtechnology.com/Pravda.pdf>)
- c. Installed Cost for new construction \$350 in 2005; \$216 in 1986.
- d. Payback = Installed Cost to \$-Savings Ratio.
- e. PVF = Present Value Factor = 15.4 for GFX; corresponding to a 30 year life. (See <http://gfxtechnology.com/E-SIR.html> & <http://gfxtechnology.com/App-A.B.C.F.pdf>, pg. 11)
- f. SIR = Savings to Investment Ratio = PVF * (\$-Savings)/(Installed Cost) = PVF/Payback.
- g. Energy costs: oil from NYS Energy Research and Development Authority (NYSERDA); natural gas and electricity from Long Island Power Authority (LIPA)