



Heating and Cooling Utility Billing and Energy Savings Analysis

Gas Bill Analysis

= Average of Lowest 3
Monthly Therms = Gas Bill \$ / Therms = Therms - Baseload;
zero out negatives = Heating Therms x
\$/Therm = %Savings x Heating
Cost

Month	Therms	Gas Bill \$	Baseload	\$/Therm	Heating Therms	Heating Cost	Heating Savings
Jan							
Feb							
Mar							
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Totals							

Percent Savings

$$Eff_{existing} \times \left(\frac{1}{Eff_{existing}} - \frac{1}{Eff_{new}} \right) = \%Savings$$

Heating

Cooling

Electric Bill Analysis

= Average of Lowest 3
Monthly kWh = Electric Bill \$ /
kWh = kWh - Baseload for
cooling months; zero
out negatives = kWh - Baseload for
heating months; zero
out negatives = Cooling kWh x
\$/kWh = Heating kWh x
\$/kWh = %Savings x Cooling
Cost = %Savings x Heating
Cost

Month	kWh	Electric Bill \$	Baseload	\$/kWh	Cooling kWh	Heating kWh	Cooling Cost	Heating Cost	Cooling Savings	Heating Savings
Jan										
Feb										
Mar										
Apr										
May										
Jun										
Jul										
Aug										
Sep										
Oct										
Nov										
Dec										
Totals										

This analysis worksheet produces an estimate of heating and cooling energy use, costs, and savings potential based on the past years' utility bills. Actual results may vary due to changes in weather, occupant behavior, or building attributes.

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Gas Bill Analysis

= Average of Lowest 3 Monthly Therms = Gas Bill \$ / Therms = Therms - Baseload; zero out negatives = Heating Therms x \$/Therm = %Savings x Heating Cost

Month	Therms	Gas Bill \$	Baseload	\$/Therm	Heating Therms	Heating Cost	Heating Savings
Jan	190.0	\$125.81	11.7	\$0.66	178.3	\$118.06	\$36.98
Feb	128.0	\$88.83	11.7	\$0.69	116.3	\$80.71	\$25.28
Mar	129.8	\$88.93	11.7	\$0.69	118.1	\$80.91	\$25.34
Apr	49.2	\$40.30	11.7	\$0.82	37.5	\$30.72	\$9.62
May	20.5	\$20.52	11.7	\$1.00	8.8	\$8.81	\$2.76
Jun	12.1	\$17.35	11.7	\$1.44	0.4	\$0.54	\$0.17
Jul	11.9	\$21.21	11.7	\$1.79	0.2	\$0.27	\$0.09
Aug	11.7	\$21.40	11.7	\$1.83	0.0	\$0.00	\$0.00
Sep	11.6	\$19.93	11.7	\$1.72	0.0	\$0.00	\$0.00
Oct	72.4	\$65.58	11.7	\$0.91	60.7	\$54.97	\$17.22
Nov	124.0	\$82.71	11.7	\$0.67	112.3	\$74.90	\$23.46
Dec	121.0	\$85.14	11.7	\$0.70	109.3	\$76.91	\$24.09
Totals	882.1	\$677.73	140.5	\$0.77	741.6	\$526.80	\$165.02

Percent Savings

$$Eff_{existing} \times \left(\frac{1}{Eff_{existing}} - \frac{1}{Eff_{new}} \right) = \%Savings$$

Heating

$$57\% \times \left(\frac{1}{57\%} - \frac{1}{83\%} \right) = 31\%$$

Cooling

$$8.6 \times \left(\frac{1}{8.6} - \frac{1}{18.9} \right) = 55\%$$

Electric Bill Analysis

= Average of Lowest 3 Monthly kWh = Electric Bill \$ / kWh = kWh - Baseload for cooling months; zero out negatives = kWh - Baseload for heating months; zero out negatives = Cooling kWh x \$/kWh = Heating kWh x \$/kWh = %Savings x Cooling Cost = %Savings x Heating Cost

Month	kWh	Electric Bill \$	Baseload	\$/kWh	Cooling kWh	Heating kWh	Cooling Cost	Heating Cost	Cooling Savings	Heating Savings
Jan	796	\$79.20	598	\$0.10	198	0	\$19.67	\$0.00	\$10.77	\$0.00
Feb	467	\$50.58	598	\$0.11	0	0	\$0.00	\$0.00	\$0.00	\$0.00
Mar	889	\$82.46	598	\$0.09	291	0	\$26.96	\$0.00	\$14.76	\$0.00
Apr	604	\$61.21	598	\$0.10	6	0	\$0.61	\$0.00	\$0.33	\$0.00
May	1062	\$137.53	598	\$0.13	463	0	\$60.01	\$0.00	\$32.86	\$0.00
Jun	1154	\$210.54	598	\$0.18	556	0	\$101.39	\$0.00	\$55.53	\$0.00
Jul	2017	\$167.84	598	\$0.08	1419	0	\$118.06	\$0.00	\$64.65	\$0.00
Aug	2032	\$107.89	598	\$0.05	1434	0	\$76.12	\$0.00	\$41.68	\$0.00
Sep	1521	\$88.60	598	\$0.06	923	0	\$53.75	\$0.00	\$29.44	\$0.00
Oct	954	\$57.82	598	\$0.06	356	0	\$21.56	\$0.00	\$11.81	\$0.00
Nov	749	\$75.36	598	\$0.10	151	0	\$15.16	\$0.00	\$8.30	\$0.00
Dec	724	\$71.54	598	\$0.10	126	0	\$12.42	\$0.00	\$6.80	\$0.00
Totals	12969	\$1,190.56	7180	\$0.09	5921	0	\$505.71	\$0.00	\$276.94	\$0.00

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