Comparative energy costs for space heating

Electricity (Cents/kWh)	Fuel Oil Regular Furnace ($/Gal.)	Fuel Oil Super Efficient Furnace ($/Gal.)	Propane Regular Furnace ($/Gal.)	Propane Super Efficient Furnace ($/Gal.)	Natural Gas Regular Furnace ($/MCF)	Natural Gas Super Efficient Furnace ($/MCF)
4	0.98	1.31	0.64	0.97	7.03	10.55
4.2	1.03	1.38	0.68	1.01	7.38	11.08
4.4	1.08	1.44	0.71	1.06	7.74	11.60
4.6	1.13	1.51	0.74	1.11	8.09	12.13
4.7	1.16	1.54	0.76	1.14	8.26	12.39
4.8	1.18	1.58	0.77	1.16	8.44	12.66
4.9	1.21	1.61	0.79	1.18	8.61	12.92
5	1.23	1.64	0.81	1.21	8.79	13.18
5.1	1.26	1.67	0.82	1.23	8.97	13.45
5.2	1.28	1.71	0.84	1.26	9.14	13.71
5.3	1.30	1.74	0.85	1.28	9.32	13.98
5.4	1.33	1.77	0.87	1.30	9.49	14.24
5.5	1.35	1.80	0.89	1.33	9.67	14.50
5.6	1.39	1.84	0.90	1.35	9.84	14.77
5.7	1.40	1.87	0.92	1.38	10.02	15.03
5.8	1.43	1.90	0.93	1.40	10.20	15.30
5.9	1.45	1.94	0.95	1.43	10.37	15.56
6	1.48	1.97	0.97	1.45	10.55	15.82
6.5	1.60	2.13	1.05	1.57	11.43	17.14
6.7	1.65	2.20	1.08	1.62	11.78	17.67
7	1.72	2.30	1.13	1.69	12.31	18.46
7.5	1.85	2.46	1.21	1.81	13.18	19.78
7.7	1.90	2.53	1.24	1.86	13.54	20.30
8	1.97	2.63	1.29	1.93	14.06	21.10
8.5	2.09	2.79	1.37	2.05	14.94	22.41
8.6	2.12	2.82	1.38	2.08	15.12	22.68
8.7	2.14	2.85	1.40	2.10	15.29	22.94
8.9	2.19	2.92	1.43	2.15	15.65	23.47
9	2.22	2.95	1.45	2.17	15.82	23.73
10	2.46	3.28	1.61	2.42	17.58	26.37
12	2.95	3.94	1.93	2.90	21.10	31.64
14	3.45	4.59	2.25	3.38	24.61	36.92

The above figures are based on the assumptions and formulas listed on the reverse side.

Assumptions

Fuel Source	Btu Heat Content	Annual Seasonal Operating Efficiency	
		Regular Furnace	Super Efficient Furnace
Electricity	3,413 Btu/kWh	100%	100%
#2 Fuel Oil	140,000 Btu/Gal.	60%	80%
Propane	91,600 Btu/Gal.	60%	90%
Natural Gas	1,000,000 Btu/MCF	60%	90%

Formulas

Alternate fuel price to electric rate conversion formula:

(Fuel Price) ÷ (Efficiency) x (341,300) ÷ (Btu Heat Content) = Electric Rate

Example of $0.97/Gal. Propane to Electricity with a Super Efficient Furnace:

(0.97) ÷ (0.90) x (341,300) ÷ (91,600) = 4.0¢/kWh

Electricity rate to alternate fuel price conversion formula:

(Electric Rate) x (Efficiency) x (Btu Heat Content) ÷ (341,300) = Fuel Price

Example of 4¢/kWh Electricity Rate to #2 Fuel Oil with a Regular Furnace:

(4.0) x (0.60) x (140,000) ÷ (341,300) = $0.98/Gal.