

Residential Energy Price Update

Recent and Historic Oil and Gas Prices

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At the request of the Oil Heat Institute of Rhode Island, we performed a comparison of average residential oil and natural gas prices for Rhode Island for the past year (2005) and prior years. These results are based on data published by the US Department of Energy's Energy Information Administration.

PRICES FOR NATURAL GAS AND HOME HEATING OIL

In recent years, natural gas prices have been higher than home heating oil in the regions of the US where oil heat is common. Figure 1 below summarizes these findings for Rhode Island for average state prices for the period from 1983 through 2005 based on data published by the US Department of Energy. The following is a brief summary of key points regarding these residential fuel price data for Rhode Island.

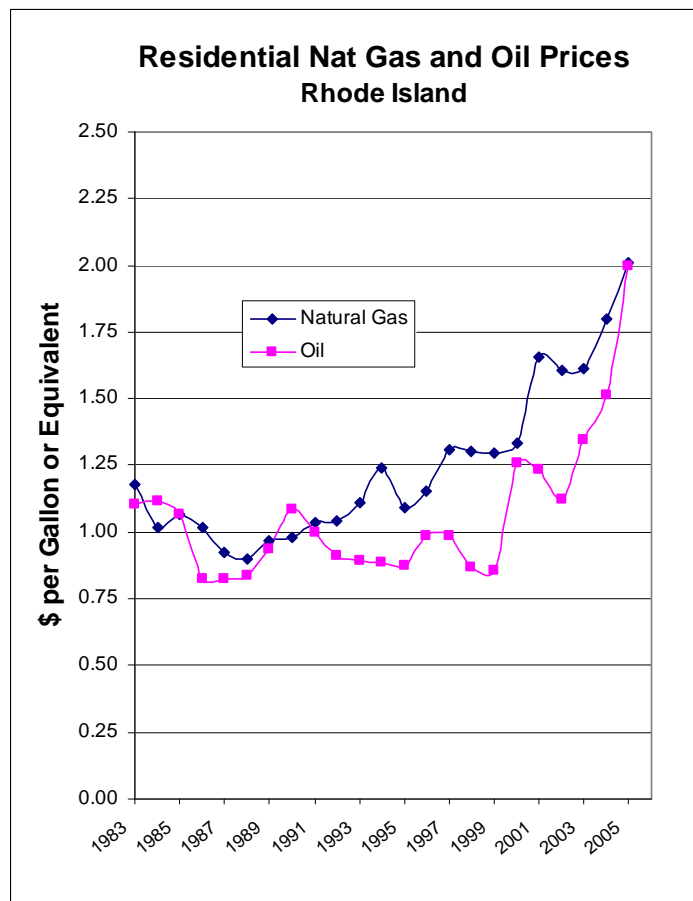


Figure 1. Average Natural Gas and Oil Prices

Figure 1 clearly shows that the average price of natural gas sold to residences in Rhode Island has been higher than the price of home heating oil from 1991 through 2005.

Residential oil prices were lower than natural gas prices in Rhode Island for each of the last 15 years. Also noteworthy is the fact that oil prices were *significantly* lower than natural gas prices for 13 of the past 15 years. The tabulated data are contained in Attachment 1.

Key observations regarding these residential gas and oil price data include the following:

- The average price of natural gas over the **past 23 years** was \$1.25 per gallon equivalent, while home heating oil averaged \$1.07 a gallon – **oil was 14 percent lower.**
- The average price of natural gas over the **past 15 years** was \$1.37 per gallon equivalent, while home heating oil averaged \$1.12 a gallon – **oil was 19 percent lower.**
- The average price of natural gas over the **past 10 years** was \$1.51 per gallon equivalent, while home heating oil averaged \$1.22 a gallon – **oil was 19 percent lower.**
- The average price of natural gas over the **past 5 years** was \$1.74 per gallon equivalent, while home heating oil averaged \$1.44 a gallon – **oil was 17 percent lower.**
- Oil prices were consistently and **substantially lower than** natural gas for the periods from 1992 TO 2004. (See Figure 1).

LONG-TERM OIL AND GAS PRICE TRENDS

Both oil and gas prices have been changing over the past two decades as seen in Figure 1. Oil prices have been rising and falling in a cyclical pattern from 1983 to 2003, while natural gas prices have been trending upward without the frequent periodic drops observed for oil. In order to evaluate these trends, linear regression analyses were again performed to evaluate average trends in residential oil and gas prices over the past 23 years. The results are plotted in **Figure 2**.

Natural gas prices have been increasing in a steady pattern for the past 17 years from 1988 (Year 6) to the present time, with some slight decreases for two years. For these two years (years 13 and 20), prices dropped slightly amid the rising trend line. In contrast, oil prices have not steadily increased, but instead, have periodically risen and fallen over that interval. The last two to three years appear to be an exception to this historic trend. Clearly, the average rate at which oil prices increased over the past two decades has been much less than the increase for natural gas. The lower rate of increase in oil prices compared to gas prices is evident by examining the linear regression trend lines shown in Figure 2.

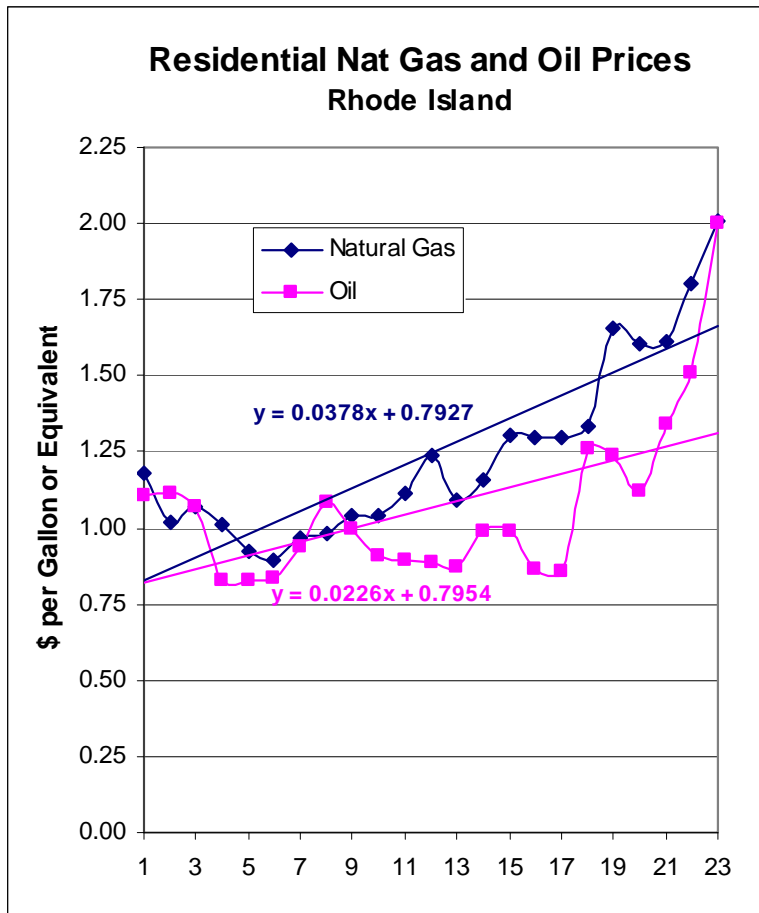


Figure 2. 23- year Price Trends

The linear regression analyses shown in Figure 2 quantify the difference in price increases for gas and oil. The slope of the natural gas trend line is 0.0378 dollars per year, compared to oil at 0.0226 dollars per year. **Therefore, on average, natural gas prices have increased at a rate that is about 67% faster than home heating oil.** Year 1 is 1983 and the linear regression analysis is the same for both oil and gas prices at approximately \$0.79 per gallon or gallon equivalent. Gas prices increased more rapidly than oil during the first 21 years (to 2003) as shown by the higher slope for natural gas prices when compare to oil prices. However, for the past two years (2004 and 2005) oil prices have increased to where they are currently approaching natural gas prices.

The overall conclusion of this trend analysis is that natural gas prices have increased steadily over the past two decades at an average rate that is higher than home heating oil. The average price of natural gas in Rhode Island over the past 23 years is \$1.25 for energy equivalent to gallon of oil, while the average price of oil for the same period is \$1.07 per gallon. The cost of heating with oil, therefore, has been 14 percent lower than the cost of heating with gas over the past 23 years based on published US Department of Energy fuel price information.

RESIDENTIAL NATURAL GAS AND OIL PRICES 1983 TO 2005

REF: US DEPARTMENT OF ENERGY - ENERGY INFORMATION ADMINISTRATION
RHODE ISLAND

	YEAR	NAT GAS \$/mcf	\$/gal	OIL \$/gal	diff	% diff	
1	1983	8.66	1.18	1.105	0.07	6	
2	1984	7.50	1.02	1.114	-0.09	-9	
3	1985	7.87	1.07	1.067	0.00	0	
4	1986	7.46	1.01	0.828	0.19	18	
5	1987	6.81	0.93	0.825	0.10	11	
6	1988	6.60	0.90	0.836	0.06	7	
7	1989	7.13	0.97	0.939	0.03	3	
8	1990	7.22	0.98	1.086	-0.10	-11	
9	1991	7.63	1.04	0.999	0.04	4	
10	1992	7.68	1.04	0.912	0.13	13	
11	1993	8.17	1.11	0.893	0.22	20	
12	1994	9.12	1.24	0.885	0.36	29	
13	1995	8.02	1.09	0.874	0.22	20	
14	1996	8.49	1.15	0.986	0.17	15	
15	1997	9.61	1.31	0.989	0.32	24	
16	1998	9.56	1.30	0.868	0.43	33	
17	1999	9.53	1.30	0.857	0.44	34	
18	2000	9.83	1.34	1.259	0.08	6	
19	2001	12.17	1.65	1.236	0.42	25	
20	2002	11.81	1.61	1.124	0.48	30	
21	2003	11.85	1.61	1.344	0.27	17	
22	2004	13.24	1.80	1.511	0.29	16	
23	2005	14.79	2.01	1.998	0.01	1	
	AVERAGE		1.25	1.07	0.18	14	23 yr
			1.37	1.12	0.26	19	15 yr
			1.51	1.22	0.29	19	10 yr
			1.74	1.44	0.29	17	5 yr

ATTACHMENT 1. Tabulated Oil and Nat Gas Prices