

THE ALTERNATIVE FUEL PRICE REPORT



Alternative Fuel Prices Across the Nation

December 30, 2003

This is the tenth issue of the Clean Cities Alternative Fuel Price Report, a quarterly newsletter keeping you up to date on the prices of alternative fuels in the U.S. and their relation to gasoline and diesel prices. This issue discusses prices that were gathered from Clean Cities coordinators and stakeholders during the weeks of December 1 and December 8, 2003, with comparisons to the prices in the previous Price Report, which were collected in February, 2003.

The prices contained within this report are meant to represent retail, at-the-pump sales prices for each fuel. In some cases, prices are collected from utilities or government facilities, where taxes are not included. In these instances, though government users may not be required to pay a tax on the fuel, standard federal and state taxes are added on and included in the prices presented herein. Some states, in lieu of taxes, charge an annual flat fee for certain alternative fuels (esp. gaseous fuels such as CNG and propane). Such flat fees are not considered in the prices estimated in this report.

Gasoline and Diesel Prices

Regular grade gasoline averaged \$1.476 per gallon nationwide during the week of December 8, 2003, decreasing by 13.1¢ per gallon since the previous Price Report (February 2003), as illustrated in the table to the right. Prices for the various regions of the country are also illustrated in this table. (A map of the regions is shown on the next page.) During the week of December 8, prices ranged from a low of \$1.387 in the Gulf Coast region to a high of \$1.630 on the West Coast. The price decreased in all regions since February, 2003. The greatest decrease in prices was in the Midwest, where the price decreased by 18.1¢ per gallon.

Gasoline Price Trends

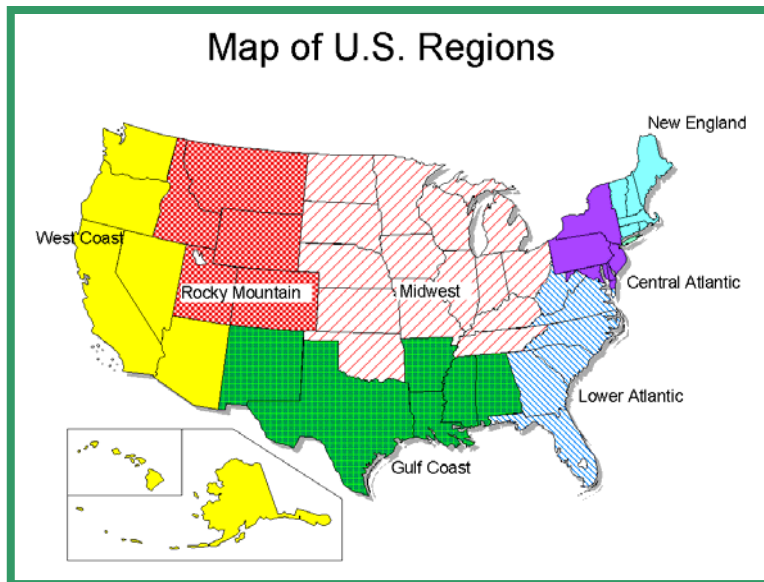
	Week of 2-10-03	Week of 12-8-03	Change in Price
New England	\$1.634	\$1.541	(0.093)
Central Atlantic	\$1.627	\$1.551	(0.076)
Lower Atlantic	\$1.563	\$1.417	(0.146)
Midwest	\$1.606	\$1.425	(0.181)
Gulf Coast	\$1.556	\$1.387	(0.169)
Rocky Mountain	\$1.559	\$1.496	(0.063)
West Coast	\$1.679	\$1.630	(0.049)
Nationwide Average	\$1.607	\$1.476	(0.131)

Diesel fuel averaged \$1.481 per gallon nationwide during the week of December 8, 2003. This represents a decrease of 18.1¢ per gallon from the previous Price Report (February 2003). Prices for the various regions of the country are illustrated in the table to the right. During the week of December 8, diesel prices ranged from a low of \$1.430 in the Lower Atlantic region to a high of \$1.635 on the West Coast. Between February and December, 2003, prices for diesel decreased in every region of the country.

Diesel Price Trends

	Week of 2-10-03	Week of 12-8-03	Change in Price
New England	\$1.834	\$1.606	(\$0.228)
Central Atlantic	\$1.801	\$1.592	(\$0.209)
Lower Atlantic	\$1.669	\$1.430	(\$0.239)
Midwest	\$1.652	\$1.448	(\$0.204)
Gulf Coast	\$1.632	\$1.431	(\$0.201)
Rocky Mountain	\$1.574	\$1.528	(\$0.046)
West Coast	\$1.653	\$1.635	(\$0.018)
Nationwide Average	\$1.662	\$1.481	(\$0.181)

Gasoline and diesel prices shown are retail prices; they include federal, state, and local taxes. These prices were obtained from the Energy Information Administration.



Natural Gas (CNG) Prices

Average natural gas (CNG) retail pump prices for the various regions of the country are illustrated in the accompanying table. Regional average CNG prices ranged from a low of \$1.14 per GGE in the Midwest region to a high of \$1.66 per GGE on the West Coast during the week of December 8, 2003. Prices for CNG were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis.

CNG Price Trends

	Week of 2-10-03	Week of 12-8-03	Change in Price	Number of Respondents for 12-8-03	Approx. No. of Stations Represented
New England	\$1.20	\$1.40	\$0.20	1	1
Central Atlantic	\$1.10	\$1.18	\$0.08	2	8
Lower Atlantic	\$1.29	\$1.46	\$0.17	2	6
Midwest	\$1.01	\$1.14	\$0.13	5	8
Gulf Coast	\$1.27	\$1.24	(\$0.03)	2	2
Rocky Mountain	\$0.89	\$1.35	\$0.46	3	25
West Coast	\$1.44	\$1.66	\$0.22	4	67

Propane Prices

Propane retail pump prices in the various regions of the country during the week of December 8, 2003, are illustrated in the accompanying table. Regional average propane prices ranged from a low of \$1.42 per gallon (\$1.90 per GGE) in the Gulf Coast region to a high of \$1.83 per gallon (\$2.45 per GGE) in the West Coast region. Prices for propane were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis.

Propane Price Trends

	Week of 2-10-03	Week of 12-8-03	Change in Price	Number of Respondents for 12-8-03	Approx. No. of Stations Represented
New England	\$1.63	No Info	-	0	0
Central Atlantic	\$1.81	\$1.71	(\$0.10)	1	21
Lower Atlantic	\$1.24	\$1.52	\$0.28	1	13
Midwest	\$1.56	\$1.70	\$0.14	5	7
Gulf Coast	\$1.35	\$1.42	\$0.07	2	2
Rocky Mountain	\$1.24	\$1.63	\$0.39	2	2
West Coast	\$1.93	\$1.83	(\$0.10)	2	2

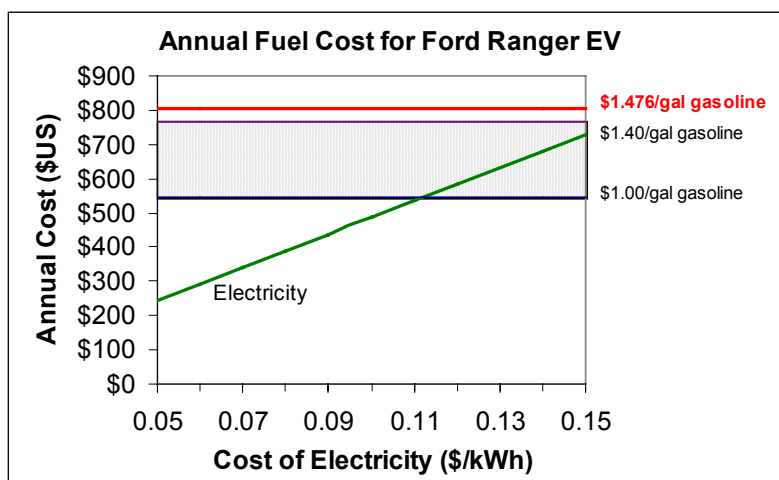
Electricity Prices

Residential electricity prices in the United States ranged from 5¢ to 17¢ per kilowatt-hour in August 2003, according to the Energy Information Administration's Electric Power Monthly newsletter of December 2003. Commercial electricity rates ranged from 5¢ to 15¢ per kilowatt-hour. The Rocky Mountain region boasted the lowest electricity prices in the both the residential and commercial sectors. The highest residential prices were in the New England region, and the highest commercial prices were in the Central Atlantic region.

It is difficult to estimate regional fuel costs of electric vehicles with any precision because of the complexity of electricity pricing structures. However, one method for comparing electricity to conventional fuels is to calculate the fuel cost per year for sample vehicles. The table below illustrates three sample electric vehicles; the Ford Ranger, the Toyota Rav4, and the Nissan Altra¹. Fuel costs per year were calculated based upon the EPA-published fuel economy ratings for gasoline vehicles (in MPG) and for electric vehicles (in kilowatt-hours per mile). Each vehicle was assumed to travel 12,000 miles per year. Fuel costs for electric vehicles were calculated from a range of prices, as shown below. The national average price of gasoline (\$1.476 per gallon) was used to calculate the annual fuel cost for gasoline vehicles. The gasoline counterpart to the Nissan Altra was the Nissan Altima, a midsize car that could serve the same fleet purpose as the midsize electric Altra.

Annual Fuel Cost Comparison

	Electric Vehicle (5¢/kWh)	Electric Vehicle (7.5¢/kWh)	Electric Vehicle (10¢/kWh)	Electric Vehicle (12.5¢/kWh)	Electric Vehicle (15¢/kWh)	Gasoline Vehicle
Ford Ranger	\$240	\$360	\$490	\$610	\$730	\$810
Toyota Rav4	\$180	\$270	\$360	\$450	\$540	\$680
Nissan Altra	\$170	\$250	\$330	\$410	\$500	\$710



The graph to the left shows the annual fuel cost of an electric Ford Ranger over a range of electricity prices from 5¢ to 15¢ per kilowatt-hour. At the national average gasoline price of \$1.476 per gallon, the fuel cost of an electric Ranger is less than that of its conventional counterpart for electricity price up to 17¢ per kilowatt-hour. If gasoline costs \$1.00 per gallon, the electric vehicle will not have a lower fuel cost than its conventional counterpart unless the electricity price is under 11¢ per kilowatt-hour.

Ethanol (E85) Prices

For the week of December 8, 2003, E85 prices were obtained from the Lower Atlantic, Midwest, and Rocky Mountain regions. Regional average prices range from a low of \$1.36 per gallon (\$1.70 per GGE) in the Midwest region, to a high of \$1.88 per gallon (\$2.35 per GGE) in the Rocky Mountain

Ethanol Price Trends

	Week of 2-10-03	Week of 12-8-03	Change in Price	Number of Respondents for 12-8-03	Approx. No. of Stations Represented
New England	No Info	No Info	-	0	0
Central Atlantic	No Info	No Info	-	0	0
Lower Atlantic	\$1.41	\$1.58	\$0.17	1	1
Midwest	\$1.49	\$1.36	(\$0.13)	6	44
Gulf Coast	No Info	No Info	-	0	0
Rocky Mountain	\$1.56	\$1.88	\$0.32	2	2
West Coast	No Info	No Info	-	0	0

¹ The 2002 Ford Ranger EV is compared to a 2002 Ford Ranger 2WD with 4 cylinders, 4-valve dual overhead cam, 2.3 liters, and automatic transmission. The 2002 Toyota Rav4 EV is compared to a 2002 Toyota Rav4 2WD with 4 cylinders, 2 liters, and automatic transmission. The 2000 Nissan Altra is compared to the 2002 Nissan Altima with 4 cylinders, 2.5 liters, and automatic transmission. Fuel economy data was not available for a 2002 Nissan Altra.

region.² Prices for E85 were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis.

Biodiesel (B20) Prices

Biodiesel prices for the week of December 8, 2003, are shown in the table to the right. The prices shown represent B20, a fuel composed of conventional diesel (80%) and biodiesel (20%). Regional average prices ranged from \$1.55 per gallon in the Midwest region to \$1.84 per gallon in the Central Atlantic region.

Biodiesel Price Trends

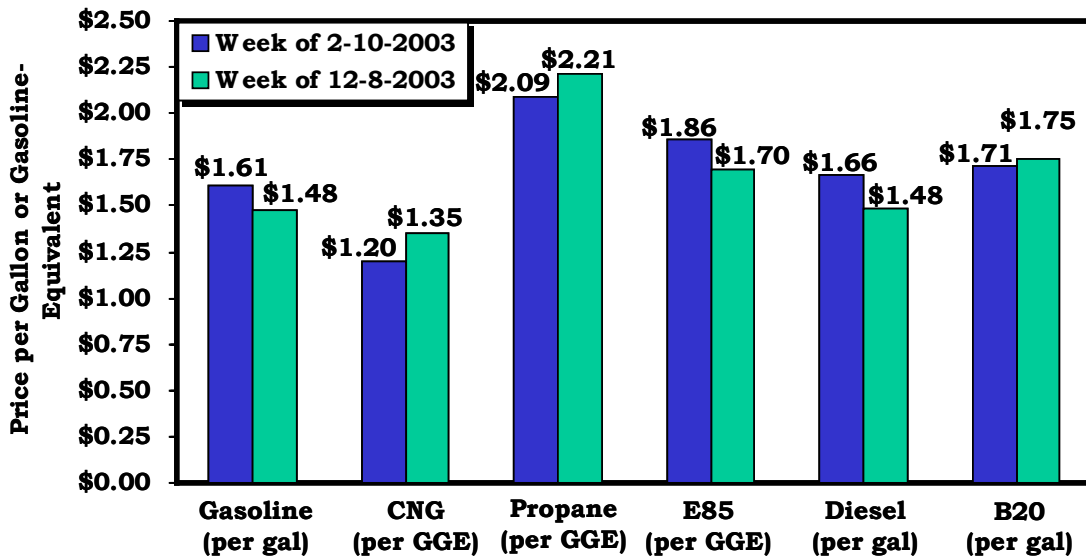
	Week of 2-10-03	Week of 12-8-03	Change in Price	Number of Respondents for 12-8-03	Approx. No. of Stations Represented
New England	\$1.95	No Info	-	0	0
Central Atlantic	\$1.90	\$1.84	(\$0.06)	1	1
Lower Atlantic	\$1.71	\$1.65	(\$0.06)	2	2
Midwest	\$1.48	\$1.55	\$0.07	5	6
Gulf Coast	\$1.72	No Info	-	0	0
Rocky Mountain	\$1.67	\$1.75	\$0.08	2	3
West Coast	\$1.63	\$1.78	\$0.15	1	1

Prices for biodiesel were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis. Note that some biodiesel prices were given in terms of B100, a pure biodiesel fuel not blended with conventional diesel. In these cases, a representative diesel price from the corresponding region was assumed, and a B20 price was calculated.

Summary

During the week of December 8, 2003, gasoline and diesel prices across the country were significantly lower than in February, 2003 (the time period of the previous Price Report). The reported price of CNG increased in every region except the Gulf Coast, where it dropped by 3¢ per GGE. Propane prices also increased in most regions; interestingly, however, propane prices decreased in the two regions with the highest propane prices. The graph below illustrates the relative prices of gasoline, diesel, CNG, propane, E85, and biodiesel.³

Selected Fuel Prices in the U.S.



² Includes a 10% decrease in energy use per mile for E85 relative to gasoline.

³ Gasoline and diesel prices in the graph are national averages; CNG, propane, and B20 prices are median values. The Midwest region's price for E85 is shown because the majority of the reporting stations are located in the Midwest.



Do you have fuel prices you wish to share for inclusion in the next newsletter? To do so, contact:

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