

Energy Usage Statistics

Consumption by Source

In the Electric Power Sector, Nebraska’s Energy Consumption in 2009 consisted of mainly two sources. 68.61% (242.326 trillion Btu) of consumption came from coal while the second highest use was 27.94% (3.326 TBtu) generated by Nuclear Electric Power.

According to the 2009 EIA State-Level Energy Consumption statistics, Nebraska was ranked 34th in total consumption with 759.1 trillion Btu. This consumption per person in Nebraska is 9th highest with 422.9 Million Btu. The upper Midwest Region is represented poorly for consumption per person with Wyoming, North Dakota, Iowa, South Dakota, Nebraska, and Montana in the top ten. This is due to the rural and agricultural nature of these states. Most of these states are found in the top ten of lowest prices for Dollars spent per Million Btu.

The agricultural economies and cheap prices lead to high energy consumption per person as well as less urgency to conserve these resources. It becomes a way of life and hard to change course with both isolated farmers as well as urban citizens who have low and affordable public prices. For example, the average monthly bill in Nebraska in 2007 was roughly \$78. In 2010 it rose to \$94. Nebraska’s energy consumption by source as it compares to the United States in 2010 is shown in Table 30.

ENERGY CONSUMPTION BY SOURCE

COAL	254.6 TBtu (31st)	20,869 TBtu
NATURAL GAS	169.6 TBtu (38th)	24,314 TBtu
PETROLEUM	222.1 TBtu (36th)	37,081 TBtu
RETAIL ELECTRICITY SALES	101.8 TBtu (36th)	12,810 TBtu
NEBRASKA		United States

CONSUMPTION PER CAPITA

461.1 MBtu (8th)	315.9 MBtu
NEBRASKA	United States

Table 32: Energy Consumption By Source and Per Capita

The consumption by source for Lexington is difficult to determine. Typically, this information is not at the city scale but on system-wide scales. Purchasing outside energy from third parties also compounds this task for verifying information and therefore left at the state level.

Consumption by End User

In 2007, the Nebraska Energy Office compiled statewide statistics on energy consumption in the sectors of Residential, Commercial and Industrial.

2007 Residential Sector

- 1) Natural Gas: 47.5%
- 2) Electricity: 40.2%
- 3) Petroleum: 7.7%
- 4) Renewable Energy: 4.64%
(*wood 4.38; geothermal 0.22; solar 0.04*)
- 5) Coal: less than 1%

2007 Commercial Sector

- 1) Electricity: 48.06%
- 2) Natural Gas: 45.88%
- 3) Petroleum: 4.1%
(*diesel fuel 1.65; propane 1.58; motor gasoline 0.88; kerosene 0.01*)
- 4) Renewable Energy: 1.79%
- 5) *geothermal 0.92; wood 0.85; ethanol 0.02*
- 6) Coal: Less than 1%

2007 Industrial Sector (including the transportation sector)

- 1) Natural Gas: 38.13%
- 2) (*Petroleum*) Diesel Fuel: 22.66%
- 3) Electricity: 19.77%
- 4) Petroleum: 10.88%
(*asphalt and road oil 3.82; propane 3.51; motor gasoline 2.33; residual fuel 0.19; lubricants 0.14; kerosene 0.01; other petroleum 0.88*)
- 5) Coal: 5.13%
- 6) Renewable Energy: 3.44% (*wood/wood waste 3.38; ethanol 0.06*)

Nebraska's energy consumption by end-user sector as it compares to the United States in 2010 is shown in Table 33. This information was compiled by the United States Energy Information Administration (EIA).

Energy Consumption by End-Use Sector

Nebraska 2010

SECTOR	Nebraska TRILLION BTU	U.S. TRILLION BTU
Residential	165.4 (#36)	21,836.2
Commercial	143.8 (#35)	18,040.1
Industrial	352.4 (#27)	30,390.6
Transportation	182.2 (#38)	27,443.8
Total Consumption	843.8 (#33)	97,710.6

Table 33: Energy Consumption by End-Use Sector, 2010

lexington

Local Utility Provider

The City of Lexington serves its citizens affordable utilities by purchasing wholesale energy from Nebraska Public Power District (NPPD). The Electric Rebate Incentive program is available for Lexington residents and commercial customers for high efficiency heat pump purchases. It relates to new, conversion, or upgrade installations with electric back-up heating only.

The first step of the Electric Rebate Incentive is for the citizen or the hired contractor to fill out two applications. One is the City of Lexington Electric Rebate Program Application with basic information. The High Efficiency Heat Pump Program application is the second form that has more detailed questions. The second step of the rebate program is for the contractor to provide a Certificate of Product Rating Form from AHRI. The final step is to bring these required forms to the City Inspection Department to schedule an inspection for verification of properly installed equipment.

Both Lexington and NPPD contribute to the rebate incentives. It is a good investment to improve the efficiency of heat pumps but research must be done to verify that the upfront cost with the benefit of rebates will pay off in the long term. There are also incentives for improving efficiency in lighting, insulation, cooling systems, irrigation and industrial motors. For more information and the various incentives, visit the City of Lexington’s or NPPD’s websites or contact the city inspection or utilities department.

The City of Lexington’s utilities department works on a fiscal year from October to September. The following table represents the electricity used per year and is measured in kilowatt hours. Also note, Commercial-Large includes downtown, churches, parks, and schools.

City of Lexington Utilities	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012
<i>Units in kWh</i>						
Basic Residential	25,014,318	24,381,972	24,156,847	26,101,893	26,221,017	24,021,853
Commercial - Small	12,628,440	12,891,876	12,117,482	12,847,381	12,351,211	11,895,223
Commercial - Large	17,041,780	17,089,608	17,517,144	17,642,229	17,003,078	18,555,386
Industrial	118,049,933	112,902,831	116,836,278	124,924,181	124,869,734	119,737,332

Table 34: Energy Usage Trend, City of Lexington, 2006 - 2012