



TENNESSEE ENERGY CONSUMPTION, PRODUCTION, & PRICE STATISTICS

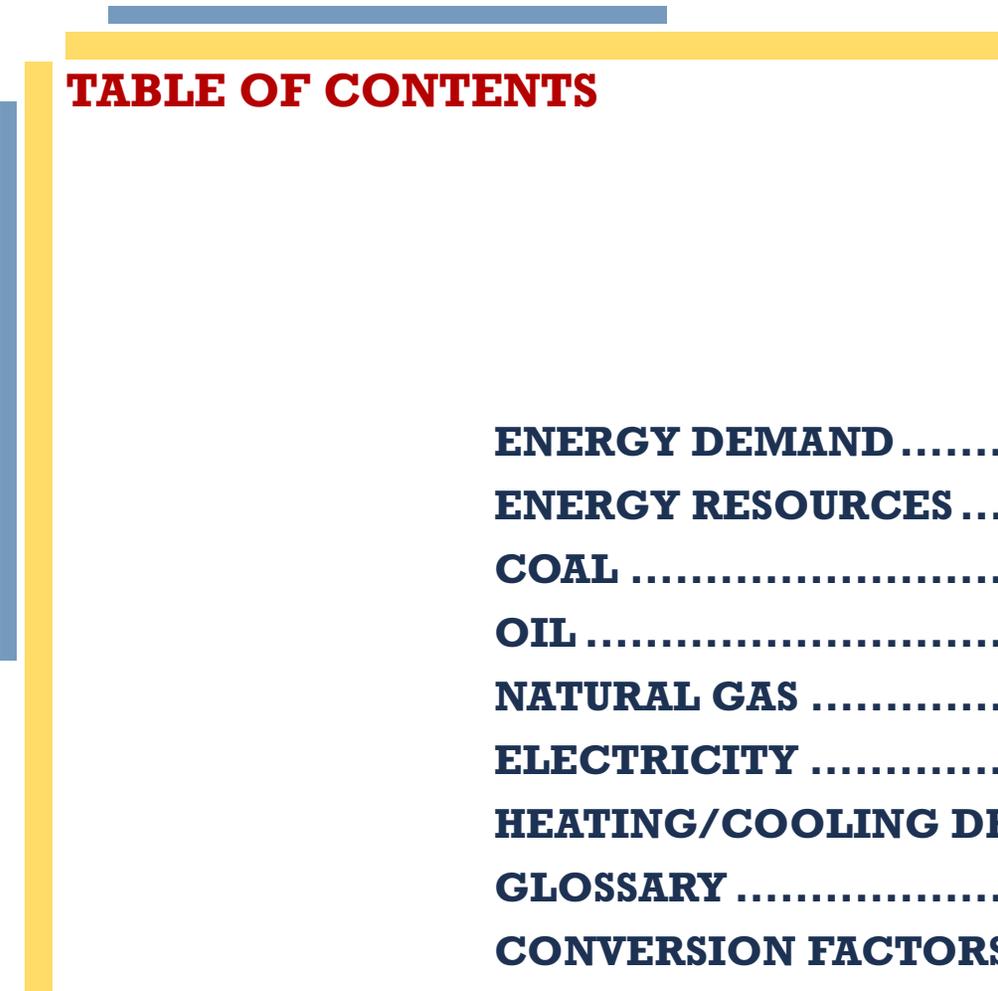
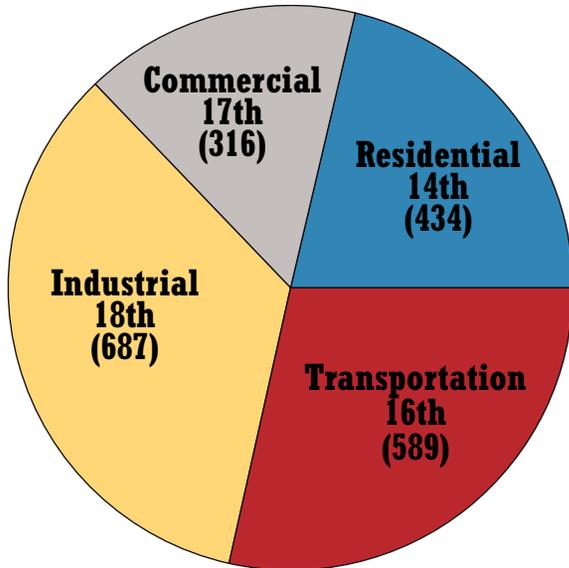


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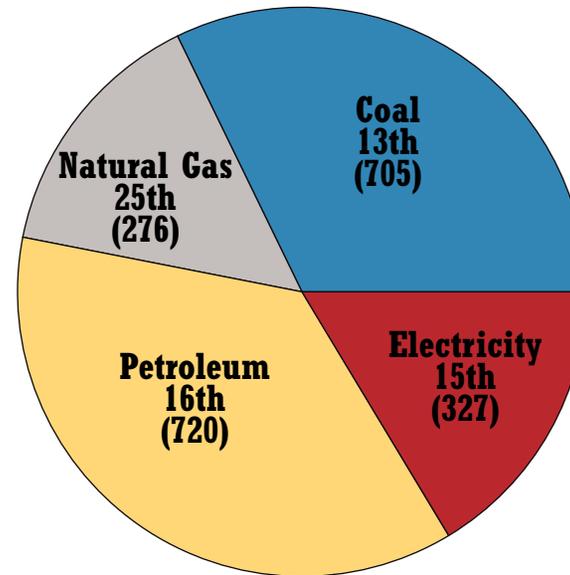
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ENERGY DEMAND

**2000 ENERGY CONSUMPTION
BY SECTOR/STATE RANK
(Trillion Btu) ⁽¹⁾**



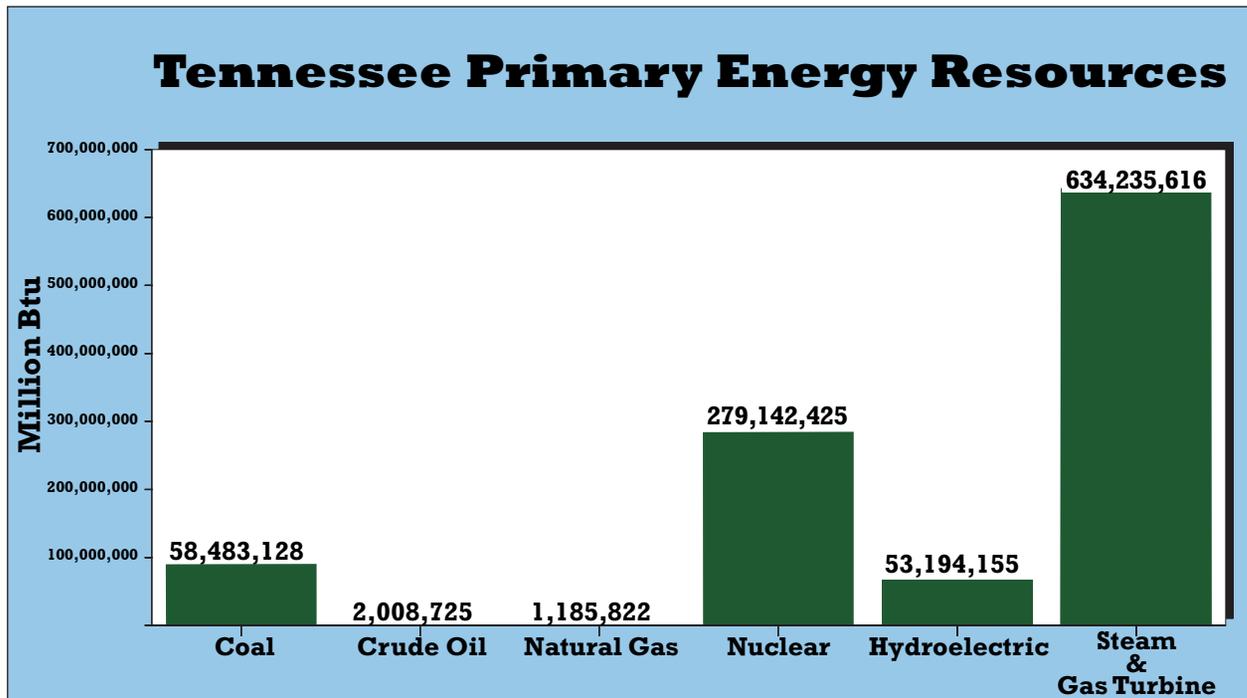
**2000 ENERGY CONSUMPTION
BY SOURCE/STATE RANK
(Trillion Btu) ⁽¹⁾**



ENERGY RESOURCES

TENNESSEE PRIMARY ENERGY RESOURCES

	<u>2000</u> <u>TOTALS</u>	<u>MILLION</u> <u>Btu</u>	<u>% of TOTAL</u> <u>Btu</u>
COAL	2,669,000 short tons	58,483,128	5.7%
CRUDE OIL	346,332 barrels	2,008,725	.2%
NATURAL GAS	1,154,197 Mcf	1,185,822	.1%
NUCLEAR	25,825 MWh	279,142,425	27.2%
HYDROELECTRIC	5,145 MWh	53,194,155	5.1%
STEAM & GAS TURBINE	61,344 MWh	634,235,616	61.7%
TOTAL		1,028,249,871	100.0%

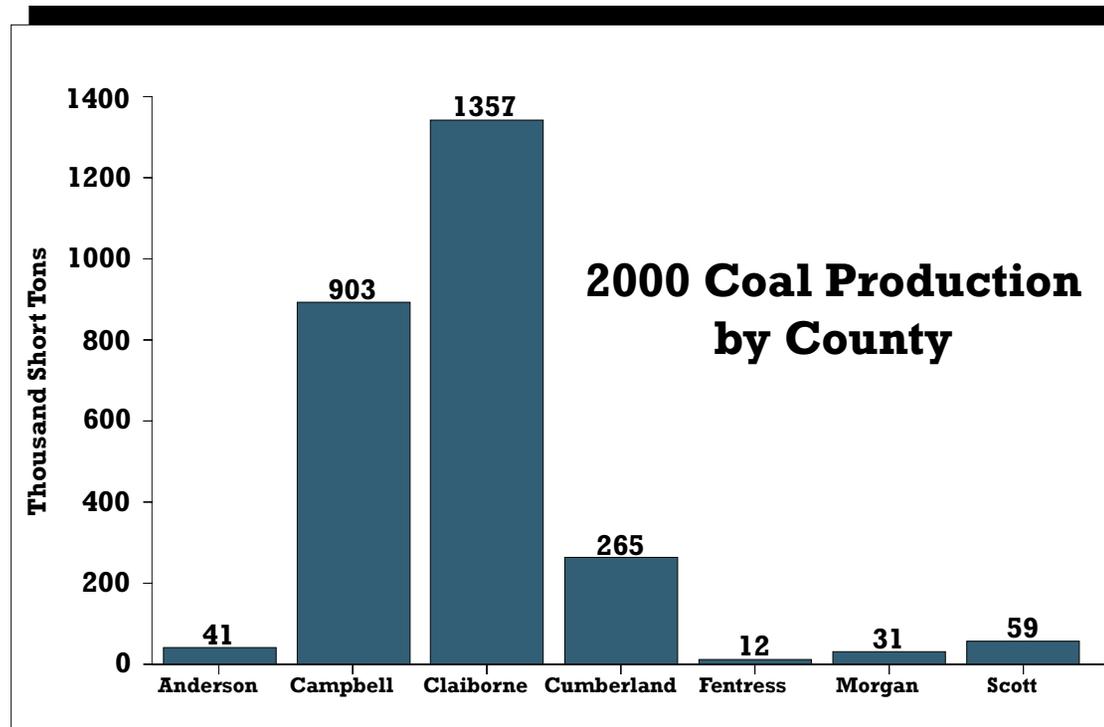


COAL

2000 Coal Production by County⁽²⁾

(Thousand Short Tons)

Anderson	41
Campbell	903
Claiborne	1357
Cumberland	265
Fentress	12
Morgan	31
Scott	59
Total	2,669



Average Price of Coal Receipts by End-Use Sectors⁽³⁾

(Nominal Dollars per Short Ton)

		<u>Electric Utilities</u>	<u>Industrial</u>
1980	Average	\$36.21	\$33.53
1985	Average	\$36.41	\$39.34
1990	Average	\$31.24	\$35.74
1991	Average	\$30.48	\$35.66
1992	Average	\$31.04	\$35.51
1993	Average	\$30.94	\$35.41
1994	Average	\$30.61	\$35.34
1995	Average	\$27.94	\$35.68
1996	Average	\$27.64	\$35.21
1997	Average	\$26.67	\$36.33
1998	Average	\$26.39	\$36.62
1999	Average	\$26.32	\$35.26
2000	Average	\$25.73	\$33.94

Coal Consumption by Sector⁽⁴⁾

(Thousand Short Tons)

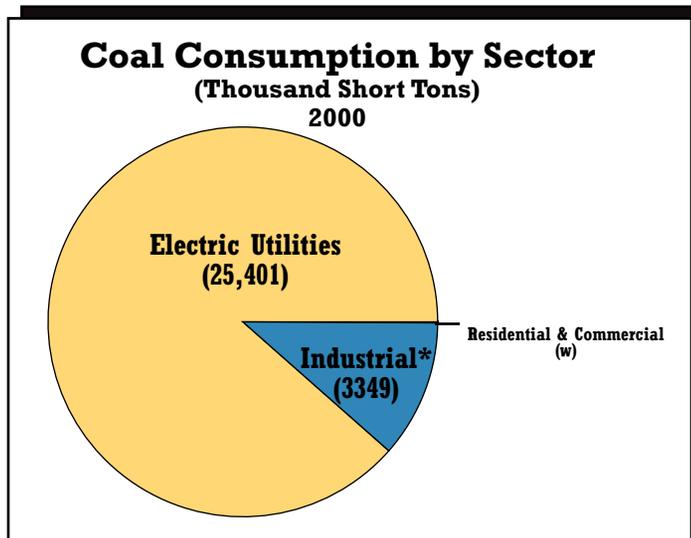
	<u>Electric Utilities</u>	<u>Industrial*</u>	<u>Residential & Commercial*</u>	<u>Total</u>
1980	21,679	2,774	w	24,687
1985	20,853	4,145	w	25,167
1990	20,814	3,846	w	24,878
1991	19,216	3,720	w	23,107
1992	20,263	3,686	w	24,106
1993	23,801	3,942	w	27,854
1994	21,253	4,097	w	25,440
1995	23,477	3,777	w	27,399
1996	22,964	3,670	w	26,744 ^R
1997	24,464	3,608	w	28,208 ^R
1998	23,320	3,463	w	26,786 ^R
1999	23,216	3,303	w	26,617 ^R
2000	25,401	3,349	w	28,862

* = Includes coal consumed at coke plants.

^R = Revised

w = withheld

Note: Totals may not equal sum of components because of independent rounding. Numbers reflect tons taxed in a particular period and may not necessarily represent tons mined during that year.



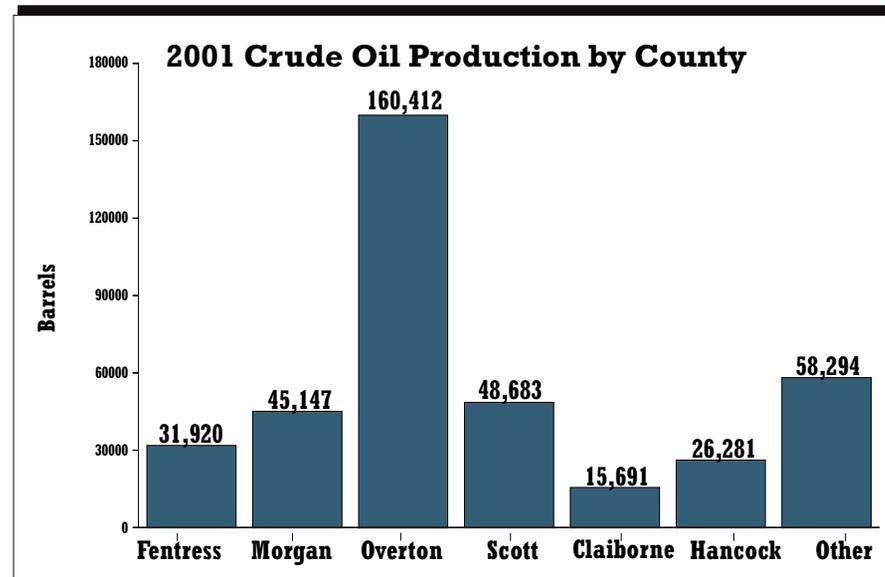
OIL

Crude Oil Production by County ⁽⁶⁾ (Barrels)

	<u>Fentress</u>	<u>Morgan</u>	<u>Overton</u>	<u>Scott</u>	<u>Claiborne</u>	<u>Hancock</u>	<u>Other*</u>	<u>Total</u>
1980	40,804	173,689	65,671	449,108	99	n/a	13,546	742,926
1985	103,697	171,607	84,051	240,977	167,375	n/a	25,066	792,773
1990	62,342	122,690	56,905	118,160	86,467	n/a	61,664	508,228
1991	54,777	117,890	71,739	107,643	82,463	n/a	50,745	485,257
1992	45,853	108,419	117,097	105,848	75,273	n/a	47,835	500,325
1993	43,342	92,258	71,050	87,168	79,077	n/a	45,637	418,532
1994	40,774	82,243	69,592	78,482	91,536	n/a	54,456	417,083
1995	35,940	75,778	67,035	69,808	96,165	n/a	39,518	384,244
1996	30,065	65,029	100,943	73,813	78,429	n/a	32,470	380,750
1997	29,193	65,585	114,096	69,198	57,247	n/a	31,948	367,267
1998	25,973	50,870	87,039	60,340	48,030	9,353	23,992	305,597
1999	26,603	55,275	112,108	63,420	35,576	27,535	27,476	347,993
2000	14,114	35,259	136,281	49,758	18,869	51,676	40,375	346,332
2001	31,920	45,147	160,412	48,683	15,691	26,281	58,294	386,428

* Anderson, Campbell, Clay, Cumberland, Jackson, Pickett, Rhea, and Robertson counties.

Note: Totals may not equal sum of components because of independent rounding. Minor revisions in data from previous report. Numbers reflect tons taxed in a particular period and may not necessarily represent tons mined during that year.



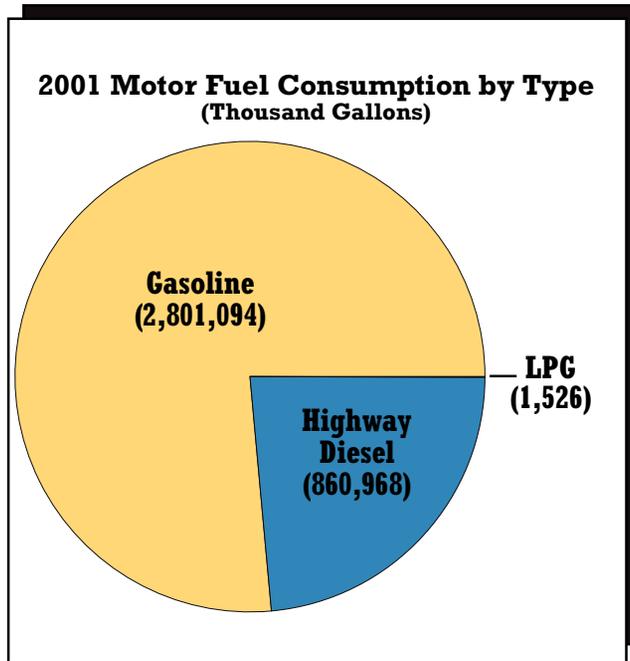
Motor Fuel Consumption by Type ⁽⁷⁾
(Thousand Gallons)

	Gasoline*	Gasohol	Highway Diesel	Highway LPG**	Total
1980	2,417,938	n/a	391,393	2,570	2,811,901
1985	2,169,930	209,372	513,329	4,125	2,896,757
1990	2,366,923	246,713	605,871	2,005	3,221,511
1991	2,359,973	178,374	591,634	2,465	3,132,448
1992	2,448,434	194,319	597,942	1,932	3,242,627
1993	2,441,575	211,884	646,910	1,344	3,301,713
1994	2,582,890	146,339	676,285	2,139	3,407,653
1995	2,758,919	22,149	728,022	2,058	3,511,148
1996	2,783,723	3,009	754,982	845	3,542,559
1997	2,740,152	3,097	776,452	1,615	3,521,317
1998	2,805,925	15,129	821,331	1,585	3,601,857
1999	2,695,848	n/a	783,092	1,426	3,480,366
2000	2,860,408	n/a	889,379	1,325	3,751,113
2001	2,801,094	n/a	860,968	1,526	3,814,643

* Includes aviation gasoline and losses.

** LPG includes butane, propane, ethane-propane mixtures.

Note: n/a = not available
Totals may not equal sum of components because of independent rounding.
Numbers reflect gallons taxed in a particular period and may not necessarily represent gallons consumed during that quarter.



Average Motor Gasoline Prices to Tennessee Consumers by Type⁽⁸⁾
(Cents per gallon excluding taxes)

		Unleaded Regular	Unleaded Midgrade	Unleaded Premium	Average All Grades
1985	Average	92.0	NA	101.2	96.6
1990	Average	85.2	93.9	100.6	93.2
1991	Average	74.4	83.3	90.8	82.8
1992	Average	70.5	80.8	88.6	75.9
1993	Average	66.7	76.9	85.2	72.3
1994	Average	65.2	76.8	84.7	72.0
1995	Average	67.5	79.3	86.8	74.1
1996	Average	78.2	89.3	95.8	83.8
1997	Average	75.9	86.6	94.1	81.5
1998	Average	58.7	68.4	77.0	64.2
1999	Average	66.4	76.9	83.7	71.8
2000	January	74.0	78.8	84.0	76.3
	February	84.6	89.4	94.7	86.8
	March	92.4	97.4	102.4	94.3
	April	78.7	83.9	89.1	80.7
	May	92.0	96.7	102.5	94.1
	June	100.5	104.7	111.0	102.4
	July	90.7	95.4	101.1	92.6
	August	86.9	91.4	97.3	88.9
	September	95.2	99.6	105.6	97.1
	October	92.0	96.3	102.4	94.0
	November	91.2	95.7	101.5	93.2
	December	77.0	81.7	87.1	79.1
2000	Average	88.3	92.5	98.1	90.2

NA = Not available

Note: Sales to End Users are sales made directly to the consumer of the product.

NATURAL GAS

Natural Gas Production by County⁽⁹⁾

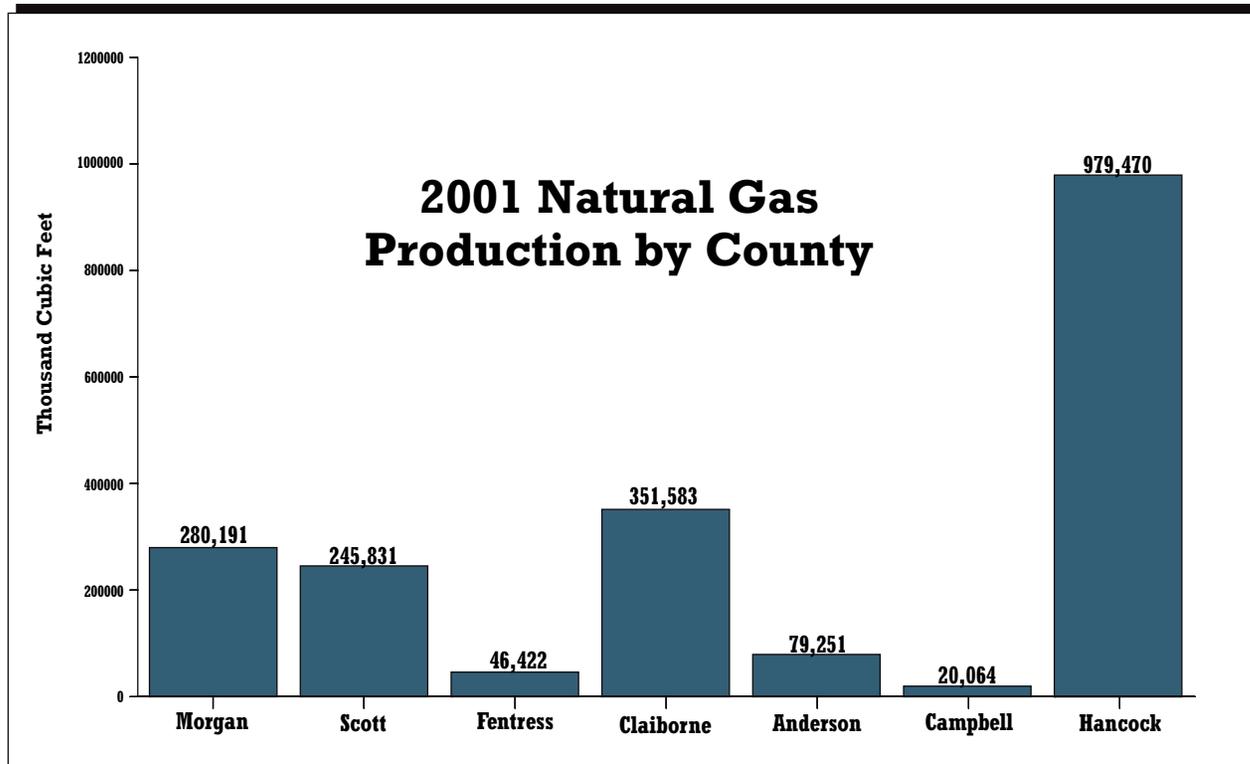
(Mcf)

	<u>Morgan</u>	<u>Scott</u>	<u>Fentress</u>	<u>Claiborne</u>	<u>Anderson</u>	<u>Campbell</u>	<u>Other*</u>	<u>Total</u>
1980	855,250	213,666	95,121	n/a	n/a	n/a	84,057	1,248,094
1990	648,945	524,607	234,677	343,540	n/a	n/a	319,644	2,071,413
1991	533,011	524,651	179,195	284,312	n/a	n/a	332,949	1,854,118
1992	445,523	573,378	152,179	400,919	n/a	n/a	205,737	1,777,736
1993	475,783	522,641	134,759	309,988	n/a	n/a	217,845	1,661,016
1994	386,347	497,352	115,455	677,077	n/a	n/a	315,262	1,991,493
1995	337,021	381,136	85,913	779,242	65,652	168,241	5,081	1,822,286
1996	138,777	384,261	84,318	749,135	138,777	22,607	n/a	1,692,234
1997	301,328	331,072	64,401	644,886	107,057	61,226	n/a	1,510,010
1998	289,483	314,213	75,408	591,272	85,516	60,217	n/a	1,416,109
1999	298,609	335,990	62,494	420,816	79,426	32,911	n/a	1,230,246
2000	277,140	307,739	55,018	410,391	81,830	22,079	n/a	1,154,197
2001	280,191	245,831	46,422	351,583	79,251	20,064	979,470	2,002,812

* Anderson, Campbell, Overton(1995),and Hancock(2001) counties.

Note: Mcf = 1000 Cubic Feet

Minor revisions in data from previous energy statistics report.



* Average price of all total sales to ultimate consumers.

Note: Minor revisions in data from previous energy statistics report. Mcf = 1000 Cubic Feet NA = Not Available

Natural Gas Consumption by Sector⁽¹⁰⁾
(Million Cubic Feet)

	<u>Residential</u>	<u>Commercial*</u>	<u>Industrial</u>	<u>Total</u>
1980	44,894	45,153	123,122	213,169
1990	46,340	44,119	109,703	200,161
1991	49,358	46,166	115,786	211,310
1992	52,220	46,825	126,230	225,275
1993	58,919	52,289	124,306	235,514
1994	57,334	51,784	118,889	228,007
1995	59,994	51,235	125,814	239,100
1996	70,423	58,497	126,545	256,053
1997	64,130	55,117	138,877	259,773
1998	59,386	52,397	145,773	263,778
1999	60,561 ^R	52,572 ^R	144,639 ^R	261,234 ^R
2000	67,950	53,194	129,548	252,528

^R = revised

* Includes electric utilities, consumption by municipalities and government agencies for use in schools, institutions, street lighting, vehicle fuel, etc.

Note: Minor revisions in data from previous energy statistics report.

Average Natural Gas Prices to Tennessee Consumers by Sector⁽⁸⁾
(Dollars per Mcf)

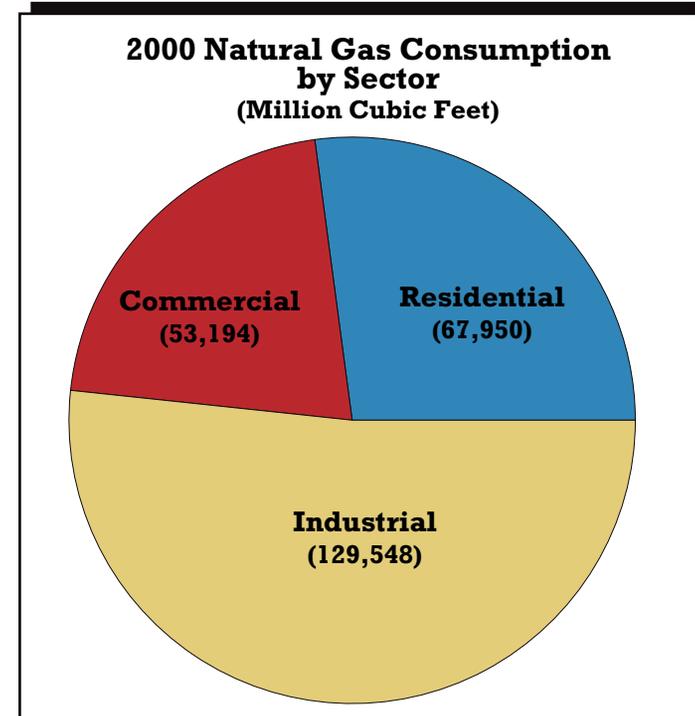
	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Average*</u>
1980	\$2.89	\$3.00	\$2.57	\$2.73
1990	\$5.11	\$4.80	\$3.41	\$4.10
1991	\$5.19	\$4.76	\$3.22	\$4.01
1992	\$5.50	\$5.06	\$3.44	\$4.25
1993	\$5.69	\$5.27	\$3.89	\$4.63
1994	\$6.13	\$5.56	\$3.84	\$4.79
1995	\$5.77	\$5.18	\$3.34	\$4.33
1996	\$6.26	\$5.72	\$3.92	\$4.71
1997	\$6.91	\$6.11	\$4.18	\$5.70
1998	\$6.73	\$6.04	\$3.94	\$5.54
1999	\$6.53 ^R	\$5.73 ^R	\$3.72	\$5.28
2000	\$7.48	\$6.82	\$5.08	\$6.46

^R = revised

* Average price of all total sales to ultimate consumers.

Note: Minor revisions in data from previous energy statistics report.

Mcf = 1000 Cubic Feet



ELECTRICITY

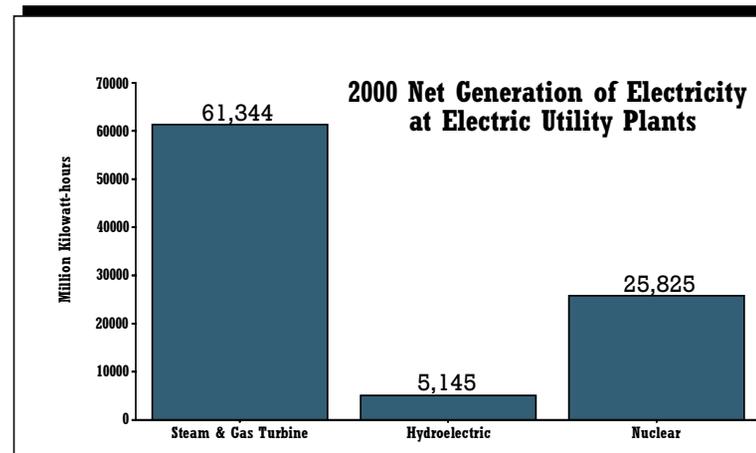
Net Generation of Electricity by Prime Mover * at Electric Utility Plants⁽¹²⁾ (Million Kilowatt-hours)

	<u>Steam & Gas Turbine</u>	<u>Hydroelectric**</u>	<u>Nuclear</u>	<u>Total</u>
1980	50,928	8,764	519	60,211
1990	50,362	9,537	14,003	73,902
1991	46,848	10,497	16,587	73,932
1992	50,153	9,590	15,654	75,396
1993	59,915	3,305	8,394	71,614
1994	52,523	10,399	11,932	74,854
1995	58,382	8,186	15,708	82,278
1996	58,823	9,900	22,924	88,647
1997	59,244	9,401	24,648	93,293
1998	56,371	9,385	28,388	94,142
1999	55,957	6,499	27,227	89,683
2000	61,344	5,145	25,825	92,314

* The engine, turbine, water wheel or similar machine which drives an electric generator.

** Includes pumped-storage generation.

Note: Minor revisions in data. Totals may not equal sum of components due to independent rounding. Negative amounts occur when more energy is used at a location than is produced.



Electricity Consumption by Sector⁽¹³⁾

	(Million Kilowatt-hours)				
	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Other*</u>	<u>Total</u>
1980	26,207	14,216	32,968	1,019	72,631
1990	28,757	12,128	35,313	947	77,145
1991	29,605	12,097	35,667	1,021	78,390
1992	29,498	6,470	41,683	922	78,572
1993	31,772	11,742	40,786	1,042	84,741
1994	31,735	10,933	38,281	1,074	82,023
1995	33,024	11,234	39,787	1,270	85,315
1996	34,688	11,388	39,549	1,138	86,763
1997	33,367	24,745	27,710	1,095	86,917
1998	35,428	24,840	30,461	1,021	91,750
1999	35,425 ^R	25,228 ^R	31,493 ^R	1,034 ^R	93,180 ^R
2000	36,853	18,907	39,767	1,198	96,725

^R = revised

* Includes consumption by municipalities and government agencies for use in schools, street lighting, etc., and by TVA for internal use.

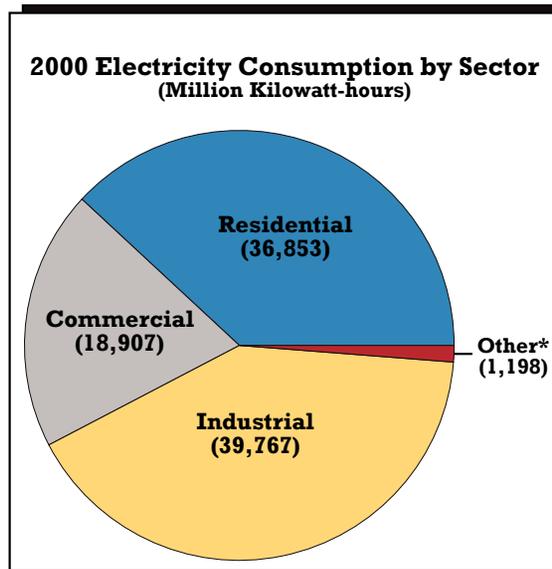
Note: Total may not equal sum of components because of independent rounding. Minor revisions in data from previous report.

Average Electricity Prices to Tennessee Consumers by Sector⁽¹¹⁾

	(Dollars per Thousand Kilowatt-hours)				
	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Other*</u>	<u>Average**</u>
1980	\$34.25	\$42.78	\$31.02	\$42.76	\$33.10
1990	\$56.91	\$60.91	\$46.90	\$68.67	\$53.10
1991	\$56.46	\$60.74	\$45.06	\$68.65	\$52.09
1992	\$57.02	\$64.98	\$46.04	\$74.14	\$52.05
1993	\$57.56	\$66.82	\$46.21	\$79.13	\$52.22
1994	\$58.78	\$66.27	\$45.17	\$77.41	\$52.27
1995	\$59.15	\$66.55	\$45.02	\$75.61	\$52.11
1996	\$58.82	\$66.45	\$45.16	\$79.65	\$52.40
1997	\$60.26	\$59.08	\$38.11	\$78.74	\$53.10
1998	\$63.16	\$62.79	\$41.66	\$87.05	\$55.67
1999	\$63.42	\$62.88	\$41.87	\$87.03	\$56.25
2000	\$63.25	\$62.78	\$40.87	\$87.88	\$55.85

* Includes consumption by municipalities and government agencies for use in schools, street lighting, etc., and by TVA for internal use.

** Average price of total sales to ultimate consumers.



HEATING/COOLING DEGREE DAYS - MONTHLY AVERAGES*⁽¹⁴⁾

		<u>CHATTANOOGA</u>	<u>KNOXVILLE</u>	<u>NASHVILLE</u>	<u>MEMPHIS</u>
1999	TOTALS	2704/1927	3298/1438	3126/1765	2417/2364
2000	January	731/3	846/0	796/2	679/0
	February	460/0	542/0	523/0	430/7
	March	269//3	354/0	364/6	269/12
	April	147/5	265/2	248/6	150/24
	May	0/242	9/167	14/172	0/284
	June	0/365	6/310	0/346	0/416
	July	0/485	0/390	0/483	0/579
	August	0/464	0/376	0/467	0/667
	September	13/221	34/211	32/227	11/371
	October	102/65	149/33	123/95	81/184
	November	474/10	522/4	518/18	455/18
	December	<u>885/0</u>	<u>955/0</u>	<u>1051/0</u>	<u>996/0</u>
2000	TOTAL	3081/1863	3682/1493	3669/1822	3071/2562

*Monthly degree day totals: One heating (cooling) degree day is accumulated for each degree that the daily mean temperature is below (above) 65 degrees Fahrenheit.

GLOSSARY

- Barrel:** A liquid measure of oil, usually crude, equal to 42 U.S. gallons or 280-380 pounds depending upon API Gravity and equal to 35 British Imperial gallons.
- Bituminous Coal:** A coal that is high in carbonaceous matter having a volatility greater than anthracite and a calorific value greater than lignite. In the United States, it is often referred to as soft coal. It is used primarily for electricity generation, coke production, and space heating.
- British Thermal Units (Btu):** The quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit.
- Coke:** A porous, solid residue resulting from the incomplete combustion of coal heated in a closed chamber, or oven, with a limited supply of air. Coke is largely carbon and is a desirable fuel in certain metallurgical industries.
- Cubic Foot:** The most common unit of measurement of gas volume of one cubic foot under stated conditions of temperature, pressures, and water vapor.
- Energy:** The capacity for doing work. Electric energy is measured in watthours (wh) and heat energy is generally measured in British thermal units (Btu). One form of energy may be changed to another such as burning coal to produce steam to drive a turbine which produces electricity.
- Energy Flow:** The series of steps involved in supplying fuels for use, including exploration, mining, transformation, distribution, and consumption.
- Kilowatt-hour:** The amount of energy equal to one kilowatt in one hour; equivalent to 3,412 Btu.
- Liquefied Petroleum Gas:** A gas containing certain specific hydrocarbons that are gaseous under normal atmosphere conditions, but can be liquefied under moderate pressure at normal temperatures.
- Prime Mover:** The engine, turbine, water wheel or similar machine which drives an electric generator.
- Pumped-Storage:** A hydroelectric plant which generates electricity during peak load periods usually by using water previously pumped into a storage reservoir during off-peak periods.
- Ton/Short Ton:** A unit of weight equal to 2,000 pounds.
- Turbine:** A fluid acceleration machine for generating rotary mechanical power from the energy in a stream of fluid.

CONVERSION FACTORS

Bituminous Coal

Production	21.912 Million Btu/short ton
Consumption	21.467 Million Btu/short ton

Butane 103,000 Btu/gallon

Crude Oil

Production	5.800 Million Btu/barrel
Imports	5.903 Million Btu/barrel

Diesel Fuel 138,690 Btu/gallon

Electricity

Fossil fuel steam-electric power plant generation*	10,339 Btu/kilowatt-hour
Nuclear power plant generation	10,809 Btu/kilowatt-hour
Electricity consumption	3,412 Btu/kilowatt-hour

Kerosene 135,000 Btu/gallon

Lubricants 144,404 Btu/gallon

LPG 86,666 Btu/gallon

Motor Gasoline 125,071 Btu/gallon

Natural Gas

Production	1,030 Btu/cubic foot
Consumption	1,030 Btu/cubic foot

Propane 91,333 Btu/gallon

Residual fuel oil 149,690 Btu/gallon

UNITS OF MEASURE

Coal

1 metric ton	contains	1,000 kilograms or 2,204.62 pounds
1 long ton	contains	2,240 pounds
1 short ton	contains	2,000 pounds

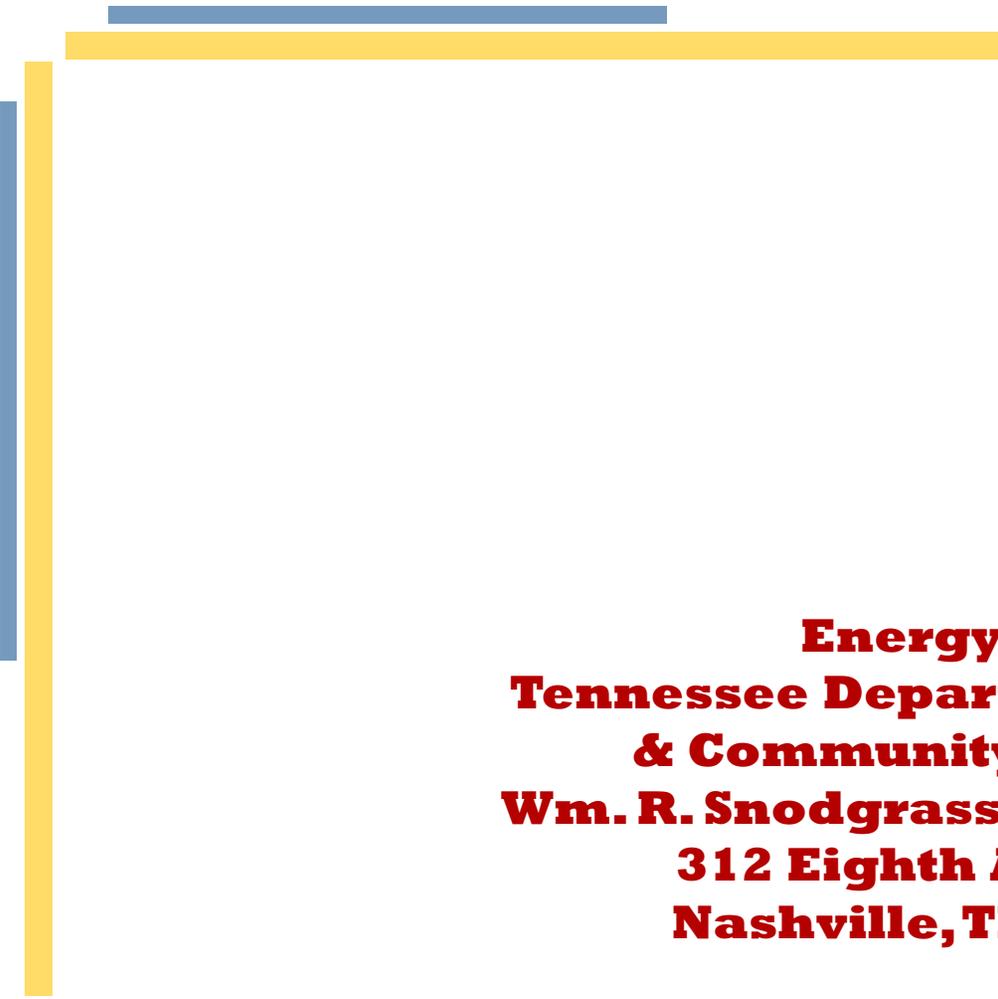
Crude Oil (Average Gravity)

1 barrel	contains	42 gallons
1 barrel	contains	0.136 metric tons (0.150 short tons)
1 metric ton	contains	7.33 barrels
1 short ton	contains	6.65 barrels

*** This thermal conversion factor is used for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.**

BIBLIOGRAPHY

- 1) **Source:** *State Energy Data Report 2000*; pgs. 17-18, 281-285. Energy Information Administration.
- 2) **Source:** *Coal Industry Annual 2000*; pg. 9(table 4), Energy Information Administration.
- 3) **Source:** *Coal Industry Annual 2000*; p. 222(table 92) & p.224(table 94), Energy Information Administration.
- 4) **Source:** *State Energy Data Report 2000*; Table 269, pgs. 281-286. Energy Information Administration.
- 5) **Source:** *Petroleum Marketing Annual 2000*, Table 35; pg.143, Energy Information Administration.
- 6) **Source:** Tennessee Division of Geology, Monthly, Purchaser's Reports (Form R-MP-2).
- 7) **Source:** Tennessee Department of Transportation, Monthly Fuel Consumption Report (Form PR-551M).
- 8) **Source:** *Natural Gas Annual 2000*; Tables 22-23, pgs. 58-59, 177, Energy Information Administration.
- 9) **Source:** Tennessee Division of Geology, Monthly Purchasers Report (Form R-MP-5).
- 10) **Source:** *Natural Gas Annual 2000* pg.179, Energy Information Administration.
- 11) **Source:** *Electric Sales and Revenue 2000*; Tables 6 & 7, pgs. 18-19. Table 7 divided by table 6). Energy Information Administration.
- 12) **Source:** *Electric Power Annual 2000*, Vol. 1; Tables A8-A12. pgs. 35-39, Energy Information Administration.
- 13) **Source:** *Electric Power Annual 2000*, Vol. 1; Tables A21-A24. pg. 47-50, Energy Information Administration.
- 14) **Source:** *Climatological Data Annual Summary*, Tennessee 2000, Vol. 106, No. 13, National Climatic Data Center., No. 07, National Climatic Data Center.



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