Table 5.5 End Uses of Fuel Consumption, 2002; Level: National and Regional Data;

Row: End Uses;

Column: Energy Sources, including Net Electricity;

Unit: Physical Units or Btu.

End Use	Total (trillion Btu)	Net Electricity(a) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil and Diesel Fuel(b) (million bbl)	Natural Gas(c) (billion cu ft)	LPG and NGL(d) (million bbl)	Coal (excluding Coal Coke and Breeze) (million short tons)	Other(e) (trillion Btu)	RSE Row Factors
	Total United St	ates							
RSE Column Factors:	1	1	2.4	1.1	1.4	1	0	0	
TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (f) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation	16,273	832,257 3,540 2,496 1,043 650,100 100,541 56,723 417,998 71,045 3,793 150,530 76,840 57,460 14,087	33 20 12 8 10 9 * * 1 1	24 6 4 2 7 4 * 3 * 9 1 *	5,641 2,105 1,271 834 2,907 2,670 44 106 87 500 406 29 2	26 2 2 16 15 * 1 * 6 1 1	35 11 23 17 17 * * * * 1	6,006	3.4 5.3 5.6 3.8 2.9 3.3 3.8 4.8 1 5.3 4.6 6.6 1.1 9.7 3.1
Other Nonprocess Use End Use Not Reported	6,276	931 28,087	3	Q 2	10 129	2	0	6,006	8.8 8.3
	Northeast Cens	sus Region							
RSE Column Factors:	1.3	1	2.7	1.2	1.8	0.6	0	0	
TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (f) Facility Lighting	1,530 	97,798 244 62 181 70,513 12,020 6,864 44,630 6,260 Q 22,350 11,241 8,831	11 7 5 2 2 2 * * * * * * *	5 2 1 * 2 2 * * * 1 1	523 183 114 70 236 220 5 7 4 79 66	2 * * 0 1 1 * * * 1 1 *	2	460 	4.4 5.6 8.7 2.6 6 7.1 4.3 8.8 1 9.1 4.7 6.4 1.3
Other Facility Support Onsite Transportation	 	2,119 142	*	*	9	* 1	0		12.2 3.5

Table 5.5 End Uses of Fuel Consumption, 2002; Level: National and Regional Data;

Row: End Uses;

Column: Energy Sources, including Net Electricity; Unit: Physical Units or Btu.

		Net	Residual	Distillate Fuel Oil and	Natural	LPG and	Coal (excluding Coal		RSE
End Use	Total (trillion Btu)	Electricity(a) (million kWh)	Fuel Oil (million bbl)	Diesel Fuel(b) (million bbl)	Gas(c) (billion cu ft)	NGL(d) (million bbl)	Coke and Breeze) (million short tons)	Other(e) (trillion Btu)	Row Factors
Conventional Electricity Generation			*	*	2	*	*		2.1
Other Nonprocess Use		Q	0	*	1	*	0		10.9
End Use Not Reported	512	4,691	1	1	26	*	*	460	7.6
	Midwest Censu	us Region							
RSE Column Factors:	1.2	0.9	2.3	1.3	1.8	0.8	0	0	
TOTAL FUEL CONSUMPTION	4,209	251,584	3	5	1,455	5	20	1,340	5.8
Indirect Uses-Boiler Fuel		1,338	3	1	405	*	14		8.1
Conventional Boiler Use		944	1	1	348	*	6		10.7
CHP and/or Cogeneration Process		394	1	*	57	*	8		4.9
Direct Uses-Total Process		196,978	1	2		2	5		5.2
Process Heating		35,404	1	1	750	2	5		5.9
Process Cooling and Refrigeration		15,703	0	*	3	*	0		5.3
Machine Drive		126,268	0	*	20	*	*		8.1
Electro-Chemical Processes		18,306							1
Other Process Use		1,296	*	*	19	*	*		5.1
Direct Uses-Total Nonprocess		45,931	*	2	213	2	*		7.6
Facility HVAC (f)		21,653	*	*	193	*	*		5.9
Facility Lighting		19,073							1.2
Other Facility Support		4,268	*	*	8	*	*		4.6
Onsite Transportation		479		2	*	2			5
Conventional Electricity Generation			*	*	6	*	*		4.4
Other Nonprocess Use		457	*	Q	5	*	0		12.4
End Use Not Reported	1,418	7,337	*	*	46	Q	*	1,340	13.8
	South Census	Region							
RSE Column Factors:	0.9	0.6	3.2	1.2	1.5	1.1	0	0	
TOTAL FUEL CONSUMPTION	8,589	381,309	17	9	3,005	15	24	3,443	4.5
Indirect Uses-Boiler Fuel	·	1,843	9	3		1	17	·	6.9
Conventional Boiler Use		1,285	5	2		1	4		6.8
CHP and/or Cogeneration Process		558	4	1	630	*	13		2.4
Direct Uses-Total Process		305,991	6	2		11	6		3.5
Process Heating		43,974	6	1	1,375	10	6		3.8
Process Cooling and Refrigeration		27,435	*	*	35	*	*		3.4
Machine Drive		196,039	*	1	71	*	*		3.9
Electro-Chemical Processes		37,343		· 					1
Other Process Use		1,200	*	*	60	*	*		4.2
Direct Uses-Total Nonprocess		62,347	*	3		2	*		4.7
•		•							

Table 5.5 End Uses of Fuel Consumption, 2002;

Level: National and Regional Data;

Row: End Uses;

Column: Energy Sources, including Net Electricity;

Unit: Physical Units or Btu.

End Use	Total (trillion Btu)	Net Electricity(a) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil and Diesel Fuel(b) (million bbl)	Natural Gas(c) (billion cu ft)	LPG and NGL(d) (million bbl)	Coal (excluding Coal Coke and Breeze) (million short tons)	Other(e) (trillion Btu)	RSE Row Factors	
Facility HVAC (f)		33,686	*	*	106	*	*		8.1	
Facility Lighting		22,460							1.2	
Other Facility Support		5,325	*	*	8	*	*		3.8	
Onsite Transportation		508		3	1	2			3.5	
Conventional Electricity Generation			0	*	34	*	*		1.3	
Other Nonprocess Use		369	*	*	3	*	0		8.1	
End Use Not Reported	3,540	11,127	2	1	37	1	*	3,443	10.3	
West Census Region										
RSE Column Factors:	1.4	0.5	3.4	1.9	1.6	0.4	0	0		
TOTAL FUEL CONSUMPTION	1,945	101,565	2	5	658	4	5	762	3.7	
Indirect Uses-Boiler Fuel		114	1	*	244	1	2		3.5	
Conventional Boiler Use		205	1	*	166	1	*		3.5	
CHP and/or Cogeneration Process		-91	*	*	78	*	1		1.1	
Direct Uses-Total Process		76,618	1	2	338	2	3		3.8	
Process Heating		9,143	1	*	325	2	3		3.7	
Process Cooling and Refrigeration		6,720	0	*	1	*	0		4	
Machine Drive		51,061	0	1	9	*	0		5	
Electro-Chemical Processes		9,137							1.1	
Other Process Use		558	0	*	4	*	0		6	
Direct Uses-Total Nonprocess		19,902	*	2	56	1	*		3.7	
Facility HVAC (f)		10,260	0	*	41	*	*		5.5	
Facility Lighting		7,096							1.2	
Other Facility Support		2,376	*	*	3	*	0		4.1	
Onsite Transportation		83		1	*	1			5.1	
Conventional Electricity Generation			0	Q	10	*	*		1.5	
Other Nonprocess Use		87	0	*	1	*	0		6.8	
End Use Not Reported	806	4,931	*	*	20	*	*	762	9.8	

⁽a) 'Net Electricity' is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

⁽b) 'Distillate Fuel Oil' includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

⁽c) 'Natural Gas' includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

Table 5.5 End Uses of Fuel Consumption, 2002;

Level: National and Regional Data;

Row: End Uses;

Column: Energy Sources, including Net Electricity;

Unit: Physical Units or Btu.

				Distillate					
			Fuel Oil			Coal			
		Net	Residual	and	Natural	LPG and	(excluding Coal		RSE
	Total	Electricity(a)	Fuel Oil	Diesel Fuel(b)	Gas(c)	NGL(d)	Coke and Breeze)	Other(e)	Row
End Use	(trillion Btu)	(million kWh)	(million bbl)	(million bbl)	(billion cu ft)	(million bbl)	(million short tons)	(trillion Btu)	Factors

- (d) Examples of Liquefied Petroleum Gases '(LPG)' are ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutanε produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids '(NGL).'
- (e) 'Other' includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power.
- (f) Facility Heating, Ventilation, and Air Conditioning '(Facility HVAC)' excludes steam and hot water.

NF=No applicable RSE row/column factor.

* Estimate less than 0.5.

W=Withheld to avoid disclosing data for individual establishments.

Q=Withheld because Relative Standard Error is greater than 50 percent.

NA=Not available.

-- Estimation is not applicable.

S=Negative value.

Notes: To obtain the RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells.

Allocations to specific end uses are made on the basis of reasonable

Allocations to specific end uses are made on the basis of reasonable approximations by respondents.

Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Consumption Division, Form EIA-846, '2002 Manufacturing Energy Consumption Survey.'