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Next MECS will be fielded in 2019

Table 5.7 End Uses of Fuel Consumption, 2014;

Level: National and Regional Data;

Row: End Uses;

Column: Energy Sources, including Net Demand for Electricity;

Unit: Physical Units or Btu.

End Use	Net Demand for Electricity(a) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil and Diesel Fuel(b) (million bbl)	Natural Gas(c) (billion cu ft)	HGL (excluding natural gasoline)(d) (million bbl)	Coal (excluding Coke and Breeze) (million short tons)
Total United States						
TOTAL FUEL CONSUMPTION	894,015	5	17	5,693	22	35
Indirect Uses-Boiler Fuel	15,181	3	2	2,240	2	18
Conventional Boiler Use	15,181	2	1	735	1	2
CHP and/or Cogeneration Process	--	2	1	1,505	1	16
Direct Uses-Total Process	703,149	1	4	2,869	12	13
Process Heating	106,168	1	1	2,517	10	13
Process Cooling and Refrigeration	63,128	*	*	26	*	0
Machine Drive	446,420	*	2	158	1	*
Electro-Chemical Processes	67,477	--	--	--	--	--
Other Process Use	19,956	*	1	169	1	1
Direct Uses-Total Nonprocess	161,142	*	10	421	7	*
Facility HVAC (e)	81,530	*	1	358	2	*
Facility Lighting	55,456	--	--	--	--	--
Other Facility Support	16,723	*	*	40	*	*
Onsite Transportation	3,984	--	7	2	5	--
Conventional Electricity Generation	--	*	*	12	*	*
Other Nonprocess Use	3,449	*	2	8	*	*
End Use Not Reported	14,543	*	1	163	1	4
Northeast Census Region						
TOTAL FUEL CONSUMPTION	86,012	2	3	411	2	2
Indirect Uses-Boiler Fuel	1,709	1	*	140	*	1
Conventional Boiler Use	1,709	1	*	52	*	*
CHP and/or Cogeneration Process	--	*	*	88	*	1
Direct Uses-Total Process	64,065	*	1	200	1	1
Process Heating	10,542	*	*	174	1	1
Process Cooling and Refrigeration	5,142	*	*	2	*	0
Machine Drive	41,166	*	*	16	*	0
Electro-Chemical Processes	5,021	--	--	--	--	--
Other Process Use	2,194	*	*	7	*	*
Direct Uses-Total Nonprocess	18,556	*	1	55	1	*
Facility HVAC (e)	9,501	*	*	49	*	*
Facility Lighting	6,474	--	--	--	--	--
Other Facility Support	1,848	*	*	2	*	0
Onsite Transportation	347	--	1	*	*	--
Conventional Electricity Generation	--	*	*	Q	*	0
Other Nonprocess Use	386	*	*	1	*	0
End Use Not Reported	1,683	*	*	16	*	*
Midwest Census Region						
TOTAL FUEL CONSUMPTION	258,940	*	4	1,710	9	15
Indirect Uses-Boiler Fuel	3,534	*	*	571	1	7
Conventional Boiler Use	3,534	*	*	278	*	1
CHP and/or Cogeneration Process	--	*	*	293	*	6
Direct Uses-Total Process	203,659	*	1	891	6	4
Process Heating	33,408	*	*	790	5	4
Process Cooling and Refrigeration	18,898	0	*	8	*	0

Machine Drive	132,837	*	*	18	*	*
Electro-Chemical Processes	13,742	--	--	--	--	--
Other Process Use	4,774	*	1	76	*	*
Direct Uses-Total Nonprocess	46,927	*	2	209	2	*
Facility HVAC (e)	22,145	*	*	183	1	*
Facility Lighting	17,989	--	--	--	--	--
Other Facility Support	4,244	0	*	21	*	*
Onsite Transportation	1,309	--	1	*	2	--
Conventional Electricity Generation	--	0	*	*	*	*
Other Nonprocess Use	1,241	0	*	Q	*	0
End Use Not Reported	4,820	0	*	38	*	4

South Census Region

TOTAL FUEL CONSUMPTION	426,777	2	8	2,904	7	12
Indirect Uses-Boiler Fuel	8,544	2	1	1,242	1	7
Conventional Boiler Use	8,544	1	*	310	1	1
CHP and/or Cogeneration Process	--	1	1	932	*	7
Direct Uses-Total Process	342,522	*	2	1,452	3	5
Process Heating	47,960	*	*	1,261	2	5
Process Cooling and Refrigeration	29,630	0	*	15	*	0
Machine Drive	217,388	*	1	111	*	*
Electro-Chemical Processes	39,444	--	--	--	--	--
Other Process Use	8,100	*	*	65	*	*
Direct Uses-Total Nonprocess	69,465	*	5	114	3	*
Facility HVAC (e)	36,604	*	*	93	*	*
Facility Lighting	22,420	--	--	--	--	--
Other Facility Support	7,516	*	*	11	*	0
Onsite Transportation	1,772	--	3	1	2	--
Conventional Electricity Generation	--	*	*	6	*	*
Other Nonprocess Use	1,153	*	1	3	*	0
End Use Not Reported	6,247	*	*	95	1	0

West Census Region

TOTAL FUEL CONSUMPTION	122,286	1	3	669	4	6
Indirect Uses-Boiler Fuel	1,395	*	*	287	*	3
Conventional Boiler Use	1,395	*	*	95	*	*
CHP and/or Cogeneration Process	--	*	*	192	*	2
Direct Uses-Total Process	92,903	*	1	326	2	3
Process Heating	14,257	*	*	291	2	3
Process Cooling and Refrigeration	9,458	0	*	1	*	0
Machine Drive	55,029	0	*	13	*	0
Electro-Chemical Processes	9,271	--	--	--	--	--
Other Process Use	4,888	*	*	20	*	*
Direct Uses-Total Nonprocess	26,194	0	2	43	1	*
Facility HVAC (e)	13,280	0	*	33	*	0
Facility Lighting	8,573	--	--	--	--	--
Other Facility Support	3,115	0	*	6	*	0
Onsite Transportation	556	--	1	*	1	--
Conventional Electricity Generation	--	0	*	3	*	0
Other Nonprocess Use	670	0	*	1	*	*
End Use Not Reported	1,794	0	*	13	*	0

(a) 'Net Demand for Electricity' is the sum of purchases, transfers in, and total onsite electricity generation, minus sales and transfers offsite. It is the total amount of electricity used by establishments. 'Net Demand for Electricity' is not directly comparable with 'Net Electricity,' which specifically excludes electricity generated onsite by combustible energy sources.

(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.

(d) Hydrocarbon Gas Liquids '(HGL)' include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).

(e) Facility Heating, Ventilation, and Air Conditioning '(Facility HVAC)' excludes steam and hot water.

* 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: 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 approximations by respondents.

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2014 Manufacturing Energy Consumption Survey.'

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RSE Table 5.7 Relative Standard Errors for Table 5.7;

Unit: Percents.

End Use	Net Demand for Electricity(a) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil and Diesel Fuel(b) (million bbl)	Natural Gas(c) (billion cu ft)	HGL (excluding natural gasoline)(d) (million bbl)	Coal (excluding Coal Coke and Breeze) (million short tons)
Total United States						
TOTAL FUEL CONSUMPTION	1.1	2.2	5.4	0.8	2.8	1.1
Indirect Uses-Boiler Fuel	2.7	2.9	7.3	1.0	3.6	1.3
Conventional Boiler Use	2.7	0.4	6.3	2.1	4.6	1.6
CHP and/or Cogeneration Process	--	6.1	10.0	1.1	5.8	1.5
Direct Uses-Total Process	1.0	2.7	10.6	1.0	2.9	1.8
Process Heating	2.1	1.6	7.5	1.1	2.1	2.0
Process Cooling and Refrigeration	1.7	73.1	10.3	5.7	27.2	X
Machine Drive	1.2	0.1	13.7	3.8	26.1	23.0
Electro-Chemical Processes	1.1	--	--	--	--	--
Other Process Use	4.5	42.3	25.7	3.3	16.9	0.1
Direct Uses-Total Nonprocess	2.1	2.3	6.7	2.5	6.0	12.2
Facility HVAC (e)	2.3	4.0	16.4	2.7	17.0	20.2
Facility Lighting	2.4	--	--	--	--	--
Other Facility Support	3.7	40.2	44.8	3.0	14.8	0.1
Onsite Transportation	4.6	--	4.5	9.0	5.3	--
Conventional Electricity Generation	--	0.1	38.1	17.4	14.5	0.1
Other Nonprocess Use	14.2	63.0	28.4	27.9	29.9	0.1
End Use Not Reported	10.5	0.1	23.2	7.3	12.6	4.2
Northeast Census Region						
TOTAL FUEL CONSUMPTION	3.6	5.3	11.4	3.0	13.2	7.4
Indirect Uses-Boiler Fuel	14.6	7.3	6.7	3.2	20.8	13.6
Conventional Boiler Use	14.6	0.2	10.0	5.5	42.2	0.1
CHP and/or Cogeneration Process	--	28.9	8.0	3.8	9.3	16.1
Direct Uses-Total Process	3.7	2.6	18.2	4.7	17.9	0.1
Process Heating	4.2	2.6	15.3	4.5	19.6	0.1
Process Cooling and Refrigeration	6.2	73.1	0.1	11.0	59.8	X
Machine Drive	5.1	0.1	26.5	30.4	29.0	X
Electro-Chemical Processes	1.2	--	--	--	--	--
Other Process Use	12.6	0.1	63.8	11.2	68.6	0.1
Direct Uses-Total Nonprocess	5.9	2.3	17.5	6.5	16.2	29.2
Facility HVAC (e)	7.5	3.8	32.2	6.2	29.1	29.2
Facility Lighting	5.9	--	--	--	--	--
Other Facility Support	6.4	46.5	38.5	12.0	34.5	X
Onsite Transportation	9.6	--	12.5	33.8	9.9	--
Conventional Electricity Generation	--	0.1	8.9	66.5	56.1	X
Other Nonprocess Use	22.0	0.1	57.7	17.9	20.9	X
End Use Not Reported	25.6	0.1	36.2	1.2	40.3	0.1
Midwest Census Region						
TOTAL FUEL CONSUMPTION	2.0	7.2	10.1	1.8	4.4	2.3
Indirect Uses-Boiler Fuel	4.7	1.3	20.0	3.0	6.6	2.1
Conventional Boiler Use	4.7	0.5	13.5	4.8	6.7	2.4
CHP and/or Cogeneration Process	--	2.1	26.4	4.2	10.0	2.4
Direct Uses-Total Process	1.9	18.1	20.3	2.1	3.6	5.3
Process Heating	3.7	24.8	15.0	2.3	1.3	5.8
Process Cooling and Refrigeration	3.2	X	42.6	2.9	2.7	X
Machine Drive	2.3	0.1	20.7	11.9	50.3	12.9
Electro-Chemical Processes	4.4	--	--	--	--	--
Other Process Use	12.5	0.1	35.1	5.2	25.9	0.1
Direct Uses-Total Nonprocess	3.7	34.7	11.3	4.2	12.4	16.1
Facility HVAC (e)	4.1	34.7	39.3	4.5	39.2	26.7
Facility Lighting	3.9	--	--	--	--	--
Other Facility Support	4.6	X	96.8	4.6	22.8	0.1
Onsite Transportation	7.4	--	4.2	17.0	10.3	--
Conventional Electricity Generation	--	X	44.2	7.3	10.3	0.1
Other Nonprocess Use	37.5	X	34.3	52.2	75.7	X
End Use Not Reported	8.3	X	18.2	9.0	29.4	4.3
South Census Region						
TOTAL FUEL CONSUMPTION	1.5	1.4	8.7	0.9	4.3	1.2
Indirect Uses-Boiler Fuel	3.1	1.8	10.0	1.0	3.8	1.5

Conventional Boiler Use	3.1	1.1	10.0	2.1	3.5	3.4
CHP and/or Cogeneration Process	--	2.6	11.8	1.1	11.9	1.6
Direct Uses-Total Process	1.4	1.4	13.3	1.1	5.8	1.8
Process Heating	3.3	1.4	6.1	1.3	5.7	1.9
Process Cooling and Refrigeration	2.8	X	7.2	9.6	58.6	X
Machine Drive	1.8	0.1	20.6	2.3	27.1	30.3
Electro-Chemical Processes	1.1	--	--	--	--	--
Other Process Use	7.5	89.5	9.6	5.8	20.9	0.1
Direct Uses-Total Nonprocess	3.0	26.5	11.9	4.4	8.1	9.3
Facility HVAC (e)	3.5	39.2	36.9	5.1	23.1	14.6
Facility Lighting	3.8	--	--	--	--	--
Other Facility Support	6.0	19.2	8.1	4.7	30.6	X
Onsite Transportation	7.1	--	7.5	9.1	8.0	--
Conventional Electricity Generation	--	0.1	14.6	2.4	17.4	0.1
Other Nonprocess Use	10.4	99.0	45.5	24.9	30.1	X
End Use Not Reported	22.2	0.1	37.4	11.7	14.3	X

West Census Region

TOTAL FUEL CONSUMPTION	4.0	4.5	13.9	1.9	6.3	0.1
Indirect Uses-Boiler Fuel	5.9	0.1	28.9	1.8	7.3	0.1
Conventional Boiler Use	5.9	0.1	16.3	3.6	5.2	0.1
CHP and/or Cogeneration Process	--	0.1	54.3	2.0	11.8	0.1
Direct Uses-Total Process	3.3	7.9	39.2	3.0	6.3	0.1
Process Heating	7.0	0.1	54.7	3.4	3.5	0.1
Process Cooling and Refrigeration	3.7	X	9.6	7.9	64.5	X
Machine Drive	3.9	X	46.4	3.0	41.4	X
Electro-Chemical Processes	1.5	--	--	--	--	--
Other Process Use	3.1	61.5	75.3	2.1	44.2	0.1
Direct Uses-Total Nonprocess	7.5	X	11.0	4.8	14.8	0.1
Facility HVAC (e)	7.0	X	1.5	4.0	33.6	X
Facility Lighting	8.3	--	--	--	--	--
Other Facility Support	11.7	X	0.1	7.0	23.4	X
Onsite Transportation	16.4	--	10.6	19.7	14.0	--
Conventional Electricity Generation	--	X	61.7	47.1	49.7	X
Other Nonprocess Use	9.8	X	23.5	27.7	10.7	0.1
End Use Not Reported	14.3	X	28.9	17.0	40.9	X

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