

Table 21. Residential Sector Supplement Table																								1997-2020		
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Equipment Stock (million units)																										
Main Space Heaters																										
Electric Heat Pumps	8.23	8.46	8.68	8.88	9.08	9.27	9.46	9.66	9.81	9.97	10.14	10.30	10.46	10.63	10.81	10.98	11.15	11.32	11.52	11.72	11.92	12.12	12.33	12.54	1.8%	
Electric Other	17.94	18.09	18.24	18.39	18.55	18.71	18.88	19.07	19.17	19.28	19.41	19.54	19.68	19.82	19.98	20.13	20.28	20.43	20.56	20.69	20.82	20.95	21.09	21.22	0.7%	
Natural Gas Heat Pumps	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.23	0.25	0.27	0.28	0.30	0.32	8.4%	
Natural Gas Other	54.53	55.32	56.09	56.87	57.64	58.42	59.21	60.03	61.06	62.09	63.15	64.20	65.25	66.30	67.34	68.38	69.39	70.38	71.27	72.14	73.00	73.85	74.69	75.51	1.4%	
Distillate	9.95	9.91	9.87	9.82	9.77	9.72	9.66	9.61	9.55	9.49	9.44	9.38	9.33	9.27	9.22	9.16	9.11	9.06	8.94	8.88	8.82	8.75	8.68		-0.6%	
Liquid Petroleum Gas	4.96	5.11	5.22	5.31	5.39	5.46	5.51	5.55	5.56	5.56	5.57	5.57	5.57	5.58	5.57	5.57	5.56	5.55	5.53	5.52	5.50	5.48	5.46	5.44	0.4%	
Kerosene	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.78	0.77	0.76	0.75	0.75	0.74	-1.0%	
Wood Stoves	3.08	3.07	3.05	3.04	3.03	3.02	3.01	3.01	3.00	2.98	2.98	2.97	2.96	2.96	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	-0.2%
Geothermal Heat Pumps	0.35	0.38	0.41	0.44	0.48	0.51	0.55	0.58	0.61	0.63	0.66	0.69	0.71	0.74	0.77	0.80	0.82	0.85	0.96	1.07	1.17	1.28	1.38	1.49	6.5%	
Total	100.03	101.34	102.56	103.75	104.93	106.10	107.29	108.50	109.74	111.01	112.32	113.64	114.96	116.29	117.63	118.96	120.26	121.54	122.80	124.04	125.27	126.48	127.70	128.89	1.1%	
Space Cooling (million units)																										
Electric Heat Pumps	8.23	8.46	8.68	8.88	9.08	9.27	9.46	9.66	9.81	9.97	10.14	10.30	10.46	10.63	10.81	10.98	11.15	11.32	11.52	11.72	11.92	12.12	12.33	12.54	1.8%	
Natural Gas Heat Pumps	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.23	0.25	0.27	0.28	0.30	0.32	8.4%	
Geothermal Heat Pumps	0.35	0.38	0.41	0.44	0.48	0.51	0.55	0.58	0.61	0.63	0.66	0.69	0.71	0.74	0.77	0.80	0.82	0.85	0.96	1.07	1.17	1.28	1.38	1.49	6.5%	
Central Air Conditioners	38.26	39.26	40.19	41.10	41.99	42.89	43.78	44.70	45.67	46.66	47.68	48.70	49.71	50.73	51.75	52.75	53.73	54.70	55.55	56.39	57.21	58.02	58.82	59.61	1.9%	
Room Air Conditioners	36.47	36.45	36.42	36.39	36.35	36.32	36.30	36.28	36.27	36.27	36.27	36.29	36.30	36.32	36.33	36.35	36.36	36.38	36.39	36.40	36.41	36.41	36.42	36.43	-0.0%	
Total	83.36	84.61	85.77	86.89	87.99	89.09	90.20	91.33	92.49	93.67	94.89	96.12	97.34	98.59	99.83	101.07	102.28	103.46	104.65	105.82	106.97	108.12	109.26	110.39	1.2%	
Water Heaters (million units)																										
Electric	38.24	38.64	39.03	39.42	39.80	40.20	40.62	41.06	41.37	41.71	42.04	42.37	42.70	43.05	43.42	43.78	44.14	44.51	44.94	45.39	45.84	46.29	46.76	47.23	0.9%	
Natural Gas	54.43	55.12	55.80	56.48	57.16	57.82	58.51	59.21	60.09	60.99	61.94	62.90	63.85	64.82	65.78	66.72	67.64	68.54	69.36	70.15	70.92	71.68	72.42	73.14	1.3%	
Distillate	4.54	4.56	4.57	4.57	4.57	4.58	4.58	4.58	4.57	4.57	4.56	4.55	4.54	4.53	4.52	4.51	4.50	4.49	4.48	4.47	4.47	4.46	4.45	4.45	-0.1%	
Liquid Petroleum Gas	3.32	3.51	3.65	3.78	3.89	3.98	4.07	4.14	4.18	4.22	4.26	4.29	4.32	4.36	4.38	4.40	4.42	4.44	4.46	4.48	4.49	4.50	4.52	4.52	1.3%	
Solar Thermal	0.64	0.64	0.64	0.63	0.63	0.63	0.63	0.62	0.62	0.62	0.61	0.61	0.61	0.61	0.60	0.60	0.60	0.60	0.59	0.59	0.59	0.59	0.58	0.58	-0.4%	
Total	101.17	102.48	103.69	104.88	106.05	107.21	108.40	109.60	110.84	112.10	113.41	114.73	116.03	117.36	118.70	120.02	121.31	122.59	123.84	125.08	126.30	127.51	128.73	129.91	1.1%	
Cooking Equipment (million units) 1/																										
Electric	62.53	63.43	64.31	65.18	66.04	66.92	67.81	68.73	69.62	70.54	71.50	72.47	73.44	74.43	75.38	76.33	77.25	78.16	79.25	80.23	81.19	82.14	83.10	84.04	1.3%	
Natural Gas	33.42	33.66	33.90	34.13	34.36	34.59	34.83	35.09	35.41	35.75	36.09	36.43	36.76	37.10	37.48	37.86	38.23	38.60	38.76	39.03	39.31	39.57	39.84	40.10	0.8%	
Liquid Petroleum Gas	5.37	5.51	5.59	5.67	5.72	5.77	5.81	5.83	5.83	5.83	5.82	5.82	5.82	5.81	5.80	5.79	5.77	5.76	5.75	5.74	5.72	5.71	5.69	5.67	0.2%	
Total	101.32	102.60	103.80	104.98	106.13	107.28	108.45	109.64	110.87	112.12	113.41	114.72	116.02	117.34	118.66	119.98	121.26	122.52	123.77	125.00	126.22	127.42	128.62	129.80	1.1%	
Clothes Dryers (million units)																										
Electric	58.73	59.88	60.96	62.03	63.06	64.08	65.11	66.14	67.19	68.25	69.33	70.40	71.47	72.54	73.61	74.68	75.72	76.76	77.79	78.81	79.82	80.82	81.83	82.81	1.5%	
Natural Gas	14.46	14.65	14.84	15.00	15.17	15.34	15.51	15.69	15.87	16.05	16.24	16.42	16.60	16.78	16.96	17.14	17.32	17.50	17.67	17.85	18.02	18.18	18.35	18.52	1.1%	
Total	73.19	74.54	75.80	77.03	78.23	79.42	80.62	81.83	83.06	84.30	85.56	86.82	88.06	89.32	90.57	91.82	93.05	94.26	95.46	96.66	97.84	99.01	100.18	101.34	1.4%	

Table 21. Residential Sector Supplement Table																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Other Appliances (million units)																									
Refrigerators	105.00	106.41	107.71	108.99	110.25	111.50	112.77	114.07	115.40	116.76	118.16	119.57	120.97	122.39	123.82	125.24	126.62	127.98	129.33	130.67	131.98	133.28	134.58	135.86	1.1%
Freezers	32.74	32.64	32.50	32.35	32.20	32.05	31.90	31.77	31.65	31.59	31.57	31.57	31.59	31.65	31.73	31.84	31.97	32.11	32.27	32.45	32.64	32.85	33.08	33.32	0.1%
Stock Average Equipment Efficiency																									
Main Space Heaters																									
Electric Heat Pumps (HSPF)	6.71	6.80	6.89	6.96	7.02	7.06	7.09	7.11	7.17	7.19	7.20	7.22	7.23	7.24	7.25	7.25	7.26	7.27	7.36	7.40	7.44	7.48	7.51	7.53	0.5%
Natural Gas Heat Pumps (HSPF)	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	N/A
Geothermal Heat Pumps (COP)	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.52	3.56	3.59	3.61	3.63	3.65	0.3%
Natural Gas Furnace (AFUE)	0.74	0.75	0.76	0.76	0.77	0.78	0.78	0.79	0.79	0.80	0.81	0.81	0.81	0.82	0.82	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.84	0.5%
Distillate Furnace (AFUE)	0.78	0.78	0.79	0.79	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.2%
Space Cooling																									
Electric Heat Pumps (SEER)	10.03	10.20	10.36	10.51	10.62	10.72	10.79	10.84	10.91	10.94	10.96	10.97	10.98	10.98	10.99	10.99	10.99	10.99	11.15	11.22	11.27	11.33	11.37	11.41	0.6%
Natural Gas Heat Pumps (SEER)	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	N/A
Geothermal Heat Pumps (EER)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.95	14.09	14.20	14.29	14.37	14.44	0.3%
Cent. Air Conditioners (SEER)	9.80	9.92	10.03	10.13	10.21	10.28	10.34	10.37	10.54	10.61	10.67	10.72	10.76	10.80	10.83	10.86	10.89	10.91	11.05	11.11	11.17	11.22	11.27	11.32	0.6%
Room Air Conditioners (EER)	8.54	8.65	8.74	8.82	8.97	9.06	9.15	9.22	9.28	9.34	9.39	9.43	9.46	9.49	9.51	9.53	9.55	9.57	9.59	9.60	9.62	9.63	9.64	9.65	0.5%
Water Heaters																									
Electric (EF)	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.1%
Natural Gas (EF)	0.54	0.55	0.55	0.55	0.56	0.56	0.56	0.56	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.4%
Distillate (EF)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.0%
Liquid Petroleum Gas (EF)	0.55	0.55	0.55	0.56	0.56	0.56	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.61	0.5%
Other Appliances (kWh/yr)																									
Refrigerators	976.05	938.38	905.04	875.47	849.27	809.32	776.12	746.05	719.09	694.62	672.20	651.66	632.72	615.83	600.98	587.81	576.66	567.07	559.24	552.73	547.59	543.46	540.55	538.26	-2.6%
Freezers	770.35	738.44	708.09	679.21	652.02	622.85	596.60	572.33	551.85	535.79	522.12	509.64	498.65	488.93	480.85	473.87	467.30	461.67	456.77	452.60	449.08	446.18	443.77	441.90	-2.4%
Building Shell Efficiency Index																									
Space Heating																									
Pre-1994 Homes	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.85	0.84	0.84	0.83	0.83	0.83	0.82	0.82	-0.6%
New Construction	0.82	0.82	0.82	0.80	0.79	0.78	0.77	0.77	0.76	0.75	0.74	0.73	0.72	0.71	0.70	0.69	0.68	0.67	0.66	0.65	0.64	0.63	0.62	0.61	-1.3%
All Homes	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84	0.83	0.83	0.82	0.82	0.81	0.80	0.80	0.79	0.79	0.78	-0.8%

Table 21. Residential Sector Supplement Table																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Space Cooling																									
Pre-1994 Homes	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87	0.87	0.87	0.86	0.86	0.85	0.85	0.84	-0.5%
New Construction	0.87	0.87	0.87	0.85	0.84	0.83	0.82	0.82	0.81	0.80	0.79	0.77	0.76	0.75	0.74	0.73	0.72	0.72	0.71	0.69	0.68	0.68	0.67	0.66	-1.2%
All Homes	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.86	0.85	0.84	0.84	0.83	0.83	0.82	0.82	0.81	-0.6%

1/ Does not include microwave ovens or outdoor grills.

HSPF = Heating Seasonal Performance Factor: The total heating output of a heat pump in Btu during its normal annual usage period for heating divided by total electric input in watt-hours during the same period.

COP = Coefficient of Performance: Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input.

AFUE = Annual Fuel Utilization Efficiency: Efficiency rating based on average usage, including on and off cycling, as set out in the standardized Department of Energy test procedures.

SEER = Seasonal Energy Efficiency Ratio: The total cooling of a central unitary air conditioner or a unitary heat pump in Btu during its normal annual usage period for cooling divided by the total electric energy input in watt-hours during the same period.

EER = Energy Efficiency Ratio: A ratio calculated by dividing the cooling capacity in Btu per hour by the power input in watts at any given set of rating conditions, expressed in Btu per hour per watt.

EF = Efficiency Factor: Efficiency (measured in Btu out / Btu in) of water heaters under certain test conditions specified by the Department of Energy.

kWh/y = Kilowatt hours per year to run the appliance under certain test conditions as specified by the Department of Energy.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: EIA, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 22. Commercial Sector Supplement Table																								1997-2020		
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Commercial Building Delivered																										
Energy Consumption (quadrillion Btu) 1/																										
Assembly	0.56	0.56	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.60	0.60	0.60	0.60	0.60	0.61	0.61	0.61	0.61	0.3%	
Education	0.68	0.68	0.70	0.70	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74	0.75	0.76	0.77	0.77	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.6%	
Food Sales	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.0%	
Food Service	0.36	0.37	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.41	0.41	0.41	0.42	0.42	0.43	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.46	0.46	1.0%	
Health Care	0.49	0.50	0.51	0.51	0.52	0.53	0.54	0.54	0.55	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.61	0.62	0.63	0.63	0.64	0.64	0.65	0.65	1.2%	
Lodging	0.53	0.54	0.54	0.55	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.60	0.60	0.61	0.62	0.63	0.63	0.64	0.64	0.64	0.65	0.65	0.65	0.9%	
Office - Large	0.69	0.70	0.71	0.72	0.72	0.73	0.74	0.74	0.75	0.76	0.77	0.78	0.79	0.79	0.80	0.81	0.82	0.83	0.83	0.84	0.84	0.84	0.85	0.85	0.9%	
Office - Small	0.54	0.54	0.55	0.56	0.57	0.57	0.58	0.58	0.59	0.60	0.60	0.61	0.62	0.62	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.66	0.66	0.66	0.9%	
Mercantile/Service	1.03	1.04	1.07	1.08	1.09	1.10	1.11	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.21	1.22	1.22	1.23	1.23	1.23	0.8%	
Warehouse	0.46	0.45	0.48	0.49	0.49	0.50	0.51	0.51	0.52	0.52	0.53	0.53	0.54	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.59	0.59	0.59	1.1%	
Other	0.55	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.68	0.69	0.71	0.72	0.73	0.75	0.76	0.77	0.79	0.80	0.81	0.82	0.83	0.83	0.84	0.85	1.9%	
Total	6.04	6.09	6.24	6.32	6.39	6.46	6.52	6.58	6.64	6.70	6.77	6.85	6.93	7.00	7.09	7.17	7.24	7.30	7.35	7.39	7.43	7.46	7.49	7.51	1.0%	
Commercial Building Floorspace (billion square feet)																										
Assembly	6.84	6.91	6.95	7.00	7.03	7.06	7.10	7.13	7.17	7.20	7.23	7.26	7.29	7.33	7.36	7.39	7.42	7.45	7.47	7.50	7.52	7.53	7.55	7.56	0.4%	
Education	7.97	8.09	8.21	8.34	8.47	8.59	8.71	8.84	8.96	9.07	9.19	9.31	9.42	9.53	9.64	9.74	9.82	9.89	9.94	9.99	10.02	10.05	10.07	10.09	1.0%	
Food Sales	0.66	0.68	0.69	0.70	0.70	0.71	0.72	0.73	0.74	0.75	0.75	0.76	0.77	0.78	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.83	0.84	0.84	1.0%	
Food Service	1.40	1.41	1.43	1.45	1.46	1.47	1.48	1.50	1.51	1.53	1.54	1.55	1.56	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.65	1.65	1.66	0.7%	
Health Care	1.70	1.73	1.76	1.78	1.81	1.84	1.86	1.89	1.91	1.93	1.95	1.97	1.99	2.01	2.03	2.04	2.05	2.07	2.08	2.09	2.10	2.11	2.12	2.13	1.0%	
Lodging	3.72	3.80	3.88	3.94	3.99	4.03	4.08	4.13	4.18	4.22	4.27	4.31	4.36	4.41	4.46	4.51	4.56	4.60	4.63	4.66	4.68	4.69	4.70	4.71	1.0%	
Office - Large	5.79	5.82	5.86	5.89	5.93	5.96	5.99	6.03	6.07	6.11	6.16	6.21	6.25	6.29	6.33	6.36	6.38	6.40	6.42	6.42	6.42	6.42	6.41	6.39	6.36	0.4%
Office - Small	5.45	5.49	5.52	5.56	5.59	5.63	5.66	5.70	5.74	5.78	5.83	5.88	5.92	5.96	6.00	6.03	6.06	6.08	6.09	6.10	6.10	6.09	6.08	6.05	0.5%	
Mercantile/Service	13.11	13.30	13.48	13.63	13.75	13.86	13.99	14.13	14.26	14.39	14.51	14.63	14.75	14.87	14.99	15.11	15.23	15.34	15.43	15.51	15.58	15.63	15.66	15.69	0.8%	
Warehouse	8.78	8.96	9.13	9.29	9.42	9.53	9.64	9.74	9.83	9.92	10.01	10.10	10.21	10.31	10.40	10.48	10.56	10.62	10.68	10.73	10.76	10.79	10.79	10.79	0.9%	
Other	4.91	5.05	5.19	5.32	5.45	5.58	5.70	5.81	5.92	6.03	6.13	6.23	6.33	6.42	6.51	6.60	6.67	6.74	6.80	6.86	6.91	6.95	6.99	7.02	1.6%	
Total	60.32	61.23	62.09	62.89	63.60	64.25	64.94	65.62	66.28	66.93	67.57	68.21	68.86	69.49	70.10	70.66	71.17	71.61	72.00	72.32	72.56	72.74	72.85	72.90	0.8%	
Stock Average Equipment Efficiency 2/																										
Space Heating																										
Electricity	1.06	1.07	1.07	1.08	1.08	1.08	1.09	1.09	1.09	1.10	1.10	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	0.2%	
Natural Gas	0.73	0.74	0.74	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.3%	
Distillate	0.74	0.75	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.2%	
Space Cooling																										
Electricity	2.45	2.49	2.54	2.58	2.62	2.65	2.69	2.73	2.77	2.81	2.84	2.88	2.91	2.95	2.98	3.00	3.03	3.06	3.08	3.11	3.14	3.16	3.18	3.20	1.2%	
Natural Gas	0.81	0.84	0.86	0.87	0.89	0.90	0.91	0.93	0.94	0.96	0.98	0.99	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.09	1.10	1.11	1.4%	

Table 22. Commercial Sector Supplement Table																								1997-	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
Water Heating																									
Electricity	0.94	0.94	0.94	0.95	0.95	0.95	0.95	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.2%
Natural Gas	0.71	0.72	0.73	0.74	0.75	0.75	0.76	0.77	0.77	0.77	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.80	0.80	0.5%
Distillate	0.74	0.74	0.75	0.75	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.2%
Ventilation (cfm per Btu) 3/																									
Electricity	0.39	0.40	0.40	0.40	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46	0.46	0.7%
Cooking																									
Electricity	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.52	0.1%
Natural Gas	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.49	0.49	-0.1%
Lighting Efficacy 4/ (efficacy in lumens per watt)																									
Electricity	52.81	53.31	53.87	54.57	55.31	56.04	56.80	57.52	58.10	58.71	59.27	59.74	60.15	60.56	60.90	61.20	61.46	61.68	62.00	62.29	62.58	62.88	63.21	63.54	0.8%
Refrigeration																									
Electricity	1.61	1.61	1.62	1.63	1.63	1.64	1.64	1.64	1.65	1.65	1.66	1.66	1.66	1.66	1.67	1.67	1.67	1.67	1.67	1.68	1.68	1.68	1.68	1.68	0.2%

1/ Excludes commercial sector energy consumption (from uses such as street lights) that is not attributable to buildings.

2/ Unless noted otherwise, the efficiency measures are in the terms of Btu of energy output divided by Btu of purchased energy input.

3/ The efficiency measure for ventilation is in terms of cubic feet per minute (cfm) of ventilation air delivered divided by Btu of purchased energy input.

4/ A measurement of the ratio of light produced by a light source to the electrical power used to produce that quality of light, expressed in lumens per watt.

Quad. = Quadrillion.

Btu = British thermal unit.

Avg. = Average.

Equip. = Equipment.

Cfm = Cubic feet per minute.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding.

Source: EIA, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 23. Industrial Sector Macroeconomic Indicators																								1997-2020		
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
GDP (billion 1992 dollars)	7270	7516	7636	7830	7996	8173	8362	8549	8769	8991	9219	9443	9666	9896	10070	10249	10417	10599	10800	10976	11149	11324	11507	11680	2.1%	
Non-Agricultural Employment (million)	121.4	124.1	125.6	126.9	128.0	129.4	130.8	132.3	134.2	136.2	138.1	139.9	141.7	143.5	144.9	146.0	147.0	148.1	149.4	150.4	151.3	152.2	153.1	154.0	1.0%	
Value of Gross Output (billion 1987 dollars)																										
Nonmanufacturing Sector																										
Agricultural	248.1	253.4	255.5	258.9	262.5	264.2	267.2	270.7	275.1	279.3	283.5	287.3	291.2	295.0	297.6	300.8	303.7	307.2	311.1	313.8	316.0	319.1	322.2	325.4	1.2%	
Mining	136.1	135.6	135.8	136.5	138.5	139.5	140.8	141.8	143.4	145.3	146.8	148.1	149.4	150.8	152.4	153.9	155.1	157.0	158.5	159.4	160.6	161.5	162.0	162.4	0.8%	
Construction	428.0	439.5	444.9	453.3	459.5	472.0	481.9	491.7	503.8	517.0	531.0	543.1	554.7	567.5	577.0	584.7	591.8	600.8	611.3	621.4	629.4	637.8	648.2	657.0	1.9%	
Manufacturing Sector																										
Food and Kindred Products	395.3	401.5	406.1	412.9	417.6	421.4	426.1	431.3	437.7	444.3	451.0	457.4	463.9	470.0	475.7	481.1	486.4	492.0	497.8	502.6	507.6	512.6	517.4	522.0	1.2%	
Tobacco Products	26.8	26.9	25.7	25.1	24.5	23.9	23.7	23.5	23.3	23.1	22.9	22.7	22.4	22.0	21.6	21.4	21.0	20.8	20.5	20.0	19.6	19.1	18.6	18.1	-1.7%	
Textile Mill Products	57.8	60.2	59.2	59.2	60.6	61.5	62.3	63.2	64.9	66.3	67.8	69.1	70.3	71.4	71.5	72.1	72.6	73.4	74.4	74.7	74.5	74.9	75.3	75.5	1.2%	
Apparel and Other Textile Products	89.5	93.4	90.4	87.4	89.2	90.5	91.1	92.4	95.2	97.6	99.7	101.8	104.2	106.3	106.8	108.5	109.6	111.3	113.1	113.4	112.2	112.4	112.4	112.4	1.0%	
Lumber and Wood Products	76.5	78.9	79.2	80.7	82.0	83.4	84.5	85.2	86.5	88.0	90.1	91.6	92.9	94.8	95.6	96.4	96.5	97.4	98.4	99.0	99.5	100.2	101.3	101.9	1.3%	
Furniture and Fixtures	46.3	48.8	48.3	47.8	47.7	48.5	49.7	50.1	50.7	51.1	51.6	52.1	52.6	53.1	53.1	53.1	53.1	53.3	53.9	53.8	53.6	53.4	53.5	53.3	0.6%	
Paper and Allied Products	125.2	127.3	128.2	130.7	132.9	134.6	135.9	137.4	139.6	141.9	144.0	145.7	147.8	149.5	150.9	152.4	153.6	155.1	156.8	158.0	159.2	160.3	161.3	162.2	162.2	1.1%
Printing and Publishing	141.5	145.3	144.6	146.6	148.0	148.7	150.2	151.4	153.7	155.5	157.5	159.2	161.1	162.5	164.1	165.6	166.9	168.5	170.4	171.5	172.6	173.7	174.9	175.8	0.9%	
Chemical and Allied Products	278.8	280.9	282.7	289.2	296.4	302.0	305.0	309.7	316.7	323.8	330.7	337.2	344.0	350.4	355.6	361.5	366.7	372.8	379.1	384.1	389.2	394.6	399.0	403.6	1.6%	
Bulk Chemicals	151.9	149.9	148.7	151.7	154.5	156.8	157.2	158.4	160.7	163.5	166.0	168.1	170.2	172.4	174.2	176.3	178.1	180.3	182.6	184.4	186.6	188.9	190.5	192.5	1.0%	
Other Chemicals and Allied Products	126.9	131.0	134.0	137.5	141.8	145.2	147.8	151.3	156.0	160.3	164.7	169.1	173.8	178.0	181.4	185.2	188.6	192.6	196.5	199.6	202.6	205.6	208.5	211.1	2.2%	
Petroleum and Coal Products	154.6	157.2	159.5	159.1	159.5	161.8	162.5	163.6	164.9	167.0	169.8	170.4	173.1	175.4	176.7	177.7	178.7	180.1	180.9	181.5	182.6	183.0	183.7	184.2	0.8%	
Petroleum Refining	139.0	141.4	143.5	142.7	143.0	145.1	145.6	146.4	147.5	149.3	151.7	152.1	154.5	156.5	157.6	158.5	159.4	160.5	161.1	161.4	162.3	162.6	162.9	163.2	0.7%	
Other Petroleum and Coal Products	15.6	15.9	16.1	16.4	16.5	16.7	16.9	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.1	19.2	19.3	19.6	19.9	20.1	20.3	20.5	20.8	21.0	1.3%	
Rubber and Miscellaneous																										
Plastic Products	126.8	133.1	134.2	138.6	143.4	147.5	151.8	156.3	162.2	167.9	173.5	178.6	184.1	188.8	193.8	199.7	205.3	212.2	219.6	224.7	232.6	240.0	245.8	251.8	3.0%	
Leather and Leather Products	7.3	7.4	6.9	6.2	6.6	6.8	6.6	6.7	7.0	7.2	7.3	7.3	7.4	7.6	7.5	7.7	7.8	7.9	8.1	8.0	7.8	7.7	7.6	7.5	0.1%	
Stone, Clay, and Glass Products	70.0	69.6	68.6	68.8	69.3	70.6	71.3	71.9	72.8	73.8	74.8	75.6	76.3	77.2	77.6	78.0	78.2	78.9	79.6	80.1	80.3	80.7	81.3	81.5	0.7%	
Glass and Glass Products	19.5	19.5	19.1	18.9	19.1	19.3	19.4	19.4	19.6	19.8	20.0	20.1	20.2	20.4	20.5	20.7	20.9	21.2	21.4	21.5	21.6	21.8	22.0	22.1	0.5%	
Cement, Hydraulic	4.8	4.7	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	0.5%	
Other Stone, Clay, and Glass Products	45.7	45.5	45.0	45.3	45.6	46.6	47.2	47.7	48.3	49.0	49.9	50.4	50.9	51.6	51.9	52.1	52.2	52.5	53.0	53.3	53.4	53.6	54.0	54.0	0.7%	

Table 23. Industrial Sector Macroeconomic Indicators																									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1997-2020
Primary Metals Industry	149.5	150.7	145.8	148.4	151.4	153.3	154.8	156.2	158.4	160.5	161.7	162.0	162.7	163.0	163.4	163.8	164.4	165.7	167.1	166.9	167.8	168.3	168.3	168.0	0.5%
Blast Furnace and Basic Steel Products	69.4	70.8	68.8	70.2	72.0	73.1	74.4	75.1	76.4	77.6	78.5	78.7	78.6	78.4	78.7	79.0	79.6	80.3	81.2	81.3	81.7	81.6	81.6	81.4	0.7%
Aluminum	28.7	28.2	27.4	27.9	28.4	28.8	29.0	29.1	29.3	29.5	29.6	29.5	29.5	29.4	29.6	29.5	29.4	29.4	29.4	29.2	29.3	29.3	29.1	28.8	0.0%
Other Primary Metal Products	51.4	51.6	49.6	50.2	51.0	51.4	51.5	51.9	52.7	53.3	53.6	53.8	54.6	55.2	55.2	55.3	55.4	56.0	56.5	56.3	56.8	57.3	57.6	57.8	0.5%
Fabricated Metal Products	179.7	183.6	182.2	183.9	186.3	189.0	191.2	193.3	197.0	200.7	204.2	207.2	210.1	213.1	214.4	216.0	217.3	220.0	223.1	224.6	227.0	229.1	230.9	232.8	1.1%
Industrial Machinery and Equipment	316.0	334.4	335.0	339.2	353.3	367.2	378.8	391.3	407.6	422.2	436.9	451.2	465.6	477.0	484.9	495.4	507.1	520.1	536.4	547.5	559.2	570.7	584.0	595.4	2.8%
Electronic and Other Electric Equipment	352.3	374.0	375.8	380.8	404.7	425.0	447.7	477.8	515.3	557.3	590.8	621.8	664.9	703.5	724.5	752.3	777.1	811.9	849.0	863.6	919.0	962.1	992.6	1021.1	4.7%
Transportation Equipment	408.6	429.7	421.3	428.1	433.6	438.8	449.7	458.9	471.6	477.7	486.9	498.4	507.3	516.5	519.1	523.4	528.6	536.4	545.7	549.5	555.5	561.7	567.9	571.8	1.5%
Instruments & Related Products	125.7	129.7	128.9	129.8	132.4	133.7	136.9	140.2	144.7	150.7	156.1	161.1	166.2	170.4	173.6	176.4	179.3	182.4	185.7	188.0	190.1	191.9	193.9	194.9	1.9%
Miscellaneous Manufacturing Industries	42.0	42.9	42.4	42.5	44.1	45.0	45.3	45.7	46.8	47.8	48.8	49.8	50.8	51.2	51.3	51.6	51.8	52.4	53.0	52.9	52.7	52.7	52.7	52.5	1.0%
Total Industrial Gross Output	3982.2	4104.2	4101.3	4153.5	4244.1	4328.8	4415.3	4510.1	4639.1	4765.8	4887.2	4998.8	5123.1	5237.0	5308.8	5393.5	5472.6	5577.6	5693.4	5758.8	5868.5	5967.5	6054.7	6131.0	1.9%

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 1997: Data Resources Incorporated (DRI), DRI Trend0898. Projections: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 24. Refining Industry Energy Consumption																								1997-2020		
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Industry Output (billion 1987 dollars)	139.04	141.35	143.46	142.71	142.96	145.05	145.58	146.44	147.47	149.26	151.75	152.15	154.53	156.52	157.61	158.47	159.38	160.54	161.07	161.38	162.30	162.57	162.94	163.22	0.7%	
Energy Consumption (trillion Btu)																										
Residual Oil	56.2	31.2	37.1	38.4	39.6	41.1	41.7	40.0	40.2	40.9	41.4	42.2	42.5	43.5	45.9	43.9	44.2	46.8	47.2	47.2	47.2	47.6	44.5	44.5	-1.0%	
Distillate Oil	4.2	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas	19.3	19.6	19.7	5.7	4.3	4.8	4.7	4.2	4.4	5.0	6.6	6.8	6.6	6.8	6.9	6.9	7.4	6.9	6.9	6.9	6.9	6.9	6.9	6.9	4.8	-5.9%
Petroleum Coke	573.1	582.9	585.2	596.4	581.5	564.9	565.1	562.2	563.3	556.4	543.7	549.4	548.5	539.3	532.5	527.2	522.1	517.9	514.5	512.0	504.5	503.9	498.9	497.1	-0.6%	
Still Gas	1434.9	1459.5	1465.3	1730.0	1748.2	1807.6	1778.5	1771.1	1775.6	1797.4	1819.4	1841.1	1851.0	1872.9	1854.0	1834.4	1828.7	1815.0	1819.8	1797.0	1793.0	1789.4	1756.8	1755.8	0.9%	
Other Petroleum 2/	38.7	39.4	39.5	47.2	18.1	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	2126.5	2136.8	2151.1	2417.6	2391.7	2423.2	2390.1	2377.4	2383.5	2399.6	2411.0	2439.6	2448.6	2462.5	2439.3	2412.3	2402.3	2386.6	2388.3	2363.0	2351.6	2347.9	2307.1	2302.2	0.3%	
Natural Gas	799.8	813.6	816.8	907.9	979.3	999.0	1043.1	1064.4	1081.5	1093.0	1121.9	1109.5	1133.2	1146.7	1166.5	1194.7	1206.0	1218.2	1228.0	1247.1	1248.3	1255.3	1278.2	1283.3	2.1%	
Steam Coal	3.1	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	
Purchased Electricity	109.6	111.5	111.9	153.1	159.8	167.2	167.5	168.4	171.0	179.4	185.2	189.1	190.9	194.8	195.9	196.2	196.6	196.1	199.4	198.3	199.3	200.1	199.7	200.4	2.7%	
Total	3039.0	3065.0	3083.1	3478.6	3530.9	3589.3	3600.7	3610.2	3636.1	3672.1	3718.1	3738.2	3772.7	3804.0	3801.7	3803.2	3804.9	3800.9	3815.7	3808.3	3799.2	3803.3	3785.1	3785.9	1.0%	
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																										
Residual Oil	0.40	0.22	0.26	0.27	0.28	0.28	0.29	0.27	0.27	0.27	0.27	0.28	0.27	0.28	0.29	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.27	0.27	-1.7%	
Distillate Oil	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas	0.14	0.14	0.14	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	-6.5%	
Petroleum Coke	4.12	4.12	4.08	4.18	4.07	3.89	3.88	3.84	3.82	3.73	3.58	3.61	3.55	3.45	3.38	3.33	3.28	3.23	3.19	3.17	3.11	3.10	3.06	3.05	-1.3%	
Still Gas	10.32	10.33	10.21	12.12	12.23	12.46	12.22	12.09	12.04	12.04	11.99	12.10	11.98	11.97	11.76	11.58	11.47	11.31	11.30	11.13	11.05	11.01	10.78	10.76	0.2%	
Other Petroleum 2/	0.28	0.28	0.28	0.33	0.13	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Petroleum Subtotal	15.29	15.12	15.00	16.94	16.73	16.71	16.42	16.24	16.16	16.08	15.89	16.03	15.84	15.73	15.48	15.22	15.07	14.87	14.83	14.64	14.49	14.44	14.16	14.11	-0.4%	
Natural Gas	5.75	5.76	5.69	6.36	6.85	6.89	7.17	7.27	7.33	7.32	7.39	7.29	7.33	7.33	7.40	7.54	7.57	7.59	7.62	7.73	7.69	7.72	7.84	7.86	1.4%	
Steam Coal	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Purchased Electricity	0.79	0.79	0.78	1.07	1.12	1.15	1.15	1.15	1.16	1.20	1.22	1.24	1.24	1.24	1.24	1.24	1.23	1.22	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.9%
Total	21.86	21.68	21.49	24.37	24.70	24.75	24.73	24.65	24.66	24.60	24.50	24.57	24.41	24.30	24.12	24.00	23.87	23.68	23.69	23.60	23.41	23.40	23.23	23.20	0.3%	

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes lubricants and miscellaneous petroleum products.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 25. Food Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	395.26	401.54	406.05	412.89	417.59	421.39	426.14	431.28	437.73	444.30	451.03	457.44	463.90	470.04	475.70	481.13	486.36	491.95	497.83	502.62	507.59	512.55	517.38	522.01	1.2%
Energy Consumption (trillion Btu)																									
Residual Oil	21.3	23.4	23.5	25.1	24.7	24.3	23.9	23.5	23.9	23.5	23.1	23.5	23.4	23.8	23.9	24.0	24.0	24.5	25.1	24.7	25.1	25.2	25.5	25.6	0.8%
Distillate Oil	16.1	17.5	17.6	18.4	18.5	18.3	18.1	17.9	17.9	17.7	17.5	17.7	17.7	17.9	18.0	18.1	18.2	18.5	18.8	18.8	19.0	19.2	19.4	19.4	0.8%
Liquefied Petroleum Gas	4.7	5.7	5.9	5.8	5.9	5.8	5.8	5.6	5.5	5.5	5.5	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.1	6.1	6.1	6.2	6.2	6.2	1.2%
Other Petroleum 2/	113.8	120.7	121.6	129.8	129.8	128.5	127.5	126.2	128.5	127.1	125.9	127.7	127.6	129.8	131.0	132.2	133.2	136.2	138.9	138.1	140.4	141.5	143.4	144.0	1.0%
Petroleum Subtotal	155.9	167.2	168.7	179.2	178.9	176.9	175.3	173.2	175.9	173.8	172.0	174.6	174.5	177.3	178.7	180.2	181.3	185.2	188.9	187.8	190.7	192.1	194.6	195.1	1.0%
Natural Gas	567.9	569.6	569.6	567.4	568.7	570.6	573.0	576.1	576.6	580.2	584.1	585.0	589.0	591.6	595.1	599.2	603.6	606.0	609.1	614.0	616.8	620.9	624.3	628.7	0.4%
Steam Coal	173.2	170.4	172.9	173.9	177.3	180.2	183.3	186.1	188.7	192.5	195.0	196.3	198.0	199.6	201.2	203.0	204.9	207.1	209.7	213.0	215.3	217.8	219.8	222.3	1.1%
Renewables	12.0	12.2	12.4	12.6	12.8	12.9	13.1	13.2	13.5	13.7	14.0	14.2	14.4	14.7	14.9	15.1	15.3	15.5	15.8	15.9	16.2	16.4	16.6	16.8	1.4%
Purchased Electricity	202.2	202.8	205.2	207.9	210.2	211.8	213.2	215.0	217.9	220.8	223.3	225.5	227.7	229.8	231.9	234.5	236.9	239.4	242.2	244.5	246.9	249.0	251.2	253.2	1.0%
Total	1111.2	1122.2	1128.7	1140.9	1147.8	1152.4	1157.9	1163.6	1172.5	1181.0	1188.3	1195.6	1203.7	1213.0	1221.8	1232.0	1242.1	1253.2	1265.6	1275.3	1285.9	1296.1	1306.4	1316.2	0.7%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Residual Oil	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-0.4%
Distillate Oil	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.4%
Liquefied Petroleum Gas	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Other Petroleum 2/	0.29	0.30	0.30	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.28	0.28	0.27	0.28	0.28	0.28	0.28	-0.2%
Petroleum Subtotal	0.39	0.42	0.42	0.43	0.43	0.42	0.41	0.40	0.40	0.39	0.38	0.38	0.38	0.38	0.38	0.37	0.37	0.38	0.38	0.37	0.38	0.37	0.38	0.37	-0.2%
Natural Gas	1.44	1.42	1.40	1.37	1.36	1.35	1.34	1.34	1.32	1.31	1.30	1.28	1.27	1.26	1.25	1.25	1.24	1.23	1.22	1.22	1.22	1.21	1.21	1.20	-0.8%
Steam Coal	0.44	0.42	0.43	0.42	0.42	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.43	-0.1%
Renewables	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.2%
Purchased Electricity	0.51	0.50	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	-0.2%
Total	2.81	2.79	2.78	2.76	2.75	2.73	2.72	2.70	2.68	2.66	2.63	2.61	2.59	2.58	2.57	2.56	2.55	2.55	2.54	2.54	2.53	2.53	2.52	2.52	-0.5%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 26. Paper Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	125.21	127.32	128.24	130.67	132.85	134.61	135.90	137.41	139.64	141.88	143.98	145.67	147.81	149.47	150.92	152.38	153.56	155.12	156.84	157.96	159.17	160.30	161.33	162.23	1.1%
Energy Consumption (trillion Btu)																									
Residual Oil	42.2	48.1	47.9	49.7	48.2	46.9	45.5	44.1	44.6	43.3	42.0	42.1	41.5	41.6	41.3	41.2	40.9	41.6	42.3	41.3	41.6	41.5	41.8	41.6	-0.1%
Distillate Oil	13.8	14.1	14.0	13.9	13.8	13.7	13.5	13.4	13.3	13.3	13.1	13.1	13.0	13.0	13.0	12.9	12.9	12.9	12.9	12.9	12.9	12.8	12.9	12.8	-0.3%
Liquefied Petroleum Gas	12.7	13.5	13.5	13.3	13.3	13.3	13.2	13.1	13.0	12.9	13.0	13.0	13.1	13.1	13.1	13.1	13.0	13.0	13.1	13.1	13.0	13.0	13.0	13.0	0.1%
Other Petroleum 2/	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	N/A
Petroleum Subtotal	78.7	85.8	85.6	87.1	85.5	84.0	82.3	80.7	81.0	79.6	78.2	78.4	77.7	77.8	77.5	77.3	77.0	77.6	78.4	77.4	77.7	77.5	77.8	77.5	-0.1%
Natural Gas	314.7	311.1	307.4	305.1	304.2	302.9	302.2	300.6	297.7	295.9	293.2	289.7	287.4	284.3	282.0	281.1	279.8	278.2	276.8	276.7	275.9	275.5	274.9	274.6	-0.6%
Steam Coal	134.0	130.4	128.4	126.7	125.6	124.3	122.4	120.6	118.7	117.1	114.1	111.0	108.2	105.3	102.8	101.3	99.6	98.0	96.8	96.0	95.2	94.3	93.5	92.9	-1.6%
Renewables	1241.8	1262.2	1272.1	1296.1	1317.3	1334.2	1346.3	1360.9	1387.4	1413.5	1438.5	1459.5	1484.7	1504.7	1522.9	1540.5	1555.4	1574.1	1594.3	1607.6	1622.4	1636.1	1648.5	1660.6	1.3%
Purchased Electricity	232.0	229.6	229.5	230.1	231.3	231.9	230.8	230.1	230.2	230.6	230.2	229.4	229.0	228.0	227.0	227.4	227.5	227.8	228.4	228.6	228.8	228.7	228.7	228.5	-0.1%
Total	2001.3	2019.1	2022.9	2045.1	2063.9	2077.3	2084.1	2093.0	2115.0	2136.6	2154.2	2168.0	2186.9	2200.0	2212.1	2227.6	2239.2	2255.6	2274.5	2286.3	2299.9	2312.1	2323.3	2334.1	0.7%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Residual Oil	0.34	0.38	0.37	0.38	0.36	0.35	0.33	0.32	0.32	0.31	0.29	0.29	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	-1.2%
Distillate Oil	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-1.4%
Liquefied Petroleum Gas	0.10	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-1.0%
Other Petroleum 2/	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	-1.1%
Petroleum Subtotal	0.63	0.67	0.67	0.67	0.64	0.62	0.61	0.59	0.58	0.56	0.54	0.54	0.53	0.52	0.51	0.51	0.50	0.50	0.50	0.49	0.49	0.48	0.48	0.48	-1.2%
Natural Gas	2.51	2.44	2.40	2.33	2.29	2.25	2.22	2.19	2.13	2.09	2.04	1.99	1.94	1.90	1.87	1.84	1.82	1.79	1.76	1.75	1.73	1.72	1.70	1.69	-1.7%
Steam Coal	1.07	1.02	1.00	0.97	0.95	0.92	0.90	0.88	0.85	0.83	0.79	0.76	0.73	0.70	0.68	0.67	0.65	0.63	0.62	0.61	0.60	0.59	0.58	0.57	-2.7%
Renewables	9.92	9.91	9.92	9.92	9.92	9.91	9.91	9.90	9.94	9.96	9.99	10.02	10.04	10.07	10.09	10.11	10.13	10.15	10.16	10.18	10.19	10.21	10.22	10.24	0.1%
Purchased Electricity	1.85	1.80	1.79	1.76	1.74	1.72	1.70	1.67	1.65	1.63	1.60	1.57	1.55	1.53	1.50	1.49	1.48	1.47	1.46	1.45	1.44	1.43	1.42	1.41	-1.2%
Total	15.98	15.86	15.77	15.65	15.54	15.43	15.34	15.23	15.15	15.06	14.96	14.88	14.80	14.72	14.66	14.62	14.58	14.54	14.50	14.47	14.45	14.42	14.40	14.39	-0.5%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 27. Bulk Chemical Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	151.90	149.88	148.73	151.69	154.54	156.81	157.23	158.44	160.70	163.50	166.01	168.06	170.25	172.41	174.18	176.35	178.10	180.28	182.56	184.41	186.60	188.94	190.47	192.53	1.0%
Energy Consumption (trillion Btu)																									
Heat and Power																									
Residual Oil	32.3	34.8	34.3	37.1	36.2	35.9	34.6	33.6	34.4	33.8	33.2	33.6	33.5	33.9	34.1	34.3	34.3	35.1	36.1	35.5	36.1	36.3	36.8	36.9	0.6%
Distillate Oil	5.8	6.1	6.1	6.1	6.0	6.0	5.8	5.7	5.6	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	5.9	0.1%
Liquefied Petroleum Gas	1.9	2.4	2.5	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.4	2.4	2.5	2.4	2.4	2.5	2.5	1.2%
Other Petroleum 2/	224.1	228.8	224.3	244.4	242.1	239.7	232.2	226.2	231.7	228.9	225.4	228.2	226.1	229.0	230.3	232.4	233.6	239.7	245.6	242.8	247.4	249.4	253.1	254.2	0.6%
Petroleum Subtotal	264.0	272.3	267.2	290.0	286.7	283.9	274.9	267.7	273.9	270.5	266.3	269.7	267.5	270.9	272.5	274.7	275.9	282.9	289.9	286.5	291.7	294.0	298.2	299.5	0.5%
Natural Gas	1854.5	1824.0	1801.7	1806.0	1828.1	1843.7	1841.2	1844.2	1843.6	1855.2	1864.0	1863.2	1868.2	1871.9	1881.8	1896.7	1908.1	1918.4	1930.2	1945.7	1958.8	1976.2	1984.1	2000.0	0.3%
Steam Coal	139.1	130.8	130.3	130.0	134.6	138.3	139.4	141.2	143.0	147.5	150.7	151.6	153.5	154.9	157.0	159.6	162.0	164.6	167.3	171.8	174.8	178.2	180.0	183.2	1.2%
Purchased Electricity	620.4	603.3	598.9	608.2	619.1	627.1	624.5	626.0	633.9	644.3	652.5	658.5	664.8	670.8	676.2	684.8	691.5	700.1	709.7	717.7	726.5	735.8	741.8	749.9	0.8%
Total Heat and Power	2878.1	2830.4	2798.1	2834.2	2868.6	2893.1	2879.9	2879.1	2894.4	2917.4	2933.5	2943.0	2954.0	2968.5	2987.5	3015.8	3037.5	3066.0	3097.2	3121.8	3151.8	3184.2	3204.1	3232.5	0.5%
Feedstock																									
Liquefied Petroleum Gas	1582.3	1560.5	1547.0	1572.3	1596.6	1615.5	1616.8	1625.4	1644.1	1668.0	1689.1	1706.0	1724.2	1742.3	1756.7	1775.0	1789.4	1807.9	1827.3	1842.7	1861.3	1881.3	1893.6	1911.1	0.8%
Petrochemical Feedstocks	1278.5	1260.9	1250.0	1270.4	1290.0	1305.3	1306.4	1313.3	1328.5	1347.8	1364.8	1378.5	1393.2	1407.8	1419.5	1434.2	1445.9	1460.8	1476.5	1488.9	1503.9	1520.1	1530.1	1544.2	0.8%
Natural Gas	696.9	687.3	681.4	692.5	703.2	711.5	712.1	715.9	724.1	734.7	743.9	751.4	759.4	767.4	773.7	781.8	788.1	796.3	804.8	811.6	819.8	828.6	834.0	841.7	0.8%
Total Feedstocks	3557.8	3508.8	3478.3	3535.1	3589.8	3632.3	3635.2	3654.6	3696.7	3750.4	3797.8	3835.9	3876.9	3917.4	3949.9	3991.0	4023.4	4065.0	4108.6	4143.1	4184.9	4230.0	4257.7	4297.1	0.8%
Total	6435.9	6339.2	6276.4	6369.3	6458.4	6525.4	6515.1	6533.7	6591.2	6667.8	6731.3	6779.0	6830.9	6885.9	6937.4	7006.8	7061.0	7131.0	7205.8	7264.9	7336.7	7414.2	7461.8	7529.6	0.7%
Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Heat and Power																									
Residual Oil	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-0.5%
Distillate Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9%
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
Other Petroleum	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	-0.5%
Petroleum Subtotal	1.7	1.8	1.8	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.5%
Natural Gas 2/	12.2	12.2	12.1	11.9	11.8	11.8	11.7	11.6	11.5	11.3	11.2	11.1	11.0	10.9	10.8	10.8	10.7	10.6	10.6	10.6	10.5	10.5	10.4	10.4	-0.7%
Steam Coal	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.2%
Purchased Electricity	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	-0.2%
Total Heat and Power	18.9	18.9	18.8	18.7	18.6	18.4	18.3	18.2	18.0	17.8	17.7	17.5	17.4	17.2	17.2	17.1	17.1	17.0	17.0	16.9	16.9	16.9	16.8	16.8	-0.5%
Feedstock																									
Liquefied Petroleum Gas	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.2	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.0	10.0	10.0	10.0	10.0	10.0	9.9	9.9	-0.2%
Petrochemical Feedstocks	8.4	8.4	8.4	8.4	8.3	8.3	8.3	8.3	8.3	8.2	8.2	8.2	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0	-0.2%
Natural Gas 2/	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	-0.2%
Total Feedstocks	23.4	23.4	23.4	23.3	23.2	23.2	23.1	23.1	23.0	22.9	22.9	22.8	22.8	22.7	22.7	22.6	22.6	22.5	22.5	22.5	22.4	22.4	22.4	22.3	-0.2%
Total	42.4	42.3	42.2	42.0	41.8	41.6	41.4	41.2	41.0	40.8	40.5	40.3	40.1	39.9	39.8	39.7	39.6	39.6	39.5	39.4	39.3	39.2	39.2	39.1	-0.3%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 28. Glass Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	19.52	19.49	19.08	18.91	19.13	19.29	19.37	19.44	19.65	19.82	19.97	20.09	20.23	20.44	20.55	20.74	20.91	21.17	21.39	21.52	21.60	21.80	21.96	22.13	0.5%
Energy Consumption (trillion Btu)																									
Residual Oil	12.4	14.8	14.7	15.0	14.7	14.4	14.2	13.8	13.7	13.3	12.9	13.0	12.8	12.8	12.7	12.7	12.7	13.1	13.3	13.2	13.4	13.5	13.6	13.6	0.4%
Distillate Oil	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-0.4%
Liquefied Petroleum Gas	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1%
Petroleum Subtotal	13.6	16.1	16.1	16.3	16.0	15.7	15.4	14.9	14.9	14.5	14.1	14.1	13.9	14.0	13.8	13.9	13.9	14.2	14.4	14.3	14.6	14.7	14.8	14.7	0.4%
Natural Gas	134.6	131.2	127.1	124.7	125.2	125.3	124.6	124.0	123.6	123.3	122.6	121.4	120.5	119.8	119.1	119.2	119.2	119.4	119.6	119.8	119.5	119.8	120.1	120.7	-0.5%
Purchased Electricity	28.8	28.2	27.7	27.4	27.6	27.8	27.8	27.8	28.0	28.2	28.3	28.3	28.4	28.5	28.5	28.8	28.9	29.2	29.4	29.5	29.6	29.8	29.9	30.1	0.2%
Total	177.0	175.5	170.8	168.3	168.8	168.8	167.8	166.7	166.5	166.0	165.0	163.8	162.8	162.3	161.4	161.8	161.9	162.8	163.5	163.7	163.6	164.3	164.8	165.5	-0.3%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Residual Oil	0.63	0.76	0.77	0.79	0.77	0.75	0.73	0.71	0.70	0.67	0.65	0.65	0.63	0.63	0.62	0.61	0.61	0.62	0.62	0.61	0.62	0.62	0.62	0.61	-0.1%
Distillate Oil	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.9%
Liquefied Petroleum Gas	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-0.4%
Petroleum Subtotal	0.70	0.83	0.84	0.86	0.84	0.81	0.79	0.77	0.76	0.73	0.70	0.70	0.69	0.68	0.67	0.67	0.66	0.67	0.68	0.67	0.67	0.67	0.67	0.67	-0.2%
Natural Gas	6.90	6.73	6.66	6.59	6.55	6.49	6.44	6.38	6.29	6.22	6.14	6.04	5.95	5.86	5.80	5.75	5.70	5.64	5.59	5.57	5.53	5.50	5.47	5.45	-1.0%
Purchased Electricity	1.48	1.45	1.45	1.45	1.45	1.44	1.44	1.43	1.43	1.42	1.42	1.41	1.40	1.39	1.39	1.39	1.38	1.38	1.38	1.37	1.37	1.37	1.36	1.36	-0.4%
Total	9.07	9.01	8.95	8.90	8.83	8.75	8.66	8.57	8.48	8.38	8.26	8.15	8.05	7.94	7.86	7.80	7.75	7.69	7.64	7.61	7.57	7.54	7.51	7.48	-0.8%

1/ Fuel consumption includes consumption for cogeneration.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 29. Cement Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	4.76	4.66	4.54	4.56	4.60	4.68	4.74	4.77	4.84	4.91	4.99	5.05	5.08	5.14	5.15	5.16	5.16	5.20	5.24	5.27	5.28	5.29	5.31	5.30	0.5%
Energy Consumption (trillion Btu)																									
Residual Oil	1.2	1.6	1.5	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	-1.2%
Distillate Oil	2.7	3.2	3.0	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	-1.9%
Other Petroleum 2/	70.1	68.2	66.2	66.2	66.3	66.6	66.7	66.4	66.5	66.5	66.5	66.4	66.0	65.8	65.2	64.9	64.6	64.7	64.8	64.8	64.7	64.6	64.7	64.4	-0.4%
Petroleum Subtotal	74.0	73.0	70.7	70.7	70.4	70.7	70.5	69.9	70.0	69.9	69.7	69.6	69.1	68.9	68.3	67.9	67.6	67.6	67.7	67.7	67.5	67.4	67.4	67.1	-0.4%
Natural Gas	23.7	24.7	22.6	22.5	21.9	21.5	21.0	20.6	20.1	19.5	19.1	18.8	18.4	18.1	17.8	17.5	17.3	17.0	16.7	16.4	16.1	15.9	15.7	15.5	-1.8%
Steam Coal	251.9	242.2	236.2	235.8	236.3	238.0	238.4	236.9	237.1	237.2	236.8	235.7	233.7	232.3	230.1	228.9	227.9	228.4	228.7	229.1	228.9	228.7	229.0	228.2	-0.4%
Purchased Electricity	42.9	41.7	40.6	40.7	40.9	41.3	41.5	41.6	42.0	42.4	42.8	43.0	43.1	43.2	43.2	43.2	43.2	43.4	43.6	43.7	43.7	43.7	43.8	43.7	0.1%
Total	392.5	381.6	370.0	369.7	369.5	371.5	371.5	368.9	369.2	369.0	368.4	367.1	364.3	362.5	359.4	357.5	355.9	356.3	356.6	356.8	356.3	355.7	355.9	354.5	-0.4%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Residual Oil	0.25	0.34	0.33	0.34	0.31	0.29	0.27	0.25	0.25	0.23	0.21	0.21	0.20	0.20	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	-1.6%
Distillate Oil	0.57	0.68	0.65	0.63	0.60	0.57	0.53	0.50	0.47	0.45	0.43	0.42	0.41	0.40	0.39	0.38	0.38	0.37	0.36	0.36	0.35	0.34	0.34	0.33	-2.3%
Other Petroleum 2/	14.72	14.65	14.57	14.51	14.40	14.25	14.08	13.92	13.72	13.54	13.34	13.15	12.98	12.81	12.67	12.58	12.52	12.45	12.38	12.31	12.27	12.23	12.18	12.15	-0.8%
Petroleum Subtotal	15.54	15.67	15.56	15.48	15.31	15.10	14.88	14.67	14.44	14.22	13.98	13.78	13.59	13.41	13.25	13.15	13.08	13.00	12.93	12.85	12.80	12.75	12.70	12.65	-0.9%
Natural Gas	4.98	5.30	4.98	4.94	4.76	4.59	4.44	4.32	4.14	3.96	3.83	3.72	3.62	3.53	3.46	3.40	3.34	3.26	3.19	3.11	3.06	3.01	2.96	2.93	-2.3%
Steam Coal	52.89	52.01	51.98	51.66	51.37	50.87	50.29	49.67	48.95	48.27	47.47	46.69	45.98	45.24	44.69	44.35	44.15	43.91	43.68	43.50	43.39	43.27	43.13	43.04	-0.9%
Purchased Electricity	9.01	8.96	8.93	8.91	8.89	8.84	8.77	8.71	8.67	8.63	8.58	8.52	8.47	8.42	8.39	8.38	8.36	8.34	8.32	8.30	8.29	8.26	8.25	8.24	-0.4%
Total	82.42	81.94	81.44	80.99	80.33	79.40	78.37	77.37	76.21	75.08	73.86	72.71	71.66	70.59	69.78	69.28	68.94	68.52	68.12	67.77	67.53	67.30	67.04	66.85	-0.9%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 30. Iron and Steel Industries Energy Consumption																									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1997-2020
Industry Output (billion 1987 dollars)	69.44	70.82	68.80	70.20	72.03	73.07	74.36	75.14	76.43	77.64	78.46	78.69	78.58	78.40	78.65	79.04	79.62	80.30	81.19	81.32	81.75	81.64	81.63	81.36	0.7%
Energy Consumption (trillion Btu)																									
Residual Oil	51.9	60.7	58.8	60.4	58.7	56.7	55.1	53.0	54.1	52.2	50.0	49.8	48.1	47.6	46.9	46.4	46.0	46.8	47.8	46.2	46.7	46.2	46.6	46.0	-0.5%
Other Petroleum 2/	85.6	88.8	85.9	88.9	88.7	87.7	86.9	85.5	86.2	85.0	83.1	82.4	80.5	79.5	78.7	78.3	78.0	78.4	78.9	77.7	78.0	77.4	77.4	76.8	-0.5%
Petroleum Subtotal	137.6	149.5	144.6	149.3	147.3	144.4	142.0	138.5	140.2	137.2	133.1	132.2	128.6	127.1	125.5	124.7	124.0	125.2	126.7	123.9	124.6	123.6	124.0	122.7	-0.5%
Natural Gas	442.1	441.1	426.0	426.7	433.3	436.3	440.3	442.4	443.1	446.9	449.0	446.5	444.8	441.4	442.1	444.3	447.9	450.5	454.9	458.8	462.8	465.4	468.3	471.2	0.3%
Metallurgical Coal	780.9	767.2	753.6	740.3	727.2	714.4	701.1	687.9	674.9	662.1	647.6	633.5	619.7	606.1	593.2	582.7	572.4	562.3	552.3	543.1	534.5	526.1	517.7	509.6	-1.8%
Net Coke Imports	85.1	99.8	90.8	108.4	124.6	136.0	148.4	158.0	170.3	181.9	190.6	195.8	198.9	201.6	206.8	213.8	222.0	230.7	240.4	246.3	254.3	259.4	265.1	269.2	5.1%
Steam Coal	78.7	75.1	74.2	74.1	76.4	78.1	79.8	81.0	82.0	84.0	84.9	84.5	84.3	83.7	83.9	84.5	85.2	85.8	86.8	88.3	89.1	89.6	89.9	90.2	0.6%
Coal Subtotal	944.7	942.1	918.7	922.7	928.2	928.5	929.3	927.0	927.2	928.0	923.1	913.8	902.9	891.5	883.8	881.0	879.6	878.7	879.5	877.6	877.9	875.1	872.7	869.0	-0.4%
Purchased Electricity	154.7	155.4	151.2	153.7	158.4	161.0	163.4	164.8	167.8	170.7	172.1	171.9	170.9	169.7	170.0	171.2	172.6	174.4	176.8	177.5	178.8	178.7	178.9	178.3	0.6%
Total	1679.1	1688.1	1640.5	1652.4	1667.2	1670.2	1675.0	1672.6	1678.4	1682.8	1677.3	1664.5	1647.1	1629.7	1621.4	1621.1	1624.1	1628.8	1637.9	1637.9	1644.1	1642.8	1643.8	1641.2	-0.1%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Residual Oil	0.75	0.86	0.85	0.86	0.81	0.78	0.74	0.71	0.71	0.67	0.64	0.63	0.61	0.61	0.60	0.59	0.58	0.58	0.59	0.57	0.57	0.57	0.57	0.56	-1.2%
Other Petroleum 2/	1.23	1.25	1.25	1.27	1.23	1.20	1.17	1.14	1.13	1.09	1.06	1.05	1.02	1.01	1.00	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.95	0.94	-1.2%
Petroleum Subtotal	1.98	2.11	2.10	2.13	2.05	1.98	1.91	1.84	1.83	1.77	1.70	1.68	1.64	1.62	1.60	1.58	1.56	1.56	1.56	1.52	1.52	1.51	1.52	1.51	-1.2%
Natural Gas	6.37	6.23	6.19	6.08	6.02	5.97	5.92	5.89	5.80	5.76	5.72	5.67	5.66	5.63	5.62	5.62	5.63	5.61	5.60	5.64	5.66	5.70	5.74	5.79	-0.4%
Metallurgical Coal	11.25	10.83	10.95	10.55	10.10	9.78	9.43	9.15	8.83	8.53	8.25	8.05	7.89	7.73	7.54	7.37	7.19	7.00	6.80	6.68	6.54	6.44	6.34	6.26	-2.5%
Net Coke Imports	1.22	1.41	1.32	1.54	1.73	1.86	2.00	2.10	2.23	2.34	2.43	2.49	2.53	2.57	2.63	2.71	2.79	2.87	2.96	3.03	3.11	3.18	3.25	3.31	4.4%
Steam Coal	1.13	1.06	1.08	1.05	1.06	1.07	1.07	1.08	1.07	1.08	1.08	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.09	1.09	1.10	1.10	1.11	-0.1%
Coal Subtotal	13.61	13.30	13.35	13.14	12.89	12.71	12.50	12.34	12.13	11.95	11.77	11.61	11.49	11.37	11.24	11.15	11.05	10.94	10.83	10.79	10.74	10.72	10.69	10.68	-1.0%
Purchased Electricity	2.23	2.19	2.20	2.19	2.20	2.20	2.20	2.19	2.20	2.20	2.19	2.18	2.17	2.16	2.16	2.17	2.17	2.17	2.18	2.18	2.19	2.19	2.19	2.19	-0.1%
Total	24.18	23.84	23.85	23.54	23.14	22.86	22.53	22.26	21.96	21.67	21.38	21.15	20.96	20.79	20.62	20.51	20.40	20.28	20.17	20.14	20.11	20.12	20.14	20.17	-0.8%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 31. Aluminum Industry Energy Consumption																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Industry Output (billion 1987 dollars)	28.68	28.20	27.39	27.91	28.39	28.80	28.95	29.11	29.35	29.48	29.57	29.51	29.52	29.43	29.56	29.49	29.39	29.42	29.41	29.24	29.28	29.30	29.07	28.83	0.0%
Energy Consumption (trillion Btu)																									
Distillate Oil	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2.6%
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5%
Natural Gas	74.1	72.6	70.4	70.3	69.9	69.4	68.5	67.6	66.8	65.9	64.9	63.8	62.8	61.8	61.2	60.5	59.8	59.2	58.7	57.9	57.5	57.0	56.2	55.5	-1.3%
Purchased Electricity	188.1	184.6	178.3	183.0	187.5	191.4	192.8	194.3	196.4	197.6	198.2	197.7	197.6	196.8	197.9	197.6	197.3	198.1	198.5	197.7	198.6	199.3	198.0	196.5	0.2%
Total	262.4	257.3	248.8	253.4	257.5	260.9	261.5	262.0	263.3	263.6	263.2	261.6	260.5	258.6	259.1	258.2	257.2	257.4	257.3	255.7	256.2	256.3	254.3	252.1	-0.2%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)																									
Distillate Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.6%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.5%
Natural Gas	2.59	2.57	2.57	2.52	2.46	2.41	2.37	2.32	2.28	2.24	2.19	2.16	2.13	2.10	2.07	2.05	2.03	2.01	1.99	1.98	1.96	1.94	1.93	1.93	-1.3%
Purchased Electricity	6.56	6.55	6.51	6.56	6.61	6.64	6.66	6.67	6.69	6.70	6.70	6.70	6.70	6.69	6.69	6.70	6.71	6.73	6.75	6.76	6.78	6.80	6.81	6.82	0.2%
Total	9.15	9.12	9.09	9.08	9.07	9.06	9.03	9.00	8.97	8.94	8.90	8.86	8.82	8.79	8.77	8.76	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	-0.2%

1/ Fuel consumption includes consumption for cogeneration.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.

Table 32. Other Industrial Sector Energy Consumption (Trillion Btu)																									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1997-2020
Agriculture																									
Distillate Oil	551.3	564.3	569.0	575.0	584.4	588.5	596.4	604.5	614.7	624.2	632.5	640.3	648.2	655.7	660.0	667.0	673.4	681.3	689.8	695.5	699.5	706.4	712.9	719.8	1.2%
Liquid Petroleum Gas	76.1	77.9	78.6	79.4	80.7	81.3	82.3	83.5	84.9	86.2	87.3	88.4	89.5	90.6	91.2	92.1	93.0	94.1	95.3	96.1	96.6	97.6	98.5	99.4	1.2%
Motor Gasoline	90.3	92.5	93.3	94.2	95.8	96.5	97.7	99.1	100.7	102.3	103.7	104.9	106.2	107.5	108.2	109.3	110.4	111.7	113.1	114.0	114.7	115.8	116.9	118.0	1.2%
Other Petroleum	16.1	16.4	16.6	16.8	17.0	17.1	17.4	17.6	17.9	18.2	18.4	18.6	18.9	19.1	19.2	19.4	19.6	19.8	20.1	20.2	20.4	20.6	20.7	20.9	1.2%
Petroleum Subtotal	733.8	751.2	757.4	765.4	777.9	783.4	793.9	804.7	818.2	830.9	841.9	852.3	862.8	872.8	878.6	887.9	896.4	906.9	918.2	925.8	931.1	940.3	949.0	958.2	1.2%
Natural Gas	55.3	56.4	56.8	57.3	58.0	58.4	59.0	59.7	60.5	61.3	62.0	62.6	63.3	63.9	64.2	64.8	65.3	65.9	66.6	67.1	67.4	68.0	68.6	69.1	1.0%
Steam Coal	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4%
Renewables	19.2	19.7	19.9	20.1	20.5	20.6	21.0	21.3	21.7	22.2	22.6	22.9	23.3	23.7	23.9	24.2	24.5	24.9	25.2	25.5	25.7	26.0	26.3	26.6	1.4%
Purchased Electricity	130.1	133.2	134.3	135.7	138.0	139.0	140.8	142.8	145.2	147.5	149.4	151.3	153.2	155.0	156.0	157.7	159.2	161.1	163.1	164.5	165.4	167.0	168.6	170.3	1.2%
Total	938.7	960.7	968.6	978.8	994.6	1001.6	1014.9	1028.7	1045.9	1062.0	1076.1	1089.3	1102.8	1115.5	1123.0	1134.8	1145.6	1159.0	1173.4	1183.0	1189.8	1201.6	1212.7	1224.3	1.2%
Industry Output (billion 1987 dollars)	248.11	253.41	255.54	258.89	262.48	264.16	267.24	270.73	275.11	279.34	283.46	287.30	291.21	294.97	297.56	300.81	303.70	307.21	311.06	313.81	315.97	319.12	322.20	325.36	1.2%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)	3.78	3.79	3.79	3.78	3.79	3.79	3.80	3.80	3.80	3.80	3.80	3.79	3.79	3.78	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.76	3.76	-0.0%
Construction																									
Residual Oil	121.9	124.7	125.9	127.9	129.3	132.3	134.7	137.1	140.0	143.2	146.7	149.6	152.4	155.6	157.9	159.7	161.4	163.6	166.2	168.6	170.6	172.6	175.1	177.3	1.6%
Distillate Oil	185.2	189.4	191.2	194.2	196.4	201.0	204.6	208.2	212.7	217.6	222.8	227.3	231.6	236.4	239.8	242.7	245.2	248.5	252.4	256.2	259.1	262.2	266.1	269.3	1.6%
Liquid Petroleum Gas	32.5	33.2	33.5	34.0	34.4	35.2	35.8	36.5	37.2	38.1	39.0	39.8	40.5	41.4	42.0	42.5	42.9	43.5	44.2	44.8	45.3	45.9	46.5	47.1	1.6%
Motor Gasoline	113.9	116.5	117.6	119.5	120.8	123.6	125.9	128.1	130.8	133.8	137.1	139.8	142.5	145.4	147.5	149.3	150.8	152.9	155.3	157.6	159.4	161.3	163.7	165.7	1.6%
Asphalt and Road Oil	1361.8	1391.5	1403.7	1425.0	1440.3	1472.9	1498.8	1524.5	1556.3	1591.5	1628.9	1660.9	1691.6	1725.9	1751.1	1771.4	1789.8	1813.9	1842.2	1869.5	1890.6	1912.8	1940.9	1964.5	1.6%
Petroleum Subtotal	1815.2	1855.3	1871.9	1900.6	1921.1	1965.1	1999.8	2034.3	2077.0	2124.2	2174.4	2217.5	2258.6	2304.6	2338.4	2365.6	2390.2	2422.3	2460.2	2496.7	2525.1	2554.8	2592.4	2623.9	1.6%
Natural Gas	184.7	189.0	190.8	193.8	195.9	200.5	204.1	207.7	212.1	217.1	222.3	226.8	231.0	235.8	239.3	242.1	244.6	247.9	251.8	255.5	258.5	261.6	265.4	268.7	1.6%
Purchased Electricity	120.2	122.9	124.1	126.1	127.4	130.4	132.8	135.1	138.0	141.2	144.5	147.5	150.2	153.3	155.6	157.4	159.0	161.2	163.7	166.1	168.0	170.0	172.6	174.7	1.6%
Total	2120.1	2167.2	2186.7	2220.5	2244.5	2296.0	2336.7	2377.1	2427.1	2482.5	2541.3	2591.7	2639.8	2693.7	2733.2	2765.1	2793.8	2831.4	2875.7	2918.4	2951.6	2986.3	3030.3	3067.2	1.6%
Industry Output (billion 1987 dollars)	427.95	439.50	444.87	453.34	459.53	471.96	481.92	491.74	503.76	516.98	530.99	543.10	554.66	567.46	576.97	584.75	591.78	600.79	611.28	621.38	629.43	637.79	648.18	656.96	1.9%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)	4.95	4.93	4.92	4.90	4.88	4.86	4.85	4.83	4.82	4.80	4.79	4.77	4.76	4.75	4.74	4.73	4.72	4.71	4.70	4.70	4.69	4.68	4.68	4.67	-0.3%

Table 32. Other Industrial Sector Energy Consumption (Trillion Btu)																								1997-2020	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Mining																									
Residual Oil	24.8	24.7	24.5	24.8	25.2	25.4	25.6	25.7	25.9	26.3	26.4	26.6	26.8	26.9	27.1	27.2	27.4	27.6	27.8	27.9	28.1	28.2	28.4	28.4	0.6%
Distillate Oil	171.1	170.4	169.4	170.8	173.7	175.3	176.4	177.5	179.0	181.1	182.4	183.6	184.7	185.7	187.1	188.0	189.0	190.6	192.0	192.7	193.9	194.8	195.7	196.3	0.6%
Motor Gasoline	14.3	14.3	14.4	14.4	14.6	14.7	14.8	14.8	14.9	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	16.0	16.1	16.2	16.3	16.4	16.4	16.4	0.6%
Other Petroleum	7.9	7.8	7.9	7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.0	9.0	0.6%
Petroleum Subtotal	218.0	217.2	216.1	217.9	221.4	223.3	224.8	226.1	228.0	230.6	232.3	233.9	235.2	236.6	238.4	239.6	241.0	243.1	244.8	245.8	247.3	248.5	249.5	250.1	0.6%
Natural Gas	353.5	351.4	353.2	353.3	357.3	358.8	362.1	363.3	367.0	370.1	373.1	375.4	378.0	381.2	384.3	388.5	391.4	396.2	399.5	401.4	403.5	405.0	404.4	403.5	0.6%
Lease and Plant Fuel	1280.9	1280.9	1297.0	1331.1	1380.5	1424.3	1475.4	1516.0	1546.9	1573.5	1603.7	1630.4	1659.3	1694.3	1721.7	1757.1	1782.7	1824.1	1857.0	1885.0	1913.3	1940.0	1961.3	1979.5	1.9%
Steam Coal	70.6	69.3	67.2	68.0	69.6	70.6	71.1	72.1	73.2	74.4	75.2	75.7	76.1	76.8	77.1	77.4	77.6	78.2	78.7	78.8	79.2	79.6	80.1	80.4	0.6%
Renewables	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.6%
Purchased Electricity	292.3	289.5	286.6	288.5	293.4	295.9	298.1	300.3	303.6	307.3	309.9	311.9	313.9	316.3	318.4	320.4	322.2	325.2	327.6	328.7	330.4	331.9	332.8	333.3	0.6%
Total	2216.4	2209.4	2221.2	2260.0	2323.5	2374.1	2432.7	2479.0	2519.9	2557.1	2595.5	2628.4	2663.7	2706.6	2741.1	2784.2	2816.2	2868.1	2909.0	2941.1	2974.9	3006.3	3029.3	3048.1	1.4%
Industry Output (billion 1987 dollars)	136.11	135.64	135.82	136.49	138.49	139.47	140.82	141.78	143.43	145.28	146.79	148.10	149.40	150.80	152.36	153.86	155.12	156.98	158.45	159.42	160.55	161.51	162.04	162.36	0.8%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)	16.28	16.29	16.35	16.56	16.78	17.02	17.27	17.48	17.57	17.60	17.68	17.75	17.83	17.95	17.99	18.10	18.15	18.27	18.36	18.45	18.53	18.61	18.70	18.77	0.6%
Metal-Based Durables Consumption																									
Residual Oil	32.5	35.7	35.3	38.3	37.6	38.6	38.7	39.1	40.9	41.5	41.9	43.3	44.8	46.1	46.6	47.2	47.5	48.8	50.8	50.1	51.7	52.6	53.5	53.9	2.2%
Distillate Oil	22.8	25.3	25.2	26.3	26.3	26.6	26.7	26.9	27.8	28.3	28.6	29.6	30.3	31.4	31.7	32.1	32.4	33.4	34.5	34.4	35.4	36.1	36.9	37.1	2.1%
Liquid Petroleum Gas	7.6	9.0	9.1	8.8	8.9	8.9	8.9	8.9	9.0	9.1	9.4	9.8	10.0	10.3	10.4	10.5	10.5	10.7	11.1	11.2	11.2	11.4	11.5	11.5	1.8%
Other Petroleum	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	N/A
Petroleum Subtotal	66.3	73.5	73.0	76.9	76.3	77.7	77.8	78.4	81.2	82.4	83.3	86.2	88.6	91.2	92.1	93.3	94.0	96.3	99.8	99.2	101.8	103.6	105.4	106.0	2.1%
Natural Gas	701.0	733.4	723.6	726.0	744.9	760.4	780.1	802.3	830.5	858.2	882.4	906.8	935.8	960.4	971.2	988.4	1004.5	1025.7	1049.4	1058.7	1086.6	1108.8	1126.5	1141.8	2.1%
Steam Coal	111.5	112.8	112.0	111.9	115.6	118.6	122.4	126.4	131.3	136.3	140.9	144.5	148.7	152.9	155.0	157.6	160.2	163.9	167.8	170.3	174.7	178.3	180.8	183.0	2.2%
Renewables	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	2.0%
Purchased Electricity	573.3	595.6	592.1	596.9	614.1	629.6	646.0	664.9	692.3	718.5	741.0	764.0	790.0	813.1	825.4	843.1	859.8	881.1	905.6	915.5	943.8	964.4	982.7	998.1	2.4%
Total	1453.1	1516.2	1501.6	1512.7	1551.8	1587.2	1627.3	1672.9	1736.3	1796.5	1848.6	1902.6	1964.3	2018.8	2044.9	2083.5	2119.7	2168.3	2223.9	2244.9	2308.3	2356.4	2396.8	2430.3	2.3%
Industry Output (billion 1987 dollars)	1382.2	1451.5	1443.2	1461.8	1510.4	1553.6	1604.3	1661.4	1736.3	1808.5	1875.0	1939.7	2014.1	2080.5	2116.6	2163.6	2209.5	2270.8	2339.8	2373.1	2450.8	2515.5	2569.3	2616.1	2.8%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)	1.05	1.04	1.04	1.03	1.03	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	-0.5%

Table 32. Other Industrial Sector Energy Consumption (Trillion Btu)																									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1997-2020
Other Manufacturing Consumption																									
Residual Oil	119.8	136.6	136.1	147.9	145.6	145.1	143.3	141.7	147.3	146.0	144.6	148.8	149.9	153.4	154.2	155.6	156.1	160.8	165.9	162.8	165.8	166.7	169.1	168.8	1.5%
Distillate Oil	69.8	77.3	77.3	81.5	84.3	84.6	84.6	84.3	86.1	86.1	86.1	88.4	89.3	91.3	91.7	92.7	93.3	95.6	97.6	97.4	98.8	99.8	100.9	100.8	1.6%
Liquid Petroleum Gas	103.6	145.3	146.1	145.4	146.7	145.6	144.8	142.9	143.5	144.6	148.0	155.5	158.7	161.9	163.4	165.3	165.7	168.6	174.0	175.2	173.0	174.4	175.2	175.1	2.3%
Petroleum Subtotal	293.1	359.3	359.5	374.8	376.6	375.4	372.8	369.0	376.8	376.7	378.8	392.7	398.0	406.6	409.3	413.6	415.0	425.0	437.5	435.3	437.6	440.9	445.2	444.7	1.8%
Natural Gas	1376.5	1381.3	1365.5	1365.6	1391.5	1415.8	1437.9	1461.4	1489.7	1519.5	1548.0	1566.4	1593.9	1614.7	1628.2	1647.9	1665.3	1684.2	1703.8	1717.2	1730.4	1746.8	1761.6	1776.3	1.1%
Steam Coal	219.6	219.7	219.9	219.6	226.5	232.5	237.8	243.5	250.2	259.0	267.2	272.5	279.2	284.9	289.3	294.5	299.2	305.3	311.4	317.9	322.1	326.8	330.3	334.1	1.8%
Renewables	297.7	308.0	306.4	309.4	316.0	321.7	326.7	331.8	340.1	347.6	355.3	362.4	369.8	376.6	381.0	386.6	391.2	397.9	405.1	409.0	413.1	418.1	422.7	426.5	1.6%
Purchased Electricity	735.8	743.7	742.0	748.0	764.0	777.9	787.6	798.9	819.0	837.4	854.4	869.4	885.6	900.2	910.6	924.7	935.9	951.2	967.9	977.0	987.0	997.4	1007.4	1015.6	1.4%
Total	2922.8	3012.0	2993.4	3017.2	3074.5	3123.3	3162.7	3204.7	3275.8	3340.2	3403.6	3463.3	3526.5	3582.9	3618.5	3667.4	3706.6	3763.6	3825.8	3856.3	3890.3	3930.0	3967.3	3997.3	1.4%
Industry Output (billion 1987 dollars)	853.97	880.90	875.49	883.36	901.06	915.91	928.80	942.44	964.72	984.89	1005.3	1023.9	1043.8	1061.4	1073.0	1087.8	1100.0	1117.9	1137.2	1147.4	1158.2	1171.1	1182.9	1192.6	1.5%
Energy Consumption per Unit of Output (thousand Btu per 1987 dollar of output)	3.42	3.42	3.42	3.42	3.41	3.41	3.41	3.40	3.40	3.39	3.39	3.38	3.38	3.38	3.37	3.37	3.37	3.37	3.36	3.36	3.36	3.36	3.35	3.35	-0.1%

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO99B.D100198A.