

Table 21. Residential Sector Equipment Stock and Efficiency (1 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
Equipment Stock (million units)																						
Main Space Heaters																						
Electric Heat Pumps	10.23	10.58	10.86	11.14	11.44	11.72	11.93	12.14	12.36	12.57	12.77	12.98	13.18	13.37	13.56	13.76	13.96	14.17	14.38	14.59	14.78	1.9%
Electric Other	20.12	20.18	20.20	20.24	20.29	20.33	20.39	20.46	20.53	20.60	20.67	20.73	20.79	20.84	20.89	20.95	21.00	21.07	21.14	21.22	21.29	0.3%
Natural Gas Heat Pumps	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	10.2%
Natural Gas Other	55.78	56.39	57.14	57.85	58.57	59.32	60.12	61.74	62.57	63.42	64.28	65.11	65.91	66.71	67.52	68.34	69.17	70.02	70.87	71.74	72.61	1.3%
Distillate	9.41	9.38	9.35	9.33	9.31	9.29	9.27	9.25	9.23	9.21	9.19	9.17	9.15	9.12	9.10	9.07	9.04	9.02	8.99	8.97	8.94	-0.3%
Liquefied Petroleum Gas	4.85	4.87	4.88	4.89	4.90	4.91	4.92	4.93	4.94	4.95	4.95	4.95	4.94	4.93	4.92	4.91	4.89	4.88	4.86	4.85	4.83	0.0%
Kerosene	0.84	0.83	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.79	0.78	0.77	0.76	0.75	0.74	0.73	0.72	0.71	-1.4%
Wood Stoves	2.18	2.18	2.17	2.17	2.16	2.16	2.15	2.15	2.15	2.14	2.14	2.13	2.13	2.12	2.12	2.12	2.11	2.11	2.11	2.10	2.10	-0.2%
Geothermal Heat Pumps	0.45	0.50	0.53	0.57	0.60	0.64	0.68	0.72	0.77	0.81	0.88	0.95	1.03	1.10	1.17	1.24	1.31	1.39	1.46	1.54	1.62	6.6%
Total	103.98	105.02	106.07	107.12	108.19	109.28	110.37	111.48	112.60	113.74	114.90	116.06	117.18	118.26	119.33	120.41	121.51	122.64	123.79	124.95	126.11	1.0%
Space Cooling (million units)																						
Electric Heat Pumps	10.23	10.58	10.86	11.14	11.44	11.72	11.93	12.14	12.36	12.57	12.77	12.98	13.18	13.37	13.56	13.76	13.96	14.17	14.38	14.59	14.78	1.9%
Natural Gas Heat Pumps	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.11	10.2%
Geothermal Heat Pumps	0.45	0.50	0.53	0.57	0.60	0.64	0.68	0.72	0.77	0.81	0.88	0.95	1.03	1.10	1.17	1.24	1.31	1.39	1.46	1.54	1.62	6.6%
Central Air Conditioners	42.06	42.87	43.76	44.63	45.49	46.39	47.34	48.31	49.28	50.25	51.21	52.18	53.11	54.00	54.89	55.79	56.68	57.59	58.50	59.42	60.34	1.8%
Room Air Conditioners	37.02	36.88	36.95	36.91	36.88	36.85	36.82	36.80	36.78	36.77	36.76	36.76	36.75	36.74	36.73	36.72	36.72	36.72	36.74	36.75	36.78	0.0%
Total	89.78	90.95	92.12	93.28	94.45	95.65	96.83	98.03	99.24	100.46	101.70	102.94	104.14	105.29	106.44	107.60	108.77	109.97	111.18	112.40	113.62	1.2%
Water Heaters (million units)																						
Electric	40.37	40.66	40.82	41.02	41.24	41.45	41.61	41.77	41.95	42.12	42.29	42.47	42.65	42.82	43.00	43.20	43.40	43.63	43.87	44.11	44.33	0.5%
Natural Gas	65.37	66.12	67.02	67.88	68.73	69.52	70.55	71.50	72.45	73.42	74.42	75.43	76.43	77.31	78.23	79.15	80.06	81.00	81.93	82.87	83.84	1.6%
Distillate	5.07	5.04	5.00	4.97	4.95	4.92	4.89	4.86	4.84	4.80	4.77	4.74	4.71	4.68	4.65	4.62	4.59	4.56	4.53	4.47	4.40	-0.4%
Liquefied Petroleum Gas	3.48	3.50	3.52	3.53	3.54	3.55	3.56	3.57	3.59	3.60	3.60	3.60	3.60	3.60	3.59	3.59	3.59	3.58	3.58	3.57	3.57	0.1%
Solar Thermal	0.34	0.35	0.35	0.36	0.37	0.37	0.38	0.39	0.40	0.41	0.41	0.41	0.42	0.42	0.43	0.44	0.45	0.45	0.46	0.46	0.46	1.9%
Total	104.63	105.98	106.71	107.75	108.82	109.91	110.99	112.09	113.21	114.34	115.49	116.66	117.77	118.84	119.91	120.99	122.08	123.21	124.35	125.51	126.67	1.0%
Cooking Equipment (million units) 1/																						
Electric	64.57	65.29	65.95	66.61	67.28	67.94	68.57	69.22	69.89	70.56	71.24	71.93	72.57	73.18	73.79	74.42	75.07	75.78	76.53	77.30	78.08	1.0%
Natural Gas	34.99	35.30	35.69	36.08	36.49	36.92	37.38	37.84	38.30	38.76	39.24	39.74	40.23	40.71	41.20	41.68	42.13	42.57	43.09	43.79	44.51	1.1%
Liquefied Petroleum Gas	4.38	4.38	4.38	4.38	4.37	4.37	4.36	4.36	4.36	4.36	4.35	4.34	4.32	4.30	4.27	4.25	4.23	4.21	4.20	4.19	4.18	-0.2%
Total	103.93	104.97	106.02	107.07	108.13	109.23	110.31	111.42	112.55	113.68	114.83	116.00	117.12	118.19	119.26	120.36	121.44	122.57	123.72	124.88	126.05	1.0%
Clothes Dryers (million units)																						
Electric	59.34	60.39	61.43	62.48	63.54	64.61	65.68	66.75	67.83	68.90	69.98	71.06	72.09	73.08	74.07	75.05	76.03	77.03	78.04	79.04	80.04	1.5%
Natural Gas	16.70	17.12	17.55	17.98	18.41	18.85	19.29	19.73	20.17	20.61	21.05	21.49	21.93	22.37	22.80	23.24	23.68	24.12	24.56	25.00	25.43	2.1%
Total	76.04	77.51	78.98	80.47	81.96	83.47	84.97	86.48	87.99	89.51	91.03	92.55	94.02	95.45	96.87	98.29	99.71	101.15	102.60	104.04	105.47	1.6%
Other Appliances (million units)																						
Refrigerators	118.90	119.98	121.08	122.18	123.30	124.44	125.58	126.74	127.92	129.10	130.31	131.54	132.71	133.84	134.96	136.10	137.25	138.44	139.65	140.87	142.09	0.9%
Freezers	33.68	33.63	33.59	33.55	33.52	33.51	33.52	33.55	33.58	33.61	33.68	33.78	33.89	34.01	34.14	34.31	34.49	34.71	34.95	35.20	35.48	0.3%
Stock Average Equipment Efficiency																						
Main Space Heaters																						
Electric Heat Pumps (HSPF)	7.10	7.15	7.19	7.22	7.23	7.23	7.29	7.33	7.38	7.43	7.48	7.53	7.58	7.64	7.70	7.75	7.80	7.84	7.87	7.89	7.92	0.5%
Natural Gas Heat Pumps (CCOP)	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.41	0.0%
Geothermal Heat Pumps (COP)	3.42	3.43	3.43	3.44	3.44	3.44	3.44	3.44	3.44	3.45	3.45	3.45	3.45	3.46	3.46	3.46	3.47	3.47	3.47	3.47	3.52	0.1%
Natural Gas Furnace (AFUE)	0.76	0.77	0.77	0.78	0.78	0.79	0.79	0.80	0.80	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.4%
Distillate Furnace (AFUE)	0.79	0.79	0.80	0.80	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	0.82	0.2%
Space Cooling																						
Electric Heat Pumps (SEER)	10.55	10.66	10.75	10.82	10.87	10.90	11.07	11.22	11.38	11.51	11.66	11.82	11.97	12.13	12.29	12.43	12.55	12.65	12.73	12.79	12.88	1.0%
Natural Gas Heat Pumps (GCOP)	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.41	0.0%
Geothermal Heat Pumps (EER)	13.72	13.77	13.81	13.85	13.88	13.88	13.88	13.87	13.87	13.86	13.86	13.90	13.91	13.92	13.94	13.95	13.96	13.98	14.00	14.02	14.27	0.2%
Central Air Conditioners (SEER)	10.32	10.43	10.51	10.58	10.64	10.69	10.88	11.05	11.21	11.36	11.52	11.67	11.82	11.97	12.11	12.24	12.35	12.44	12.51	12.57	12.63	1.0%
Room Air Conditioners (EER)	8.71	8.82	8.93	9.04	9.14	9.23	9.30	9.38	9.44	9.49	9.54	9.59	9.63	9.68	9.72	9.75	9.77	9.78	9.79	9.80	9.82	0.6%
Water Heaters																						
Electric (EF)	0.87	0.87	0.87	0.87	0.88	0.88	0.88	0.88	0.89	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.2%
Natural Gas (EF)	0.54	0.54	0.55	0.55	0.55	0.55	0.56	0.56	0.56	0.57	0.57	0.57	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.59	0.4%
Distillate (EF)	0.53	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.4%
Liquefied Petroleum Gas (EF)	0.54	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	0.59	0.59	0.59	0.59	0.59	0.59	0.4%
Other Appliances (kilowatt-hours/year) 2/																						
Refrigerators	881.60	858.44	823.78	791.38	761.46	733.89	708.50	684.73	662.36	641.13	621.81	604.43	588.86	575.14	563.02	552.50	543.41	535.69	529.07	523.67	518.71	-2.6%
Freezers	631.13	609.73	586.63	565.06	545.10	527.80	513.78	502.17	492.06	483.40	475.72	469.20	463.66	458.66	454.42	450.89	448.01	445.72	443.92	442.50	441.44	-1.8%

Table 21. Residential Sector Equipment Stock and Efficiency (2 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Building Shell Efficiency Index																						
Space Heating																						
Pre-1998 Homes	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.91	0.91	-0.2%
New Construction	0.86	0.85	0.85	0.85	0.85	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.0%
All Homes	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.89	-0.3%
Space Cooling																						
Pre-1998 Homes	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.94	-0.1%
New Construction	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.0%
All Homes	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.93	-0.1%

1) Does not include microwave ovens or outdoor grills.

2) Kilowatt-hours per year to run the appliance under certain test conditions as specified by the Department of Energy.

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.

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

AUE = 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.

Btu = British thermal unit.

N/A = Not applicable.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency (1 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
Commercial Building Delivered																						
Energy Consumption (quadrillion Btu)¹																						
Assembly	0.53	0.52	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.58	0.59	0.60	0.60	0.61	0.62	0.62	0.63	0.64	0.65	0.65	0.66	1.1%
Education	0.72	0.71	0.74	0.76	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.91	0.92	0.93	1.3%
Food Sales	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	1.4%
Food Service	0.38	0.39	0.40	0.41	0.42	0.42	0.43	0.43	0.44	0.45	0.45	0.46	0.47	0.47	0.48	0.48	0.49	0.49	0.50	0.51	0.51	1.4%
Health Care	0.56	0.56	0.58	0.61	0.63	0.65	0.66	0.68	0.70	0.72	0.74	0.77	0.79	0.81	0.83	0.85	0.87	0.90	0.92	0.94	0.97	2.8%
Lodging	0.54	0.54	0.55	0.57	0.59	0.60	0.61	0.62	0.64	0.65	0.67	0.68	0.70	0.72	0.73	0.75	0.77	0.78	0.80	0.82	0.83	2.2%
Office - Large	0.71	0.72	0.74	0.76	0.79	0.81	0.83	0.85	0.86	0.88	0.90	0.91	0.93	0.95	0.97	0.99	1.00	1.02	1.04	1.05	1.07	2.1%
Office - Small	0.56	0.57	0.58	0.61	0.63	0.64	0.66	0.67	0.69	0.70	0.71	0.73	0.74	0.75	0.77	0.78	0.79	0.80	0.81	0.82	0.83	2.0%
Mercantile/Service	1.15	1.16	1.19	1.22	1.25	1.26	1.28	1.30	1.31	1.33	1.35	1.36	1.37	1.39	1.40	1.41	1.42	1.44	1.45	1.46	1.47	1.2%
Warehouse	0.39	0.40	0.42	0.44	0.46	0.47	0.49	0.50	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.66	0.68	0.69	2.9%
Other	0.49	0.51	0.53	0.56	0.58	0.60	0.63	0.65	0.68	0.70	0.72	0.75	0.77	0.80	0.83	0.86	0.89	0.91	0.94	0.97	1.00	3.6%
Total	6.17	6.23	6.42	6.65	6.83	6.97	7.11	7.26	7.40	7.55	7.69	7.84	7.99	8.14	8.29	8.44	8.59	8.73	8.88	9.02	9.17	2.0%
Commercial Building Floorspace																						
(Billion square feet)																						
Assembly	7.09	7.17	7.23	7.30	7.37	7.44	7.52	7.59	7.66	7.74	7.82	7.90	7.98	8.06	8.14	8.22	8.30	8.38	8.47	8.55	8.63	1.0%
Education	8.54	8.74	8.95	9.15	9.35	9.55	9.74	9.92	10.09	10.26	10.42	10.58	10.73	10.87	11.01	11.15	11.27	11.39	11.49	11.58	11.65	1.6%
Food Sales	0.71	0.73	0.75	0.76	0.78	0.79	0.80	0.81	0.82	0.84	0.85	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.94	0.94	1.4%
Food Service	1.48	1.51	1.54	1.56	1.58	1.60	1.61	1.62	1.64	1.65	1.67	1.68	1.70	1.71	1.72	1.73	1.75	1.76	1.77	1.78	1.80	1.0%
Health Care	1.88	1.91	1.96	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.46	2.51	2.57	2.62	2.68	2.74	2.80	2.86	2.92	2.3%
Lodging	4.06	4.15	4.25	4.34	4.43	4.52	4.61	4.69	4.77	4.86	4.95	5.05	5.15	5.26	5.36	5.47	5.57	5.67	5.78	5.88	5.98	2.0%
Office - Large	6.05	6.14	6.24	6.34	6.43	6.52	6.60	6.67	6.74	6.81	6.88	6.96	7.04	7.11	7.19	7.27	7.35	7.43	7.51	7.58	7.66	1.2%
Office - Small	5.74	5.83	5.93	6.03	6.13	6.22	6.30	6.38	6.45	6.52	6.60	6.68	6.76	6.85	6.93	7.02	7.10	7.19	7.27	7.36	7.44	1.3%
Mercantile/Service	13.93	14.21	14.45	14.67	14.89	15.09	15.28	15.46	15.64	15.83	16.01	16.20	16.37	16.53	16.69	16.84	16.99	17.15	17.30	17.46	17.60	1.2%
Warehouse	9.49	9.95	10.34	10.68	10.94	11.18	11.40	11.61	11.80	11.99	12.23	12.51	12.80	13.10	13.39	13.64	13.90	14.17	14.43	14.68	14.93	2.3%
Other	5.55	5.78	6.00	6.20	6.44	6.67	6.90	7.12	7.34	7.55	7.77	7.99	8.21	8.44	8.67	8.90	9.13	9.36	9.58	9.80	10.02	3.0%
Total	64.50	66.10	67.62	69.02	70.38	71.67	72.90	74.07	75.20	76.34	77.55	78.73	80.06	81.32	82.55	83.75	84.95	86.14	87.31	88.45	89.56	1.7%
Stock Average Equipment Efficiency 2/																						
Space Heating																						
Electricity	1.09	1.10	1.10	1.11	1.11	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	0.1%
Natural Gas	0.72	0.73	0.73	0.73	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.4%
Distillate	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.3%
Space Cooling																						
Electricity	2.76	2.79	2.82	2.85	2.87	2.90	2.92	2.95	2.97	3.00	3.02	3.04	3.06	3.08	3.10	3.12	3.13	3.15	3.16	3.18	3.20	0.7%
Natural Gas	0.91	0.93	0.94	0.95	0.96	0.97	0.99	1.00	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.05	1.05	1.06	1.07	1.07	0.8%

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency (2 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Water Heating																						
Electricity	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.1%
Natural Gas	0.79	0.79	0.80	0.80	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.84	0.84	0.4%
Distillate	0.75	0.75	0.75	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%
Ventilation (cfm per Btu) 3/																						
Electricity	0.40	0.40	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.7%
Cooking																						
Electricity	0.71	0.71	0.72	0.72	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.75	0.75	0.75	0.75	0.75	0.3%
Natural Gas	0.51	0.52	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.1%
Lighting Efficacy 4/ (efficacy in lumens per watt)																						
Electricity	49.90	49.57	50.05	50.40	50.69	51.03	51.40	51.73	52.04	52.31	52.57	52.82	53.07	53.30	53.54	53.94	54.33	54.74	55.18	55.60	55.99	0.7%
Refrigeration																						
Electricity	1.31	1.32	1.32	1.32	1.33	1.33	1.33	1.33	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	0.1%

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 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 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.

Btu = British thermal unit.

Cfm = Cubic feet per minute.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 23. Industrial Sector Macroeconomic Indicators (1 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
GDP (billion 1996 dollars)	9224.0	9319.0	9523.3	9626.2	10103.3	10416.5	10718.9	11046.4	11441.6	11866.9	12311.8	12777.0	13166.4	13559.9	13972.7	14399.2	14835.3	15287.3	15717.2	16138.0	16525.5	3.0%
Non-Agricultural Employment (million)	130.1	130.5	130.7	132.7	134.8	136.9	138.8	140.5	142.0	143.5	145.2	146.8	147.6	148.4	149.3	150.2	151.3	152.4	153.2	153.9	154.5	0.9%
Value of Gross Output (billion 1992 dollars)																						
Nonmanufacturing Sector																						
Agriculture	303.3	298.3	289.8	300.9	308.8	316.0	312.0	309.4	315.3	322.2	329.1	335.7	341.4	346.8	351.5	356.5	362.0	367.6	374.1	380.7	385.6	1.2%
Mining	165.6	168.6	169.9	172.5	173.3	174.2	176.8	179.3	181.4	183.3	185.6	188.6	190.8	194.2	197.4	200.6	204.0	206.6	208.8	210.1	212.3	1.3%
Construction	570.4	585.8	589.4	607.2	621.6	636.7	644.6	655.1	667.4	681.1	696.3	704.3	712.1	728.6	747.1	767.5	777.6	788.8	809.1	828.5	846.5	2.0%
Manufacturing Sector																						
Food and Kindred Products	479.5	481.4	488.9	497.5	505.8	514.5	506.5	513.6	522.3	531.7	541.5	551.3	560.4	568.7	577.0	585.3	594.0	603.0	610.8	618.6	624.8	1.3%
Tobacco Products	38.5	38.3	37.6	37.9	37.7	35.9	36.1	36.4	36.6	37.1	37.5	38.4	39.1	39.7	39.9	39.5	39.8	39.4	39.3	38.5	38.2	0.0%
Textile Mill Products	86.7	85.5	85.4	85.1	86.5	87.3	87.8	88.5	88.9	89.2	91.7	93.5	94.9	96.3	97.2	97.6	97.5	97.4	98.5	99.3	99.9	0.7%
Apparel and Other Textile Products	73.9	73.4	75.7	77.6	78.2	79.0	78.8	78.5	75.4	77.4	81.1	82.3	83.9	85.1	85.2	83.8	80.4	81.1	80.9	80.5	78.6	0.3%
Lumber and Wood Products	103.0	103.0	105.2	106.6	109.3	112.0	114.4	117.0	118.9	120.6	122.9	125.1	125.5	126.6	128.2	130.6	132.5	134.4	136.7	138.6	140.2	1.6%
Furniture and Fixtures	51.8	50.9	52.4	55.0	56.2	57.2	58.3	59.8	61.5	63.0	65.2	66.7	68.7	69.7	69.9	70.8	71.6	72.3	72.4	72.1	71.3	1.6%
Paper and Allied Products	154.5	155.1	159.5	164.0	167.6	172.2	176.4	180.6	179.3	181.4	183.6	188.3	192.0	195.1	198.0	200.8	204.1	207.1	209.8	212.2	214.3	1.6%
Printing and Publishing	187.2	188.8	193.2	194.8	196.6	203.3	207.3	209.1	211.5	213.5	216.3	218.6	220.9	221.7	223.1	224.2	224.7	224.6	224.1	224.7	222.9	0.9%
Chemical and Allied Products	359.2	353.9	368.4	375.4	381.5	392.8	404.4	417.8	428.9	442.1	459.3	478.1	488.7	496.4	505.4	516.7	531.7	545.1	555.4	574.2	588.7	2.5%
Bulk Chemicals	178.7	174.0	178.3	183.1	185.7	188.1	190.0	192.7	194.7	198.2	200.6	205.9	209.1	211.5	213.5	215.0	216.7	217.7	219.5	221.1	223.2	1.1%
Other Chemical and Allied Products	177.6	179.9	190.0	192.2	195.8	204.8	214.4	225.2	234.1	243.9	258.7	270.1	277.6	284.8	291.9	301.7	315.0	327.4	339.9	353.1	363.5	3.6%
Petroleum and Coal Products	171.9	170.9	175.6	174.3	178.1	181.7	183.7	187.0	188.9	191.1	193.4	195.3	196.6	198.1	199.7	200.9	201.5	202.1	203.1	204.1	205.0	0.9%
Petroleum Refining	152.6	151.5	155.9	154.3	157.6	160.8	162.6	165.9	167.5	169.5	171.5	173.2	174.4	175.7	177.0	178.4	179.9	180.4	180.4	181.1	181.1	0.9%
Other Petroleum and Coal Products	19.3	19.4	19.6	20.0	20.5	20.9	21.0	21.2	21.4	21.7	21.9	22.1	22.1	22.4	22.7	23.0	23.1	23.2	23.7	23.9	23.9	1.1%
Rubber and Miscellaneous Plastic Products	161.5	160.4	167.7	176.4	182.9	190.4	197.4	204.8	212.4	220.2	229.3	238.3	246.0	253.9	261.7	269.6	277.2	285.3	293.6	301.3	308.4	3.3%
Leather and Leather Products	8.4	7.1	7.4	6.8	4.8	5.2	4.7	4.9	5.1	4.4	4.4	4.7	4.2	4.3	4.4	4.4	4.3	4.1	3.8	3.4	3.3	-4.5%
Stone, Clay, and Glass Products	81.2	82.1	83.8	84.2	85.7	86.3	88.0	89.2	90.5	92.0	91.2	92.9	93.5	94.3	94.9	95.9	97.1	98.5	99.7	100.8	101.7	1.1%
Glass and Glass Products	22.9	22.6	23.0	23.8	24.3	24.2	24.9	25.5	25.7	26.3	26.4	26.9	27.2	27.6	27.7	27.7	27.9	28.5	28.8	29.1	29.3	1.2%
Cement, Hydraulic	5.6	6.2	6.3	6.2	6.3	6.3	6.4	6.5	6.6	6.7	6.5	6.6	6.6	6.6	6.7	6.8	6.9	6.9	7.0	7.1	7.1	1.2%
Other Stone, Clay, & Glass Products	52.7	53.4	54.5	54.2	55.1	55.8	56.6	57.4	58.2	58.1	58.2	59.4	59.7	60.1	60.5	61.4	62.4	63.1	63.9	64.6	65.2	1.1%

Table 23. Industrial Sector Macroeconomic Indicators (2 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Primary Metals Industry	182.2	174.6	180.3	186.8	189.6	192.6	196.7	200.0	202.9	205.9	210.1	214.2	216.2	218.2	220.0	221.4	222.9	224.7	226.6	227.9	228.5	1.1%
Blast Furnace & Basic Steel Products	70.4	68.0	69.8	72.2	72.8	73.8	74.7	75.6	76.4	77.2	78.7	79.7	80.3	80.8	81.5	82.2	82.7	83.4	84.0	84.4	84.6	0.9%
Aluminum	36.1	33.7	35.0	36.3	37.1	38.0	39.3	40.2	41.0	41.6	42.4	43.4	43.9	44.2	44.4	44.6	44.9	45.1	45.6	45.8	45.9	1.2%
Other Primary Metal Products	75.7	72.9	75.5	78.3	79.6	80.8	82.6	84.2	85.5	87.0	89.0	91.1	92.1	93.2	94.1	94.6	95.3	96.2	97.1	97.7	98.0	1.3%
Fabricated Metal Products	221.8	222.5	229.0	238.2	243.4	248.9	253.7	258.6	263.0	266.8	273.4	278.9	283.1	286.9	290.9	295.4	298.8	302.5	306.8	310.8	313.9	1.6%
Industrial Machinery and Equipment	392.5	383.6	405.4	440.1	469.1	488.9	511.0	534.2	558.7	584.8	615.8	643.6	664.7	689.5	707.6	721.2	732.8	746.2	761.7	777.4	786.5	3.5%
Electronic & Other Electric Equipment	557.5	489.1	524.8	577.1	630.5	681.9	736.9	794.6	857.1	923.2	1000.2	1080.7	1155.5	1232.1	1307.3	1384.0	1464.1	1550.0	1640.0	1728.0	1807.1	6.1%
Transportation Equipment	501.0	484.9	485.4	527.4	545.2	573.7	598.6	616.8	631.8	640.9	655.1	665.9	676.3	684.9	693.9	703.6	709.6	720.4	734.6	746.9	753.4	2.1%
Instruments & Related Products	157.5	165.4	169.1	176.5	182.4	188.3	195.3	202.3	210.5	218.1	228.2	237.5	247.4	256.7	265.7	276.9	286.1	296.9	307.7	314.4	322.8	3.7%
Miscellaneous Manufacturing Industries	55.7	45.8	49.0	62.7	55.4	57.8	60.5	63.5	65.9	69.0	73.1	77.3	80.5	83.5	86.1	88.3	89.9	92.1	93.1	92.5	95.5	2.7%
Total Industrial Gross Output	5061.6	4969.4	5102.7	5315.2	5489.9	5676.8	5829.7	6001.5	6173.9	6360.9	6584.5	6798.2	6978.5	7170.0	7352.1	7535.0	7705.6	7892.2	8095.1	8285.1	8447.4	2.6%

GDP = Gross domestic product.

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

Sources: 2000: DRI-WEFA, Simulation CTL0901. Projections: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 24. Refining Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	152.56	151.51	155.94	154.29	157.57	160.78	162.61	165.86	167.49	169.49	171.47	173.19	174.42	175.70	177.04	177.89	178.40	178.88	179.62	180.38	181.10	0.9%
Energy Consumption (trillion Btu)																						
Residual Oil	35.2	35.4	36.1	10.3	10.6	10.5	10.7	10.4	10.8	10.8	11.0	2.5	0.2	30.6	31.0	30.9	30.9	31.0	31.4	33.3	43.8	1.1%
Distillate Oil	4.2	4.2	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	N/A
Liquefied Petroleum Gas	16.3	16.4	16.7	45.4	48.8	51.2	41.8	63.9	63.6	63.7	74.5	83.1	78.3	87.3	108.8	97.7	92.2	84.1	98.6	136.3	147.4	11.6%
Petroleum Coke	579.0	582.1	593.9	702.8	695.3	708.8	745.0	808.2	816.9	837.3	834.1	851.2	841.8	843.0	836.8	838.7	843.3	847.7	850.8	854.7	858.9	2.0%
Still Gas	1431.2	1438.9	1448.2	1522.8	1558.2	1604.2	1654.2	1699.1	1731.3	1750.0	1837.3	1900.2	1897.6	1906.5	1921.2	1925.5	1931.2	1933.0	1934.5	1946.0	1951.1	1.6%
Other Petroleum 2/	39.5	39.7	40.5	7.4	7.5	8.1	6.3	0.0	1.1	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	2105.3	2118.6	2159.8	2288.7	2320.3	2377.8	2458.1	2581.6	2623.7	2661.8	2756.8	2837.0	2817.9	2867.3	2897.9	2892.8	2897.6	2895.8	2915.3	2970.3	3001.2	1.8%
Natural Gas	853.2	857.8	875.3	974.9	959.8	957.8	1021.8	1007.6	987.4	997.4	976.6	982.1	984.8	937.6	906.6	936.0	948.7	964.6	948.4	888.8	868.7	0.1%
Steam Coal	0.8	0.8	0.8	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	112.0	112.6	114.9	134.4	142.2	149.5	159.7	178.5	172.8	175.5	188.3	195.9	197.1	195.8	198.1	198.7	199.7	199.4	199.7	200.4	199.7	2.9%
Total	3071.4	3067.9	3150.9	3398.0	3422.4	3485.1	3639.6	3765.7	3783.8	3834.7	3921.6	3995.1	3999.8	4000.7	4002.5	4027.6	4046.1	4059.8	4063.4	4059.5	4069.6	1.4%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
Residual Oil	0.23	0.23	0.23	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.00	0.17	0.18	0.17	0.17	0.17	0.17	0.18	0.24	0.2%
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	N/A
Liquefied Petroleum Gas	0.11	0.11	0.11	0.29	0.31	0.32	0.26	0.39	0.38	0.38	0.43	0.48	0.45	0.50	0.61	0.55	0.52	0.47	0.55	0.76	0.81	10.7%
Petroleum Coke	3.79	3.84	3.81	4.56	4.41	4.41	4.58	4.87	4.88	4.94	4.86	4.91	4.83	4.80	4.73	4.71	4.73	4.74	4.74	4.74	4.74	1.1%
Still Gas	9.38	9.50	9.42	9.87	9.89	9.98	10.17	10.24	10.34	10.33	10.72	10.97	10.88	10.85	10.82	10.83	10.81	10.77	10.79	10.77	10.79	0.2%
Other Petroleum 2/	0.26	0.26	0.26	0.05	0.05	0.02	0.04	0.00	0.01	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	13.80	13.97	13.85	14.83	14.73	14.79	15.12	15.57	15.66	15.70	16.08	16.38	16.16	16.32	16.37	16.26	16.24	16.19	16.23	16.47	16.57	0.9%
Natural Gas	5.59	5.66	5.61	6.32	6.09	5.96	6.28	6.08	5.90	5.88	5.70	5.56	5.65	5.34	5.12	5.26	5.32	5.39	5.28	4.93	4.80	-0.8%
Steam Coal	0.01	0.01	0.01	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	0.73	0.74	0.74	0.87	0.90	0.93	0.98	1.06	1.03	1.04	1.10	1.13	1.13	1.11	1.12	1.12	1.12	1.11	1.11	1.11	1.10	2.1%
Total	20.13	20.38	20.21	22.02	21.72	21.68	22.38	22.70	22.59	22.62	22.87	23.07	22.93	22.77	22.61	22.64	22.66	22.70	22.62	22.51	22.47	0.6%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	52.8	53.1	54.1	58.1	58.8	60.1	62.9	65.4	65.6	66.4	68.3	69.7	69.8	70.0	70.1	70.5	70.8	70.9	71.0	71.1	71.3	1.5%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes lubricants and miscellaneous petroleum products.

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2020 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-d102001b.

Table 25. Food Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	479.47	481.43	488.88	497.55	505.81	514.53	506.50	513.62	522.25	531.67	541.52	551.27	560.40	568.72	577.04	585.29	594.05	602.96	610.84	618.56	624.77	1.3%
Energy Consumption (trillion Btu)																						
Residual Oil	5.7	5.6	5.5	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.9	0.2%
Distillate Oil	5.9	6.2	5.5	5.7	5.9	6.0	5.9	5.9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.5	0.6%
Liquefied Petroleum Gas	4.3	4.8	4.2	4.3	4.3	4.4	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.9	4.9	4.9	0.8%
Other Petroleum 2/	16.1	16.0	14.6	15.1	15.5	15.8	15.6	15.7	15.9	16.1	16.3	16.5	16.7	16.8	17.0	17.1	17.3	17.5	17.6	17.7	17.9	0.5%
Petroleum Subtotal	31.9	32.6	29.9	30.7	31.4	31.8	31.4	31.6	32.3	32.5	32.9	33.2	33.5	33.7	33.9	34.2	34.6	34.9	35.1	35.1	35.4	0.5%
Natural Gas	554.0	548.5	578.4	592.8	594.2	589.5	579.6	583.0	588.0	594.1	600.6	608.9	612.3	617.1	622.1	628.8	632.3	637.8	642.4	646.8	649.6	0.8%
Steam Coal	148.0	151.1	134.1	140.1	144.0	148.5	144.5	146.1	148.5	150.7	153.0	155.4	157.9	160.0	161.9	164.0	166.0	168.3	170.4	172.5	174.3	0.8%
Renewables	141.3	142.3	145.2	148.4	151.5	155.0	153.4	156.4	159.9	163.7	167.7	171.7	175.5	179.1	182.8	186.4	190.2	194.1	197.6	201.0	204.0	1.9%
Purchased Electricity	223.0	223.3	221.1	222.7	224.1	225.8	220.6	221.5	223.8	226.1	228.5	230.9	233.2	235.2	237.2	239.4	241.7	244.1	246.1	248.0	249.2	0.6%
Total	1098.3	1097.8	1108.7	1122.7	1135.2	1148.6	1128.5	1139.1	1152.2	1166.9	1182.3	1197.8	1212.1	1224.9	1237.7	1250.5	1264.5	1278.9	1291.4	1303.4	1312.5	0.9%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
Residual Oil	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	-1.1%
Distillate Oil	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	-0.7%
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	-0.6%
Other Petroleum 2/	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	-0.8%
Petroleum Subtotal	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-0.8%
Natural Gas	1.16	1.14	1.18	1.17	1.16	1.15	1.14	1.14	1.13	1.12	1.11	1.10	1.09	1.08	1.07	1.06	1.06	1.06	1.05	1.04	1.04	-0.5%
Steam Coal	0.31	0.31	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	-0.5%
Renewables	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.5%
Purchased Electricity	0.47	0.46	0.45	0.45	0.44	0.44	0.44	0.43	0.43	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.40	0.40	0.40	0.40	-0.8%
Total	2.29	2.28	2.27	2.26	2.24	2.23	2.23	2.22	2.21	2.19	2.18	2.17	2.16	2.15	2.14	2.14	2.13	2.12	2.11	2.11	2.10	-0.4%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	23.5	23.6	23.2	23.5	23.7	23.9	23.5	23.7	23.8	24.0	24.2	24.5	24.7	24.9	25.0	25.2	25.5	25.7	25.9	26.1	26.2	0.9%

1/ Fuel consumption includes consumption for cogeneration.

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

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run_aeo2002_e102001b.

Table 26. Paper Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	154.48	155.10	159.47	164.00	167.57	172.17	176.44	180.59	179.26	181.35	183.59	188.28	191.96	195.10	198.02	200.85	204.11	207.09	209.81	212.20	214.26	1.6%
Energy Consumption (trillion Btu)																						
Residual Oil	172.1	164.3	152.2	154.6	155.8	156.8	157.3	157.7	156.5	156.1	155.9	156.6	157.1	157.3	155.4	152.7	150.3	147.8	145.1	142.4	139.6	-1.0%
Distillate Oil	11.9	11.8	10.8	11.1	11.2	11.2	11.2	11.2	11.0	10.9	10.8	10.8	10.7	10.4	8.7	8.7	8.6	8.6	8.6	8.6	8.5	-1.6%
Liquefied Petroleum Gas	4.9	5.4	4.9	5.0	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.3	5.3	5.4	5.4	5.5	5.5	5.5	5.6	5.6	0.7%
Petroleum Subtotal	188.8	181.6	167.9	170.7	172.0	173.2	173.7	174.2	172.7	172.2	171.8	172.7	173.2	173.3	171.1	166.8	164.4	161.9	159.3	156.5	153.7	-1.0%
Natural Gas	614.1	597.3	630.3	625.1	617.1	614.1	611.6	609.0	594.1	586.9	580.2	578.5	574.5	573.2	578.9	592.2	599.4	605.2	612.6	618.7	618.7	0.0%
Steam Coal	337.3	333.2	300.3	308.3	309.3	309.5	308.2	306.6	300.1	296.8	293.6	293.0	291.7	286.7	276.5	276.0	276.8	277.8	278.5	279.1	279.5	-0.9%
Renewables	1403.4	1410.8	1448.9	1488.6	1521.0	1562.4	1600.8	1638.6	1630.6	1651.4	1673.5	1717.4	1752.1	1782.6	1811.7	1840.2	1872.1	1901.9	1929.5	1954.3	1977.6	1.7%
Purchased Electricity	263.4	262.0	269.1	269.3	269.7	269.7	271.0	272.4	267.0	266.7	266.7	270.3	272.9	275.1	277.4	280.0	283.3	286.4	289.1	291.6	294.1	0.6%
Total	2807.0	2784.9	2816.6	2862.0	2886.2	2929.0	2965.3	3000.8	2964.5	2973.9	2985.9	3031.9	3064.4	3090.8	3115.6	3148.2	3189.1	3227.1	3262.5	3294.2	3323.7	0.8%
Energy Consumption per Unit of Output																						
(thousand Btu per 1992 dollar)																						
Residual Oil	1.11	1.06	0.95	0.94	0.93	0.91	0.89	0.87	0.87	0.86	0.85	0.83	0.82	0.81	0.78	0.76	0.74	0.71	0.69	0.67	0.65	-2.6%
Distillate Oil	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	-3.2%
Liquefied Petroleum Gas	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	-0.9%
Petroleum Subtotal	1.22	1.17	1.05	1.04	1.03	1.01	0.98	0.96	0.95	0.94	0.92	0.90	0.89	0.86	0.83	0.81	0.79	0.76	0.74	0.72	0.70	-2.6%
Natural Gas	3.98	3.85	3.95	3.81	3.68	3.67	3.47	3.37	3.31	3.24	3.16	3.07	2.99	2.94	2.92	2.91	2.90	2.89	2.89	2.89	2.89	-1.6%
Steam Coal	2.18	2.15	1.88	1.88	1.85	1.89	1.75	1.70	1.67	1.64	1.60	1.56	1.52	1.47	1.40	1.37	1.36	1.34	1.33	1.32	1.30	-2.5%
Renewables	9.08	9.10	9.09	9.08	9.08	9.08	9.07	9.07	9.10	9.11	9.12	9.12	9.13	9.14	9.15	9.16	9.17	9.18	9.20	9.21	9.23	0.1%
Purchased Electricity	1.70	1.69	1.69	1.64	1.60	1.57	1.54	1.51	1.49	1.47	1.45	1.44	1.42	1.41	1.40	1.39	1.39	1.38	1.38	1.37	1.37	-1.1%
Total	18.17	17.95	17.66	17.45	17.24	17.01	16.81	16.62	16.54	16.40	16.26	16.10	15.96	15.84	15.73	15.67	15.62	15.58	15.55	15.52	15.51	-0.8%
Carbon Dioxide Emissions 2)																						
(million metric tons carbon equivalent)	34.6	34.1	33.5	33.7	33.5	33.6	33.6	33.7	32.9	32.6	32.3	32.4	32.4	32.3	32.2	32.3	32.5	32.7	32.8	33.0	33.1	-0.2%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.a10201b.

Table 27. Bulk Chemical Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	178.67	173.96	178.32	183.14	185.72	188.07	190.00	192.67	194.71	198.16	200.64	205.93	208.13	211.53	213.54	214.96	216.71	217.69	219.46	221.14	223.15	1.1%
Energy Consumption (trillion Btu)																						
Heat and Power																						
Residual Oil	34.7	32.2	26.6	28.1	29.0	29.6	29.8	30.2	30.8	31.0	31.4	32.3	32.9	33.2	33.4	33.7	33.9	34.1	34.4	34.7	35.1	0.7%
Distillate Oil	108.9	107.3	98.5	103.3	105.8	107.4	108.3	109.6	110.8	112.4	113.7	116.4	118.1	119.2	120.0	120.6	121.4	122.1	123.1	123.9	125.1	0.7%
Liquefied Petroleum Gas	33.4	55.1	33.3	35.0	36.7	38.2	38.5	38.9	39.7	40.4	40.6	42.2	42.3	43.1	43.5	43.4	43.7	44.3	45.0	45.6	46.6	1.7%
Other Petroleum ^{2/}	301.5	293.4	272.9	285.4	292.2	296.5	299.2	302.9	306.2	310.8	314.6	322.2	327.0	330.2	332.8	334.8	337.2	339.0	341.7	344.3	347.5	0.7%
Petroleum Subtotal	478.4	488.1	431.1	451.7	463.8	471.7	475.8	481.6	487.3	494.6	500.3	513.1	520.3	525.7	529.7	532.8	536.3	539.5	544.2	548.5	554.2	0.7%
Natural Gas	1819.9	1750.1	1876.4	1901.5	1911.3	1923.5	1935.5	1954.3	1984.9	1989.3	2005.5	2044.6	2096.8	2082.3	2085.2	2102.8	2113.8	2116.8	2126.7	2138.0	2147.3	0.8%
Steam Coal	208.3	207.8	191.7	202.6	208.3	212.4	215.2	218.4	221.6	225.9	229.2	235.0	239.1	242.3	244.8	247.0	249.3	251.5	254.3	257.0	260.1	1.1%
Purchased Electricity	516.4	487.6	493.5	505.7	509.3	512.0	513.6	517.7	520.3	527.7	531.7	545.2	552.1	556.4	559.3	560.4	562.5	562.4	564.7	567.0	570.3	0.5%
Total Heat and Power	3023.0	2933.6	2992.8	3061.5	3092.7	3119.6	3140.1	3172.0	3194.1	3237.5	3266.7	3338.0	3378.1	3406.6	3429.0	3442.8	3461.9	3470.1	3490.0	3508.4	3532.0	0.8%
Feedstock																						
Liquefied Petroleum Gas	1802.2	1850.2	1892.5	1938.4	1981.6	1982.4	1998.1	2023.2	2041.1	2073.1	2095.2	2145.6	2174.9	2196.3	2213.7	2225.1	2240.0	2247.3	2262.9	2278.2	2287.0	0.9%
Petrochemical Feedstocks	1532.2	1490.8	1525.0	1561.8	1580.3	1598.8	1610.1	1628.4	1643.6	1669.3	1687.1	1727.7	1751.4	1768.7	1782.8	1833.2	1833.9	1805.7	1821.8	1833.2	1847.3	0.9%
Natural Gas	791.4	769.8	787.4	806.5	816.1	824.8	831.8	841.8	849.2	862.6	871.9	893.0	905.3	914.3	921.6	926.5	932.8	936.0	942.4	948.4	955.8	0.9%
Total Feedstocks	4225.7	4110.8	4204.9	4306.6	4358.0	4404.0	4440.9	4484.4	4533.9	4605.0	4654.2	4786.3	4831.6	4879.2	4918.1	4943.7	4976.8	4992.9	5027.0	5059.8	5100.2	0.9%
Total	7248.7	7044.3	7197.7	7368.2	7450.7	7523.6	7581.1	7666.4	7728.0	7842.4	7920.8	8104.3	8209.7	8265.9	8347.1	8386.5	8438.6	8463.0	8517.0	8568.3	8632.1	0.9%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
Heat and Power																						
Residual Oil	0.2	0.2	0.1	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	-1.0%
Distillate Oil	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-0.4%
Liquefied Petroleum Gas	0.2	0.3	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	0.6%
Other Petroleum ^{2/}	1.7	1.7	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.4%
Petroleum Subtotal	2.7	2.8	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	-0.4%
Natural Gas	10.2	10.1	10.5	10.4	10.3	10.2	10.2	10.1	10.1	10.0	10.0	9.9	9.9	9.8	9.8	9.8	9.8	9.7	9.7	9.7	9.7	-0.3%
Steam Coal	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	0.0%
Purchased Electricity	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	-0.6%
Total Heat and Power	16.9	16.9	16.8	16.7	16.7	16.6	16.5	16.5	16.4	16.3	16.2	16.2	16.2	16.1	16.1	16.0	16.0	15.9	15.9	15.9	15.8	-0.3%
Feedstock																						
Liquefied Petroleum Gas	10.6	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.3	-0.2%
Petrochemical Feedstocks	8.6	8.6	8.6	8.5	8.5	8.5	8.5	8.5	8.4	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	-0.2%
Natural Gas	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	-0.2%
Total Feedstocks	23.7	23.6	23.6	23.5	23.5	23.4	23.4	23.3	23.3	23.2	23.1	23.1	23.1	23.1	23.0	23.0	23.0	22.9	22.9	22.9	22.9	-0.2%
Total	40.6	40.5	40.4	40.2	40.1	40.0	39.9	39.8	39.7	39.6	39.5	39.4	39.3	39.2	39.1	39.0	38.9	38.9	38.8	38.7	38.7	-0.2%
Carbon Dioxide Emissions ^{3/} (million metric tons carbon equivalent)	88.1	85.3	85.8	88.0	88.8	89.7	90.4	91.4	91.8	93.0	93.7	95.8	96.9	97.7	98.2	98.6	99.1	99.3	99.8	100.3	101.0	0.7%

^{1/} Fuel consumption includes consumption for cogeneration.
^{2/} Includes petroleum coke, lubricants, and miscellaneous petroleum products.
^{3/} Includes emissions attributable to the fuels consumed to generate the purchased electricity.
 Btu = British thermal unit.
 N/A = Not applicable.
 Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.
 Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.n10001b.

Table 28. Glass Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	22.90	22.56	23.03	23.78	24.28	24.23	24.92	25.54	25.69	26.28	26.40	26.91	27.20	27.64	27.74	27.73	27.90	28.49	28.75	29.08	29.32	1.2%	
Energy Consumption (trillion Btu)																							
Residual Oil	2.6	2.5	1.7	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	-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	N/A	
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	N/A
Petroleum Subtotal	2.6	2.5	1.7	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	-0.5%	
Natural Gas	161.2	157.3	160.5	163.5	165.0	163.3	165.9	168.1	167.6	169.6	169.0	170.5	170.8	171.9	171.2	170.0	169.8	171.6	171.8	172.2	172.3	0.3%	
Purchased Electricity	44.7	44.0	43.8	45.0	45.7	45.4	46.4	47.2	47.3	48.0	48.0	48.6	48.9	49.4	49.4	49.2	49.3	50.0	50.2	50.5	50.7	0.6%	
Total	208.4	203.9	206.0	210.4	212.7	210.7	214.4	217.5	217.0	219.8	219.1	221.2	221.9	223.5	222.8	221.5	221.3	223.9	224.3	225.0	225.3	0.4%	
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																							
Residual Oil	0.11	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-1.7%	
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	N/A	
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	N/A	
Petroleum Subtotal	0.11	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-1.7%	
Natural Gas	7.04	6.98	6.97	6.87	6.80	6.74	6.66	6.58	6.53	6.45	6.40	6.34	6.28	6.22	6.17	6.13	6.09	6.02	5.97	5.92	5.88	-0.9%	
Purchased Electricity	1.95	1.95	1.90	1.85	1.88	1.88	1.86	1.85	1.84	1.83	1.82	1.81	1.80	1.79	1.78	1.77	1.77	1.76	1.75	1.74	1.73	-0.6%	
Total	9.10	9.04	8.95	8.85	8.76	8.70	8.60	8.51	8.45	8.36	8.30	8.22	8.16	8.08	8.03	7.99	7.93	7.86	7.80	7.74	7.68	-0.8%	
Carbon Dioxide Emissions 2/ (million metric tons carbon equivalent)	4.6	4.5	4.5	4.6	4.7	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.8	4.8	4.9	4.9	4.9	4.9	0.3%	

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 29. Cement Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	5.61	6.16	6.27	6.20	6.26	6.33	6.42	6.49	6.57	6.65	6.51	6.59	6.60	6.62	6.68	6.78	6.86	6.92	7.02	7.09	7.14	1.2%	
Energy Consumption (trillion Btu)																							
Residual 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	N/A
Distillate Oil	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	0.3%
Other Petroleum 2/	58.5	62.7	63.3	62.2	62.4	62.6	62.9	63.1	63.3	63.6	62.0	62.4	62.0	61.9	62.0	62.4	62.7	62.8	63.1	63.3	63.4	63.4	0.4%
Petroleum Subtotal	60.4	64.9	65.5	64.4	64.6	64.8	65.1	65.3	65.6	65.8	64.2	64.5	64.2	64.0	64.0	64.5	64.7	64.8	65.2	65.4	65.5	65.5	0.4%
Natural Gas	20.0	21.3	22.6	23.5	23.2	22.8	22.3	22.2	21.8	21.6	21.9	22.8	25.3	24.9	24.7	24.6	24.5	24.3	24.2	23.9	23.8	23.8	0.8%
Steam Coal	250.4	270.4	281.9	282.3	282.5	284.1	286.1	287.3	289.2	292.7	294.7	298.5	295.8	295.7	296.5	299.0	293.1	271.7	273.9	275.4	276.5	276.5	0.5%
Purchased Electricity	41.1	44.2	44.6	43.9	44.2	44.4	44.8	45.1	45.3	45.6	44.4	44.8	44.8	44.6	44.7	45.2	45.5	45.6	46.0	46.2	46.3	46.3	0.6%
Total	371.9	400.8	404.7	398.1	399.4	400.9	403.3	404.8	406.9	408.8	399.2	401.5	399.8	399.1	399.9	403.2	405.5	406.4	409.3	410.9	411.8	411.8	0.5%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																							
Residual 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	N/A
Distillate Oil	0.34	0.36	0.35	0.36	0.35	0.35	0.35	0.34	0.34	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	0.30	0.29	0.29	0.29	0.29	-0.9%
Other Petroleum 2/	10.43	10.19	10.09	10.04	9.96	9.88	9.79	9.72	9.64	9.56	9.52	9.46	9.41	9.36	9.28	9.20	9.13	9.07	9.00	8.93	8.88	8.88	-0.8%
Petroleum Subtotal	10.77	10.55	10.44	10.40	10.31	10.23	10.14	10.06	9.97	9.89	9.85	9.79	9.73	9.66	9.59	9.50	9.43	9.37	9.29	9.22	9.16	9.16	-0.8%
Natural Gas	3.57	3.45	3.50	3.46	3.45	3.35	3.25	3.19	3.13	3.07	3.11	3.19	3.63	3.57	3.50	3.43	3.38	3.31	3.24	3.17	3.16	3.16	-0.7%
Steam Coal	44.64	43.91	41.75	42.00	41.92	41.71	41.44	41.18	40.95	40.70	40.63	40.43	40.29	40.13	39.91	39.67	39.44	39.26	39.04	38.86	38.70	38.70	-0.7%
Purchased Electricity	7.34	7.18	7.12	7.09	7.05	7.02	6.98	6.94	6.86	6.82	6.79	6.76	6.73	6.70	6.67	6.66	6.62	6.59	6.55	6.51	6.48	6.48	-0.6%
Total	66.32	65.09	64.50	64.24	63.78	63.31	62.81	62.36	61.90	61.46	61.28	60.92	60.61	60.27	59.90	59.46	59.07	58.72	58.33	57.97	57.65	57.65	-0.7%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	9.9	10.7	10.6	10.5	10.5	10.6	10.7	10.7	10.8	10.8	10.5	10.6	10.5	10.5	10.5	10.6	10.7	10.7	10.8	10.8	10.8	10.8	0.5%

1/ Fuel consumption includes consumption for cogeneration.

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

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-d102001b.

Table 30. Iron and Steel Industries Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	70.44	68.00	69.81	72.19	72.85	73.75	74.74	75.64	76.45	77.22	78.67	79.73	80.25	80.83	81.52	82.21	82.71	83.36	83.98	84.43	84.58	0.9%	
Energy Consumption (trillion Btu)																							
Distillate Oil	5.3	5.1	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	4.9	-0.4%
Residual Oil	34.5	28.0	22.4	25.4	25.6	25.7	25.6	25.5	25.3	25.9	26.2	26.0	25.7	25.7	25.5	25.4	25.1	25.0	24.9	24.6	24.1	24.1	-1.6%
Other Petroleum 2/	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.0	6.0	-1.3%
Petroleum Subtotal	47.6	40.7	35.0	38.1	38.2	38.2	38.0	37.8	37.7	37.4	37.9	38.2	37.8	37.4	37.1	36.9	36.4	36.2	36.0	35.6	35.1	35.1	-1.5%
Natural Gas	513.8	493.8	532.8	534.0	530.2	529.6	530.4	530.8	530.2	530.0	532.9	533.8	532.2	531.4	531.4	531.1	530.4	530.1	529.9	529.0	528.8	528.8	0.1%
Metallurgical Coal	692.0	679.4	667.0	654.8	642.8	631.1	619.6	608.3	597.2	586.3	575.6	565.1	554.8	544.6	534.7	524.9	515.4	505.9	496.7	487.6	478.7	478.7	-1.8%
Nat Coke Imports	51.6	43.6	52.1	85.5	70.7	77.0	83.8	90.2	96.1	102.0	111.1	118.4	123.1	128.2	133.7	138.3	144.0	149.4	154.8	159.3	162.4	162.4	5.9%
Steam Coal	107.3	111.3	86.4	91.5	94.0	95.1	95.7	96.2	97.2	97.8	98.9	99.9	100.8	101.5	102.0	102.8	103.3	104.2	105.2	105.9	106.6	106.6	0.0%
Coal Subtotal	850.9	832.2	805.5	811.8	807.5	803.2	799.0	794.6	790.5	786.1	785.6	783.4	778.7	774.3	770.4	767.1	762.8	759.6	756.6	752.8	747.7	747.7	-0.6%
Purchased Electricity	157.5	151.1	152.5	159.0	160.7	162.8	165.2	167.2	169.0	170.8	174.2	176.7	177.8	179.0	180.5	182.1	183.2	184.7	186.1	187.2	187.6	187.6	0.9%
Total	1569.7	1517.9	1525.9	1542.8	1536.5	1533.9	1532.6	1530.5	1527.3	1524.2	1530.6	1532.1	1528.6	1522.1	1519.5	1517.2	1512.7	1510.7	1508.6	1504.6	1497.2	1497.2	-0.2%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																							
Distillate Oil	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-1.3%
Residual Oil	0.49	0.41	0.32	0.35	0.35	0.35	0.34	0.34	0.33	0.33	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	0.30	0.29	0.29	0.29	-2.7%
Other Petroleum 2/	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	-2.2%
Petroleum Subtotal	0.68	0.60	0.50	0.53	0.52	0.52	0.51	0.50	0.49	0.48	0.48	0.48	0.47	0.47	0.46	0.45	0.44	0.43	0.42	0.41	0.41	0.41	-2.4%
Natural Gas	7.29	7.28	7.63	7.40	7.28	7.18	7.10	7.02	6.96	6.88	6.77	6.69	6.63	6.57	6.52	6.46	6.41	6.38	6.31	6.27	6.23	6.23	-0.8%
Metallurgical Coal	9.82	9.99	9.55	9.07	8.82	8.56	8.29	8.04	7.81	7.59	7.32	7.09	6.91	6.74	6.56	6.39	6.23	6.07	5.91	5.78	5.66	5.66	-2.7%
Nat Coke Imports	0.73	0.61	0.75	0.91	0.97	1.04	1.12	1.19	1.26	1.32	1.41	1.49	1.53	1.59	1.64	1.69	1.74	1.79	1.84	1.89	1.92	1.92	4.9%
Steam Coal	1.52	1.64	1.24	1.27	1.29	1.29	1.28	1.27	1.27	1.27	1.26	1.25	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	-0.9%
Coal Subtotal	12.08	12.24	11.54	11.25	11.08	10.89	10.69	10.51	10.34	10.18	9.99	9.83	9.70	9.58	9.45	9.33	9.22	9.11	9.01	8.92	8.84	8.84	-1.5%
Purchased Electricity	2.24	2.22	2.19	2.20	2.21	2.21	2.21	2.21	2.21	2.21	2.22	2.22	2.22	2.21	2.21	2.22	2.22	2.22	2.22	2.22	2.22	2.22	0.0%
Total	22.28	22.32	21.86	21.37	21.09	20.89	20.51	20.23	19.98	19.74	19.45	19.21	19.02	18.83	18.64	18.46	18.29	18.12	17.96	17.82	17.70	17.70	-1.1%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	37.8	36.6	36.3	36.5	36.7	36.8	36.8	36.8	36.7	36.6	36.8	36.8	36.7	36.6	36.5	36.5	36.4	36.4	36.4	36.3	36.3	36.1	0.2%

1/ Fuel consumption includes consumption for cogeneration.

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

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

NA = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2020 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-d10000b.

Table 31. Aluminum Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	36.06	33.66	34.96	36.31	37.15	38.05	39.30	40.20	40.95	41.62	42.42	43.44	43.88	44.16	44.40	44.60	44.92	45.13	45.59	45.78	45.88	1.2%	
Energy Consumption (trillion Btu)																							
Distillate Oil	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	-0.3%
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	N/A
Petroleum Coke	5.4	5.4	5.3	5.2	5.2	5.1	5.0	5.0	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.4	4.4	4.3	4.3	4.2	4.2	4.2	-1.3%
Other Petroleum	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
Petroleum Subtotal	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.5	5.4	5.3	5.3	5.2	5.2	5.1	5.0	4.9	4.9	4.8	4.8	4.7	4.6	4.6	-1.2%
Natural Gas	147.8	136.2	141.3	144.0	145.0	146.2	146.2	149.3	150.0	150.4	151.2	152.4	152.3	151.7	151.1	150.3	149.9	149.2	149.1	148.5	147.6	146.5	0.0%
Steam Coal	71.6	71.6	71.6	70.3	69.0	67.7	66.5	65.3	64.1	62.9	61.7	60.6	59.5	58.4	57.3	56.3	55.3	54.3	53.3	52.3	51.3	51.3	-1.6%
Purchased Electricity	230.0	223.1	222.0	221.1	219.5	218.0	216.9	215.3	213.8	211.7	210.1	208.7	206.6	204.4	202.1	199.8	197.7	195.5	193.6	191.4	189.2	188.2	-1.0%
Total	455.4	438.8	440.7	441.2	439.2	437.5	437.1	435.4	433.0	430.4	428.3	427.0	423.6	419.6	415.5	411.4	407.7	403.8	400.7	396.8	392.7	392.7	-0.7%
Energy Consumption per Unit of Output																							
(thousand Btu per 1992 dollar)																							
Distillate Oil	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	-1.5%
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	N/A
Petroleum Coke	0.15	0.16	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	-2.5%
Other Petroleum	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
Petroleum Subtotal	0.17	0.17	0.17	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.4%
Natural Gas	4.10	4.11	4.04	3.97	3.90	3.84	3.77	3.71	3.66	3.61	3.56	3.51	3.47	3.44	3.40	3.37	3.34	3.31	3.27	3.24	3.22	3.22	-1.2%
Steam Coal	1.99	2.13	2.05	1.98	1.86	1.78	1.69	1.62	1.56	1.51	1.46	1.40	1.36	1.32	1.29	1.26	1.23	1.20	1.17	1.14	1.12	1.12	-2.8%
Purchased Electricity	6.38	6.63	6.35	6.09	5.91	5.73	5.52	5.36	5.21	5.09	4.95	4.81	4.71	4.63	4.55	4.48	4.40	4.33	4.25	4.18	4.12	4.12	-2.2%
Total	12.63	13.04	12.60	12.15	11.82	11.50	11.12	10.83	10.57	10.34	10.10	9.83	9.65	9.50	9.36	9.22	9.08	8.95	8.79	8.67	8.56	8.56	-1.9%
Carbon Dioxide Emissions 2/																							
(million metric tons carbon equivalent)	15.6	15.1	14.8	14.8	14.7	14.6	14.6	14.5	14.3	14.2	14.0	13.9	13.7	13.5	13.3	13.2	13.0	12.9	12.7	12.6	12.4	12.4	-1.1%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 32. Other Industrial Sector Energy Consumption (1 of 2)
(Trillion Btu)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Agriculture																						
Distillate Oil	508.2	503.4	490.9	506.5	517.3	526.9	523.1	520.6	529.3	539.0	548.5	557.3	564.3	570.5	576.4	582.2	588.6	595.1	604.1	613.1	619.3	1.0%
Unbleached Petroleum Gas	211.2	208.8	203.1	209.9	214.4	218.4	216.3	214.9	218.5	222.5	226.4	230.0	233.9	238.0	238.1	240.6	243.3	246.2	250.0	253.8	256.4	1.0%
Motor Gasoline	104.3	103.0	103.3	103.6	102.9	107.8	106.8	106.1	107.9	109.9	111.8	113.6	115.1	116.4	117.7	118.9	120.3	121.7	123.6	125.4	126.1	1.0%
Other Petroleum	101.2	99.9	97.2	100.5	102.7	104.6	103.6	102.9	104.6	106.5	108.4	110.2	111.6	112.9	114.1	115.3	116.7	118.1	119.9	121.6	122.9	1.0%
Petroleum Subtotal	924.9	914.9	891.6	920.5	940.2	957.7	949.7	944.5	960.4	977.8	995.1	1011.1	1024.0	1035.4	1046.3	1057.0	1068.9	1081.1	1097.6	1113.9	1125.3	1.0%
Natural Gas	96.9	96.1	93.8	96.7	98.7	99.7	99.3	99.3	100.9	102.8	104.3	105.9	107.1	108.2	109.2	110.2	111.3	112.5	114.1	115.8	116.8	0.9%
Steam Coal	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-3.3%
Renewables	23.4	23.3	22.8	23.8	24.3	24.9	24.7	24.7	25.2	25.8	26.4	27.0	27.5	27.9	28.3	28.8	29.2	29.7	30.9	31.3	31.9	1.5%
Purchased Electricity	196.1	193.4	189.2	194.8	198.9	202.8	200.5	199.0	202.4	206.1	209.8	213.2	216.9	218.5	220.9	223.2	225.9	228.5	232.0	235.4	237.8	1.0%
Total	1241.9	1229.3	1196.8	1235.9	1282.4	1295.9	1275.1	1288.0	1289.4	1312.8	1336.1	1357.5	1374.9	1390.3	1405.0	1419.5	1435.6	1452.1	1474.3	1498.3	1511.5	1.0%
Industry Output (billion 1992 dollars)	303.27	298.27	289.84	300.92	308.77	316.03	312.03	309.36	315.33	322.16	329.11	335.72	341.40	346.66	351.53	356.53	361.96	367.56	374.10	380.67	385.59	1.2%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)	4.09	4.12	4.13	4.11	4.09	4.07	4.09	4.10	4.09	4.08	4.06	4.04	4.03	4.01	4.00	3.98	3.97	3.95	3.94	3.93	3.92	-0.2%
Carbon Dioxide Emissions 1/ (million metric tons carbon equivalent)	28.9	28.6	27.7	28.6	29.1	29.7	29.5	29.3	29.7	30.2	30.7	31.1	31.5	31.8	32.1	32.4	32.8	33.1	33.6	34.1	34.4	0.9%
Construction																						
Distillate Oil	250.6	256.3	257.2	263.8	269.0	274.6	277.2	280.9	285.3	290.2	296.8	298.4	301.0	307.0	313.8	321.2	324.7	328.6	335.9	343.0	349.5	1.7%
Motor Gasoline	76.6	78.3	79.6	80.8	82.2	83.9	84.7	85.8	87.2	88.7	90.4	91.2	92.0	93.8	95.9	98.2	99.2	100.4	102.7	104.8	106.8	1.7%
Asphalt and Road Oil	1309.1	1390.0	1395.2	1431.0	1459.3	1489.2	1503.6	1523.7	1547.4	1574.2	1604.2	1618.6	1632.7	1665.3	1701.9	1742.5	1781.3	1822.5	1860.8	1895.9	1929.4	1.7%
Petroleum Subtotal	1686.3	1724.5	1731.1	1775.5	1810.5	1847.7	1865.6	1890.4	1919.9	1953.1	1990.3	2008.2	2035.7	2096.1	2111.5	2161.9	2185.2	2211.4	2261.1	2308.6	2352.2	1.7%
Natural Gas	104.6	107.0	107.4	110.1	112.3	114.6	115.7	117.2	121.1	123.4	124.6	126.6	128.6	131.0	134.1	136.5	137.2	140.3	142.6	145.9	149.4	1.7%
Purchased Electricity	121.5	124.2	124.7	127.9	130.4	133.1	134.4	136.2	138.3	140.7	143.4	144.7	145.9	148.8	152.1	155.7	157.4	159.3	162.9	166.3	169.4	1.7%
Total	1912.4	1955.7	1963.1	2013.5	2053.2	2095.4	2115.7	2143.8	2177.2	2215.0	2257.1	2277.4	2297.3	2343.1	2394.6	2451.7	2478.2	2507.9	2564.2	2618.1	2687.6	1.7%
Industry Output (billion 1992 dollars)	570.40	585.83	589.43	607.23	621.55	636.88	644.57	655.08	667.35	681.10	696.35	704.26	712.06	728.80	747.10	767.54	777.61	788.80	809.07	828.54	848.49	2.0%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)	3.35	3.34	3.33	3.32	3.30	3.29	3.28	3.27	3.26	3.25	3.24	3.23	3.23	3.22	3.21	3.19	3.19	3.18	3.17	3.16	3.15	-0.3%
Carbon Dioxide Emissions 1/ (million metric tons carbon equivalent)	14.0	14.4	14.3	14.6	14.9	15.2	15.4	15.6	15.8	16.0	16.3	16.4	16.5	16.8	17.2	17.6	17.7	17.9	18.3	18.7	19.0	1.5%
Mining																						
Residual Oil	44.5	45.0	45.3	45.9	45.9	46.1	46.6	47.1	47.5	47.9	48.4	49.0	49.5	50.3	50.9	51.6	52.4	52.9	53.4	53.6	54.0	1.0%
Distillate Oil	141.5	145.1	145.8	147.5	148.3	149.6	151.3	152.9	154.0	155.2	156.0	157.6	158.2	159.7	160.6	161.3	162.8	163.8	165.2	166.3	168.2	0.9%
Motor Gasoline	18.0	18.2	18.3	18.5	18.5	18.6	18.8	19.0	19.1	19.3	19.5	19.8	20.0	20.3	20.6	20.9	21.2	21.4	21.6	21.7	21.9	1.0%
Other Petroleum	27.7	27.7	27.9	28.3	28.2	28.2	28.5	28.8	29.1	29.3	29.8	30.2	30.6	31.3	31.9	32.5	33.1	33.5	33.8	33.9	34.1	1.1%
Petroleum Subtotal	231.7	235.9	237.4	240.2	241.0	242.4	245.1	247.7	249.7	251.7	253.6	256.7	258.3	261.5	264.1	266.4	269.5	271.6	274.0	275.5	278.3	0.9%
Natural Gas	181.8	182.8	185.2	186.3	186.3	187.0	188.9	190.8	192.7	194.6	196.6	198.4	201.0	204.1	206.5	211.4	213.2	216.5	218.5	218.8	218.9	0.9%
Lignite and Peat Fuel	1147.85	1157.12	1162.99	1209.24	1253.94	1306.04	1333.58	1378.02	1429.76	1478.38	1537.30	1579.58	1611.38	1643.13	1675.18	1708.97	1740.19	1770.89	1801.19	1821.42	1848.82	2.4%
Steam Coal	71.2	72.2	72.9	74.7	75.1	75.7	76.2	76.6	77.1	77.7	78.5	78.5	78.5	79.0	79.0	78.7	79.3	79.3	79.9	80.5	81.4	0.7%
Renewables	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	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4%
Purchased Electricity	235.8	239.5	241.8	244.5	245.1	246.3	248.8	251.2	253.3	255.4	257.4	260.5	262.0	265.3	267.7	269.8	272.9	274.9	277.4	279.0	282.0	0.9%
Total	1869.0	1888.6	1901.1	1954.7	2002.2	2038.5	2093.8	2145.5	2203.8	2259.5	2324.0	2374.9	2412.4	2454.4	2493.8	2533.9	2574.4	2610.5	2649.2	2676.3	2710.8	1.9%

Table 32. Other Industrial Sector Energy Consumption (2 of 2)
(Trillion Btu)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	165.57	168.56	169.86	172.52	173.25	174.24	176.77	179.33	181.41	183.28	185.58	188.60	190.77	194.24	197.43	200.61	203.99	206.55	208.84	210.09	212.33	1.3%
Energy Consumption per Unit of Output	11.29	11.20	11.19	11.33	11.58	11.70	11.84	11.96	12.15	12.33	12.52	12.59	12.65	12.64	12.63	12.63	12.62	12.64	12.69	12.74	12.77	0.6%
(thousand Btu per 1992 dollar)																						
Carbon Dioxide Emissions 1/	20.9	21.3	21.2	21.4	21.4	21.6	21.8	22.1	22.1	22.3	22.3	22.5	22.6	22.9	23.0	23.2	23.4	23.6	23.7	23.9	24.1	0.7%
(million metric tons carbon equivalent)																						
Metal-Based Durables Consumption																						
Residual Oil	9.4	8.6	8.0	8.8	9.4	9.9	10.5	11.0	11.5	12.0	12.7	13.3	13.8	14.4	14.9	15.4	15.8	16.4	17.0	17.5	18.0	3.3%
Distillate Oil	26.3	26.4	23.6	26.6	28.5	30.0	31.4	32.6	34.2	35.1	36.5	38.2	39.5	40.4	41.0	41.6	42.7	44.1	45.7	47.0	48.3	3.1%
Liquefied Petroleum Gas	13.8	15.0	12.7	13.5	14.2	14.9	15.5	16.1	16.6	17.4	17.9	18.7	19.1	19.8	20.3	20.8	21.3	22.0	22.7	23.4	24.0	2.8%
Petroleum Subtotal	49.5	52.0	44.2	48.9	52.1	54.9	57.4	59.6	62.5	64.5	67.1	70.2	72.5	74.5	76.2	77.8	79.9	82.5	85.4	87.9	90.3	3.1%
Natural Gas	729.1	686.7	720.1	756.6	787.3	818.6	850.5	881.2	912.0	942.9	980.6	1015.9	1045.4	1075.4	1103.5	1131.1	1157.7	1187.8	1220.2	1250.9	1275.8	2.8%
Steam Coal	63.5	62.1	59.2	61.9	63.7	65.3	66.8	68.2	69.6	70.9	72.5	74.0	75.2	76.4	77.5	78.6	79.5	80.8	82.1	83.3	84.4	1.4%
Renewables	44.4	42.4	44.4	47.8	50.6	53.4	56.3	59.2	62.1	65.0	68.6	72.0	75.2	78.4	81.4	84.5	87.4	90.8	94.3	97.7	100.5	4.2%
Purchased Electricity	736.8	701.8	716.8	760.4	795.7	830.5	865.8	899.5	934.3	968.4	1010.0	1049.9	1084.2	1118.5	1150.6	1182.5	1213.4	1248.2	1285.7	1321.3	1350.8	3.1%
Total	1623.3	1545.0	1584.7	1675.6	1749.4	1822.7	1896.9	1967.7	2040.5	2111.7	2198.8	2281.8	2352.5	2423.2	2489.2	2554.4	2617.9	2690.1	2767.6	2841.1	2901.8	2.9%
Industry Output (billion 1992 dollars)	1830.32	1745.62	1823.59	1959.29	2070.62	2181.67	2295.41	2406.48	2521.00	2634.88	2772.70	2906.56	3026.89	3150.01	3265.36	3381.05	3493.32	3618.05	3750.82	3877.61	3983.63	4.0%
Energy Consumption per Unit of Output	0.89	0.89	0.87	0.86	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.78	0.77	0.76	0.76	0.75	0.74	0.74	0.73	0.73	-1.0%
(thousand Btu per 1992 dollar)																						
Carbon Dioxide Emissions 1/	50.0	47.9	47.9	50.8	53.0	55.3	57.7	60.0	61.9	63.8	66.1	68.4	70.4	72.4	74.2	76.0	77.8	80.0	82.1	84.2	85.9	2.7%
(million metric tons carbon equivalent)																						
Other Manufacturing Consumption																						
Residual Oil	64.2	59.7	53.6	55.7	57.1	58.6	59.6	60.7	61.6	62.7	64.3	65.8	66.8	67.7	68.5	69.3	70.0	71.0	71.9	72.7	73.3	0.7%
Distillate Oil	56.5	62.3	51.7	55.6	57.4	59.0	60.1	61.0	62.1	62.4	63.5	65.0	65.8	65.9	65.7	65.7	66.3	67.3	68.3	68.9	69.7	1.1%
Liquefied Petroleum Gas	27.1	37.2	25.7	26.6	27.4	28.5	28.9	29.4	30.1	30.7	31.2	32.1	32.3	33.0	33.4	33.7	34.2	34.9	35.7	36.4	37.1	1.6%
Petroleum Subtotal	147.7	159.2	130.9	137.9	141.9	146.1	148.7	151.1	153.9	155.8	159.0	162.9	164.6	166.6	167.6	168.7	170.5	173.2	175.9	177.9	180.1	1.0%
Natural Gas	1359.9	1318.2	1404.9	1416.3	1428.1	1453.5	1478.1	1502.7	1521.6	1548.4	1586.1	1617.9	1637.2	1659.2	1677.7	1696.3	1715.2	1736.8	1757.1	1773.3	1786.2	1.4%
Steam Coal	263.6	261.5	247.0	256.2	262.0	268.6	273.8	279.3	284.1	289.7	297.4	304.5	309.2	314.0	318.1	322.5	326.8	332.0	337.0	341.3	345.2	1.4%
Renewables	344.0	340.9	350.6	358.1	364.8	373.8	382.7	391.9	399.5	409.3	422.0	433.9	442.2	450.9	459.0	466.8	474.5	483.2	491.9	499.3	505.9	1.9%
Purchased Electricity	911.9	896.0	907.3	922.5	933.4	950.8	967.1	983.8	996.6	1013.9	1038.3	1060.0	1073.0	1086.5	1098.7	1110.9	1123.0	1137.4	1151.1	1161.8	1170.7	1.3%
Total	3026.2	2973.8	3040.7	3090.9	3130.1	3190.9	3250.4	3309.8	3365.7	3417.0	3502.8	3579.2	3626.6	3676.2	3721.0	3765.2	3810.0	3862.7	3913.1	3953.6	3988.1	1.4%
Industry Output (billion 1992 dollars)	1091.89	1078.79	1113.29	1137.76	1158.53	1190.34	1220.00	1250.62	1275.46	1307.02	1349.53	1387.73	1413.59	1440.31	1464.74	1488.95	1513.12	1540.71	1567.19	1589.58	1609.14	2.0%
Energy Consumption per Unit of Output	2.77	2.76	2.73	2.72	2.70	2.68	2.66	2.65	2.63	2.61	2.60	2.58	2.57	2.55	2.54	2.53	2.52	2.51	2.50	2.49	2.48	-0.6%
(thousand Btu per 1992 dollar)																						
Carbon Dioxide Emissions 1/	74.9	73.9	73.7	75.0	75.8	77.3	78.8	80.3	81.0	82.1	83.8	85.3	86.1	87.2	87.9	88.8	89.6	90.8	91.8	92.6	93.2	1.1%
(million metric tons carbon equivalent)																						

1/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.n102001b.