

Table A6. Industrial sector key indicators and consumption

Key indicators and consumption	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Key indicators								
Value of shipments (billion 2005 dollars)								
Manufacturing	4052	4260	4948	5467	5735	5983	6270	1.6%
Nonmanufacturing	1615	1578	1888	2116	2211	2317	2437	1.8%
Total	5667	5838	6836	7583	7946	8300	8707	1.6%
Energy prices								
(2010 dollars per million Btu)								
Liquefied petroleum gases	20.05	21.80	27.35	27.91	29.27	30.38	31.99	1.5%
Motor gasoline	16.79	16.77	29.11	31.10	32.21	33.58	34.05	2.9%
Distillate fuel oil	16.74	21.32	24.10	25.62	27.26	28.88	29.89	1.4%
Residual fuel oil	12.16	10.92	19.12	20.45	21.14	21.63	21.99	2.8%
Asphalt and road oil	6.59	5.59	9.22	9.82	10.21	10.45	10.89	2.7%
Natural gas heat and power	4.59	4.78	4.12	4.56	5.39	5.76	6.73	1.4%
Natural gas feedstocks	6.16	6.32	5.66	6.12	6.93	7.30	8.21	1.1%
Metallurgical coal	5.49	5.84	7.17	7.54	8.08	8.58	9.05	1.8%
Other industrial coal	2.99	2.93	3.26	3.30	3.38	3.50	3.62	0.8%
Coal for liquids	--	--	1.25	2.03	2.11	2.21	2.35	--
Electricity	20.05	19.63	18.36	18.45	18.84	18.87	20.00	0.1%
(nominal dollars per million Btu)								
Liquefied petroleum gases	19.82	21.80	29.48	33.17	38.48	44.04	50.78	3.4%
Motor gasoline	16.60	16.77	31.38	36.96	42.34	48.67	54.05	4.8%
Distillate fuel oil	16.55	21.32	25.98	30.45	35.83	41.86	47.45	3.3%
Residual fuel oil	12.02	10.92	20.60	24.30	27.79	31.34	34.91	4.8%
Asphalt and road oil	6.52	5.59	9.94	11.67	13.42	15.15	17.28	4.6%
Natural gas heat and power	4.54	4.78	4.44	5.42	7.09	8.35	10.69	3.3%
Natural gas feedstocks	6.09	6.32	6.10	7.28	9.11	10.58	13.04	2.9%
Metallurgical coal	5.43	5.84	7.73	8.96	10.62	12.44	14.37	3.7%
Other industrial coal	2.96	2.93	3.51	3.92	4.45	5.07	5.74	2.7%
Coal for liquids	--	--	1.35	2.41	2.77	3.20	3.73	--
Electricity	19.83	19.63	19.79	21.92	24.76	27.35	31.74	1.9%
Energy consumption (quadrillion Btu)¹								
Industrial consumption excluding refining								
Liquefied petroleum gases heat and power ..	0.45	0.41	0.37	0.41	0.41	0.41	0.41	0.0%
Liquefied petroleum gases feedstocks	1.54	1.58	1.50	1.70	1.78	1.79	1.78	0.5%
Motor gasoline	0.24	0.25	0.28	0.29	0.29	0.28	0.28	0.6%
Distillate fuel oil	1.11	1.15	1.18	1.19	1.18	1.16	1.18	0.1%
Residual fuel oil	0.10	0.11	0.08	0.08	0.08	0.08	0.08	-1.1%
Petrochemical feedstocks	0.90	0.94	1.04	1.22	1.27	1.28	1.27	1.2%
Petroleum coke	0.28	0.16	0.20	0.21	0.21	0.20	0.20	0.9%
Asphalt and road oil	0.87	0.88	0.98	1.01	0.97	0.95	0.96	0.3%
Miscellaneous petroleum ²	0.38	0.52	0.17	0.16	0.16	0.14	0.15	-4.9%
Petroleum subtotal	5.87	6.00	5.79	6.26	6.35	6.31	6.31	0.2%
Natural gas heat and power	4.48	4.84	5.17	5.32	5.22	5.15	5.13	0.2%
Natural gas feedstocks	0.47	0.48	0.49	0.53	0.52	0.48	0.46	-0.1%
Lease and plant fuel ³	1.31	1.37	1.42	1.47	1.47	1.50	1.54	0.5%
Natural gas subtotal	6.25	6.69	7.09	7.31	7.21	7.13	7.14	0.3%
Metallurgical coal and coke ⁴	0.38	0.55	0.53	0.50	0.46	0.41	0.37	-1.6%
Other industrial coal	0.88	0.95	0.92	0.93	0.93	0.92	0.91	-0.2%
Coal subtotal	1.26	1.50	1.46	1.43	1.39	1.33	1.28	-0.6%
Renewables ⁵	1.37	1.50	1.56	1.68	1.78	1.85	1.94	1.0%
Purchased electricity	2.94	3.09	3.23	3.39	3.36	3.29	3.20	0.1%
Delivered energy	17.69	18.78	19.12	20.08	20.09	19.91	19.86	0.2%
Electricity related losses	6.19	6.47	6.52	6.85	6.79	6.49	6.22	-0.2%
Total	23.88	25.25	25.64	26.93	26.88	26.40	26.08	0.1%

Table A6. Industrial sector key indicators and consumption (continued)

Key indicators and consumption	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Refining consumption								
Liquefied petroleum gases heat and power . . .	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.4%
Distillate fuel oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Residual fuel oil	0.01	0.01	0.00	0.00	0.00	0.00	0.00	--
Petroleum coke	0.52	0.52	0.54	0.52	0.51	0.52	0.54	0.2%
Still gas	1.50	1.50	1.55	1.39	1.33	1.36	1.38	-0.3%
Miscellaneous petroleum ²	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.2%
Petroleum subtotal	2.05	2.05	2.13	1.94	1.87	1.91	1.96	-0.2%
Natural gas heat and power	1.38	1.44	1.48	1.56	1.56	1.54	1.58	0.4%
Natural-gas-to-liquids heat and power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural gas subtotal	1.38	1.44	1.48	1.56	1.56	1.54	1.58	0.4%
Other industrial coal	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.0%
Coal-to-liquids heat and power	0.00	0.00	0.00	0.26	0.36	0.48	0.60	--
Coal subtotal	0.06	0.06	0.06	0.32	0.42	0.54	0.66	10.0%
Biofuels heat and coproducts	0.82	0.84	0.81	1.00	1.42	2.21	2.74	4.8%
Purchased electricity	0.19	0.20	0.20	0.20	0.20	0.20	0.21	0.3%
Delivered energy	4.51	4.60	4.67	5.01	5.48	6.40	7.15	1.8%
Electricity related losses	0.40	0.41	0.39	0.40	0.40	0.40	0.42	0.0%
Total	4.91	5.01	5.06	5.41	5.87	6.80	7.56	1.7%
Total industrial sector consumption								
Liquefied petroleum gases heat and power . . .	0.46	0.42	0.38	0.42	0.43	0.42	0.42	0.0%
Liquefied petroleum gases feedstocks	1.54	1.58	1.50	1.70	1.78	1.79	1.78	0.5%
Motor gasoline	0.24	0.25	0.28	0.29	0.29	0.28	0.28	0.6%
Distillate fuel oil	1.11	1.16	1.18	1.19	1.18	1.16	1.18	0.1%
Residual fuel oil	0.11	0.12	0.08	0.08	0.08	0.08	0.08	-1.3%
Petrochemical feedstocks	0.90	0.94	1.04	1.22	1.27	1.28	1.27	1.2%
Petroleum coke	0.80	0.68	0.73	0.73	0.72	0.72	0.74	0.3%
Asphalt and road oil	0.87	0.88	0.98	1.01	0.97	0.95	0.96	0.3%
Still gas	1.50	1.50	1.55	1.39	1.33	1.36	1.38	-0.3%
Miscellaneous petroleum ²	0.40	0.54	0.19	0.18	0.18	0.16	0.17	-4.5%
Petroleum subtotal	7.93	8.05	7.92	8.20	8.22	8.21	8.26	0.1%
Natural gas heat and power	5.86	6.28	6.65	6.88	6.78	6.69	6.72	0.3%
Natural-gas-to-liquids heat and power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural gas feedstocks	0.47	0.48	0.49	0.53	0.52	0.48	0.46	-0.1%
Lease and plant fuel ³	1.31	1.37	1.42	1.47	1.47	1.50	1.54	0.5%
Natural gas subtotal	7.63	8.14	8.57	8.87	8.77	8.67	8.72	0.3%
Metallurgical coal and coke ⁴	0.38	0.55	0.53	0.50	0.46	0.41	0.37	-1.6%
Other industrial coal	0.94	1.01	0.98	0.99	0.99	0.98	0.97	-0.2%
Coal-to-liquids heat and power	0.00	0.00	0.00	0.26	0.36	0.48	0.60	--
Coal subtotal	1.32	1.56	1.52	1.74	1.81	1.87	1.94	0.9%
Biofuels heat and coproducts	0.82	0.84	0.81	1.00	1.42	2.21	2.74	4.8%
Renewables ⁵	1.37	1.50	1.56	1.68	1.78	1.85	1.94	1.0%
Purchased electricity	3.13	3.28	3.42	3.59	3.56	3.49	3.41	0.2%
Delivered energy	22.20	23.37	23.79	25.09	25.57	26.30	27.01	0.6%
Electricity related losses	6.59	6.89	6.91	7.25	7.18	6.89	6.63	-0.2%
Total	28.79	30.26	30.70	32.34	32.75	33.19	33.64	0.4%

Table A6. Industrial sector key indicators and consumption (continued)

Key indicators and consumption	Reference case							Annual growth 2010-2035 (percent)
	2009	2010	2015	2020	2025	2030	2035	
Energy consumption per dollar of shipments (thousand Btu per 2005 dollar)								
Liquid fuels and other petroleum	1.40	1.38	1.16	1.08	1.03	0.99	0.95	-1.5%
Natural gas	1.35	1.39	1.25	1.17	1.10	1.04	1.00	-1.3%
Coal	0.23	0.27	0.22	0.23	0.23	0.23	0.22	-0.7%
Renewable fuels ⁵	0.39	0.40	0.35	0.35	0.40	0.49	0.54	1.2%
Purchased electricity	0.55	0.56	0.50	0.47	0.45	0.42	0.39	-1.4%
Delivered energy	3.92	4.00	3.48	3.31	3.22	3.17	3.10	-1.0%
Industrial combined heat and power								
Capacity (gigawatts)	25.08	25.64	29.71	34.80	39.80	47.61	53.58	3.0%
Generation (billion kilowatt-hours)	130.57	141.07	164.49	198.37	233.18	289.82	330.95	3.5%

¹Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

²Includes lubricants and miscellaneous petroleum products.

³Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

⁴Includes net coal coke imports.

⁵Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal waste, and other biomass sources.

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2009 and 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2009 and 2010 prices for motor gasoline and distillate fuel oil are based on: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009*, DOE/EIA-0487(2009) (Washington, DC, August 2010). 2009 and 2010 petrochemical feedstock and asphalt and road oil prices are based on: EIA, *State Energy Data Report 2009*, DOE/EIA-0214(2009) (Washington, DC, June 2011). 2009 and 2010 coal prices are based on: EIA, *Quarterly Coal Report, October-December 2010*, DOE/EIA-0121(2010/4Q) (Washington, DC, May 2011) and EIA, AEO2012 National Energy Modeling System run REF2012.D121011B. 2009 and 2010 electricity prices: EIA, *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). 2009 and 2010 natural gas prices are based on: EIA, *Manufacturing Energy Consumption Survey* and industrial and wellhead prices from the *Natural Gas Annual 2009*, DOE/EIA-0131(2009) (Washington, DC, December 2010) and the *Natural Gas Monthly*, DOE/EIA-0130(2011/07) (Washington, DC, July 2011). 2009 refining consumption values are based on: *Petroleum Supply Annual 2009*, DOE/EIA-0340(2009)/1 (Washington, DC, July 2010). 2010 refining consumption based on: *Petroleum Supply Annual 2010*, DOE/EIA-0340(2010)/1 (Washington, DC, July 2011). Other 2009 and 2010 consumption values are based on: EIA, *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). 2009 and 2010 shipments: IHS Global Insight Industry model, August 2011. Projections: EIA, AEO2012 National Energy Modeling System run REF2012.D121011B.