

Appendix K

Reference case industrial sector projections

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Table K1. Industrial sector energy consumption by region and sector, 2015-50

quadrillion Btu

Region/sector	2015	2020	2025	2030	2035	2040	2045	2050	Average annual percent change (2015-50)
OECD									
United States /a									
Energy-intensive manufacturing	16.7	18.5	19.6	19.6	19.9	20.4	20.8	21.2	0.7
Nonenergy-intensive manufacturing	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.7	0.8
Nonmanufacturing	5.8	6.2	6.6	6.8	7.1	7.4	7.7	8.1	1.0
Total United States	24.5	26.8	28.5	28.7	29.3	30.3	31.0	32.0	0.8
OECD Europe									
Energy-intensive manufacturing	17.3	16.6	16.4	16.4	16.5	16.5	16.3	16.3	-0.2
Nonenergy-intensive manufacturing	4.6	4.4	4.2	4.2	4.1	4.2	4.2	4.3	-0.2
Nonmanufacturing	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	-0.3
Total OECD Europe	24.2	23.2	22.8	22.8	22.8	22.7	22.5	22.7	-0.2
Total OECD									
Energy-intensive manufacturing	51.6	52.0	53.2	53.4	53.8	54.5	54.7	55.2	0.2
Nonenergy-intensive manufacturing	10.8	10.2	10.2	10.3	10.3	10.5	10.7	11.0	0.1
Nonmanufacturing	12.2	12.4	13.0	13.4	13.8	14.3	14.9	15.6	0.7
Total OECD	74.6	74.6	76.4	77.0	78.0	79.3	80.2	81.7	0.3
Non-OECD									
Non-OECD Asia									
China									
Energy-intensive manufacturing	54.5	56.2	56.8	55.6	54.2	52.6	50.3	47.3	-0.4
Nonenergy-intensive manufacturing	10.8	12.7	13.7	14.3	15.0	15.8	16.5	17.1	1.3
Nonmanufacturing	6.4	6.8	6.5	5.9	5.3	4.7	4.1	3.5	-1.7
Total China	71.6	75.7	77.0	75.8	74.5	73.0	70.9	67.9	-0.2
India									
Energy-intensive manufacturing	9.8	10.6	12.1	14.3	16.9	20.1	23.1	25.8	2.8
Nonenergy-intensive manufacturing	3.5	3.8	4.3	4.9	5.6	6.3	7.1	7.7	2.2
Nonmanufacturing	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.2	1.6
Total India	14.6	15.8	17.9	20.8	24.3	28.3	32.2	35.7	2.6
Other non-OECD Asia									
Energy-intensive manufacturing	10.8	11.3	12.5	14.1	15.7	17.7	19.9	22.7	2.2
Nonenergy-intensive manufacturing	4.3	4.2	4.6	5.1	5.6	6.2	6.9	7.8	1.7
Nonmanufacturing	2.8	3.0	3.4	3.8	4.2	4.7	5.3	5.8	2.1
Total other non-OECD Asia	17.8	18.5	20.5	23.0	25.6	28.7	32.2	36.3	2.0

Table K1. Industrial sector energy consumption by region and sector, 2015-50 (cont.)

quadrillion Btu

Region/sector	2015	2020	2025	2030	2035	2040	2045	2050	Average annual percent change (2015-50)
Total Non-OECD									
Energy-intensive manufacturing	111.8	114.1	119.6	124.3	129.9	135.8	141.1	145.4	0.8
Nonenergy-intensive manufacturing	31.2	32.9	34.9	37.0	39.5	42.2	45.0	47.5	1.2
Nonmanufacturing	19.8	20.3	21.0	21.4	21.8	22.5	23.3	24.4	0.6
Total Non-OECD	162.8	167.4	175.5	182.7	191.2	200.5	209.5	217.4	0.8
World									
Energy-intensive manufacturing	163.4	166.1	172.8	177.7	183.7	190.3	195.8	200.6	0.6
Nonenergy-intensive manufacturing	42.0	43.1	45.2	47.3	49.8	52.7	55.7	58.5	1.0
Nonmanufacturing	31.9	32.7	34.0	34.8	35.6	36.8	38.2	40.0	0.6
Total World	237.3	242.0	251.9	259.7	269.2	279.8	289.7	299.1	0.7

a/ Includes the 50 states and the District of Columbia.

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

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2017), run IEO2017_d2017.08.23_153156 and EIA, *Annual Energy Outlook 2017*, DOE/EIA-0383(2017) (Washington, DC: January 2017); AEO2017 National Energy Modeling System, run ref2017.d120816a, www.eia.gov/aeo.