Table 10.2b Renewable Energy Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector ^a									
					Biomass					
	Hydro- electric Power ^b	Geo- thermal ^c	Solar ^d	Wind ^e	Wood ^f	Waste ^g	Fuel Ethanol ^{h,i}	Losses and Co- products ^j	Total	Total
1950 Total 1955 Total 1960 Total 1960 Total 1960 Total 1960 Total 1970 Total 1970 Total 1970 Total 1980 Total 1980 Total 1980 Total 1995 Total 2000 Total 2001 Total 2011 Total 2012 Total 2013 Total 2014 Total 2015 Total 2016 Total 2017 Total 2017 Total 2018 Total 2019 Total 2019 Total 2019 Total 2019 Total 2019 Total 2020 Total 2020 Total 2021 Total 2021 Total 2021 Total 2022 Total	17 11 12 11 11 11 11 11 10 18 14 11 6 6 8 12 4 5 4 4 3 3 3	NA N	NAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	NA N	532 631 680 855 1,019 1,063 1,600 1,645 1,442 1,652 1,452 1,452 1,488 1,462 1,489 1,495 1,476 1,476 1,474 1,442 1,432 1,436 1,456 1,476 1,	NA NA NA NA NA 230 192 195 145 148 168 165 159 187 190 174 168 165 160 161	NA NA NA NA NA NA 1 1 2 1 7 7 17 17 17 18 18 18 18 19 19 19 20	NA NA NA NA NA NA 42 49 86 99 227 727 756 711 714 766 791 821 847 855 835 735 789 808	532 631 680 855 1,019 1,063 1,600 1,918 1,684 1,934 1,881 1,834 2,320 2,375 2,349 2,407 2,466 2,474 2,487 2,475 2,471 2,416 2,270 2,336 2,297	549 642 692 866 1,030 1,074 1,611 1,928 1,696 1,955 1,900 1,849 2,331 2,387 2,363 2,427 2,478 2,489 2,503 2,493 2,493 2,493 2,435 2,290 2,357 2,320
Petron January February February March April May June July August September October November December Total	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 2 2 2 2 2 2 1 1 1 1 1	(\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$)	110 97 107 98 104 97 103 105 101 100 104 107 1,235	14 12 14 13 13 12 12 12 12 13 13 14	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	69 62 68 64 68 69 71 69 67 70 70 74	R 194 173 189 177 188 180 187 187 181 186 189 197	196 175 192 179 190 182 189 189 183 187 190 198 2,251
Post January February March April May June July August September October November December Total	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	1 1 2 2 2 2 2 2 2 2 1 1 1 1 1 8	(\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$) (\$)	105 95 104 102 103 97 101 105 102 98 103 105 1,219	14 13 13 13 14 12 12 12 12 13 13 13	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	68 69 73 65 70 69 75 74 69 73 74 76	187 178 192 181 188 179 189 193 184 186 192 196 2,246	189 180 194 184 191 181 192 195 187 188 194 198 2,271
2025 January	(s)	(s)	1	(s)	103	13	2	74	192	194

Wood and wood-derived fuels.

tire-derived fuels). $$^{\rm h}$$ The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the industrial sector.

There is a discontinuity in this time series between 2014 and 2015 due to a

change in the method for allocating motor gasoline consumption to the end-use sectors. Beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share

J Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol and biodiesel—these are included in the industrial sector

consumption statistics for the appropriate energy source.
R=Revised. NA=Not available. — =No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Industrial sector data are estimates, except for hydroelectric power in 1949–1978 and 1989 forward, and wind. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.
Sources: See end of section.

a Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

^b Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

^c Geothermal heat pump and direct use energy.

^d Solar photovoltaic (PV) electricity net generation in the industrial sector (converted to Btu by multiplying by the heat content of electricity in Table A6), both utility-scale and small-scale. See Table 10.5.

^e Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

^f Wood and wood-derived fuels.

g Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and