

1. EXTERNAL COMBUSTION SOURCES

External combustion sources include steam/electric generating plants, industrial boilers, and commercial and domestic combustion units. Coal, fuel oil, and natural gas are the major fossil fuels used by these sources. Liquefied petroleum fuels are also used in relatively small quantities. Coal, oil, and natural gas currently supply about 95 percent of the total thermal energy consumed in the United States. Nationwide consumption in 1980 was over 530×10^6 megagrams (585 million tons) of bituminous coal, nearly 3.6×10^6 megagrams (4 million tons) of anthracite coal, 91×10^9 liters (24 billion gallons) of distillate oil, 114×10^9 liters (37 billion gallons) of residual oil, and 57×10^{12} cubic meters (20 trillion cubic feet) of natural gas.

Power generation, process heating, and space heating are some of the largest fuel combustion sources of sulfur oxides, nitrogen oxides, and particulate emissions. The following sections present emission factor data on the major fossil fuels and others.