

Fernandes, S.D., N.M. Trautmann, D.G. Streets, C.A. Roden, and T.C. Bond (2007). Global biofuel use, 1850–2000. *Global Biogeochemical Cycles* 21, GB2019, doi:10.1029/2006GB002836

Abstract:

This paper presents annual, country-level estimates of biofuel use for the period 1850–2000. We estimate that global biofuel consumption rose from about 1000 Tg in 1850 to 2460 Tg in 2000, an increase of 140%. In the late 19th century, biofuel consumption in North America was very high, ~220–250 Tg/yr, because widespread land clearing supplied plentiful fuelwood. At that time biofuel use in Western Europe was lower, ~180–200 Tg/yr. As fossil fuels became available, biofuel use in the developed world fell. Compensating changes in the regional patterns of biofuel use caused global consumption to remain remarkably stable between 1850 and 1950 at ~1200 ± 200 Tg/yr. It was only after World War II that biofuel use began to increase more rapidly in response to population growth in the developing world. Between 1950 and 2000, biofuel use in Africa, South Asia, and Southeast Asia grew by 170%, 160%, and 130%, respectively.