

4. Energy content of selected substances

substance	energy content (10^6 J/kg)*
natural gas	3.9×10^7 J/m ³ (STP)
gasoline	48
petroleum (crude)	43
	(6.1×10^9 J/bbl)
typical animal fat	38
coal	29.3
charcoal	29
paper	20
dry biomass	16
air-dried wood or dung	15
crop wastes (20% moisture)	13
bread	12
milk	3.0
beer	1.8

*Except where noted
