

Convert Fuel Use to Source Energy Worksheet

Fuel	Annual fuel use	Fuel units	Multiplier	Annual energy use in source kBtu ¹
Electricity	_____	kWh	x 10.3	= _____
Electricity	_____	MWh	x 10300	= _____
Natural gas	_____	MCF	x 1000	= _____
Natural gas	_____	CCF	x 100	= _____
Natural gas	_____	CF	x 1	= _____
Natural gas	_____	MMBtu ²	x 1000	= _____
Natural gas	_____	therms	x 100	= _____
Fuel oil #2	_____	gallons	x 139	= _____
Kerosene	_____	gallons	x 135	= _____
Propane	_____	gallons	x 91	= _____
Coal ³	_____	tons	x 22000	= _____
District steam	_____	lbs	x 1.6124	= _____
District steam	_____	klbs	x 1612.4	= _____
District steam	_____	kBtu	x 1.39	= _____
District steam	_____	MMBtu	x 1390	= _____
District hot water	_____		x	= _____
District hot water	_____		x	= _____
District hot water	_____		x	= _____
District chiller water	_____	ton-hrs	x 12	= _____
District chiller water	_____	kBtu	x 1	= _____
District chiller water	_____	MMBtu ²	x 1000	= _____
Total annual source energy use (kBtu)				= _____

¹Calculate using your fuel uses and appropriate multipliers. Then sum column for total.

²MMBtu = 1,000,000 Btu.

³The coal multiplier could be as low as 16000 and as high as 26000 kBtu/ton. Check with supplier.

Enter your building's gross floor area: sq. ft.

Your building's annual source energy use intensity, EUI, is: kBtu/sf
(divide total annual source energy use by gross floor area)

NOTE: The "Create Your Own Benchmarking Distribution" download in *Tools for Better Benchmarking* provides a version of the above table for multiple buildings.