

Fuel Swithing Worksheet

Complete for the 1 initial fuel, and all potential replacement fuels. Use local price or EIA value provided.

Initial Fuel	Annual Usage				Annual Usage	
Electricity		kWh	x	0.003413	mmBtu/kWh	mmBtu
Fuel Oil		Gallons	x	0.138500	mmBtu/Gallons	mmBtu
Kerosene		Gallons	x	0.134000	mmBtu/Gallons	mmBtu
Natural Gas		Therms	x	0.100000	mmBtu/Therms	mmBtu
Propane		Gallons	x	0.091000	mmBtu/Gallons	mmBtu
Cord wood		Face Cord	x	20.000000	mmBtu/Face Cord	mmBtu
Pellets		Ton	x	16.000000	mmBtu/Ton	mmBtu
Coal		Ton	x	27.346667	mmBtu/Ton	mmBtu

Known Fuels	Local Price				Cost per mmBTU	
Electricity		\$/kWh	/	0.003413	mmBtu/kWh	\$/mmBtu
Fuel Oil		\$/Gallons	/	0.138500	mmBtu/Gallons	\$/mmBtu
Kerosene		\$/Gallons	/	0.134000	mmBtu/Gallons	\$/mmBtu
Natural Gas		\$/Therms	/	0.100000	mmBtu/Therms	\$/mmBtu
Propane		\$/Gallons	/	0.091000	mmBtu/Gallons	\$/mmBtu
Cord wood		\$/Face Cord	/	20.000000	mmBtu/Face Cord	\$/mmBtu
Pellets		\$/Ton	/	16.000000	mmBtu/Ton	\$/mmBtu
Coal		\$/Ton	/	27.346667	mmBtu/Ton	\$/mmBtu

New Fuel	Cost per mmBTU			Annual Usage		New Annual Cost
Electricity		\$/mmBtu	x		mmBtu	
Fuel Oil		\$/mmBtu	x		mmBtu	
Kerosene		\$/mmBtu	x		mmBtu	
Natural Gas		\$/mmBtu	x		mmBtu	
Propane		\$/mmBtu	x		mmBtu	
Cord wood		\$/mmBtu	x		mmBtu	
Pellets		\$/mmBtu	x		mmBtu	
Coal		\$/mmBtu	x		mmBtu	

Fuel	btu	Unit
Coal	13673	lbs
Coal	27346667	Ton
Coal	546933	40lb bag
Cord Wood	5000	lbs
Cord Wood	10000000	Ton
Cord Wood	20000000	cord
Cord Wood	200000	40lb bag
Wood Pellets	8000	lbs
Wood Pellets	16000000	Ton
Wood Pellets	32000000	cord
Wood Pellets	320000	40lb bag
Electricity	3413	kWh
Electricity	3413000	mWh
Fuel Oil	138500	gallon
Fuel Oil	19507	lbs
Kerosene	134000	gallon
Kerosene	20000	lbs
Natural Gas	1000000	dekatherm
Natural Gas	1000000	mmbtu
Natural Gas	100000	therm
Natural Gas	107000	ccf
Propane	1000000	dekatherm
Propane	1000000	mmbtu
Propane	100000	therm
Propane	257000	ccf
Propane	91000	gallon
Propane	21600	lbs

DOE EIA Values		
Electricity	0.13	\$/kWh
Fuel Oil	3	\$/Gallons
Kerosene	3.11	\$/Gallons
Natural Gas	1.05	\$/Therms
Propane	2	\$/Gallons
Cord wood	150	\$/Face Cord
Pellets	900	\$/Ton
Coal	59.43	\$/Ton

DOE EIA Values		
Electricity	\$ 38.09	\$/mmBtu
Fuel Oil	\$ 21.66	\$/mmBtu
Kerosene	\$ 23.21	\$/mmBtu
Natural Gas	\$ 10.50	\$/mmBtu
Propane	\$ 21.98	\$/mmBtu
Cord wood	\$ 7.50	\$/mmBtu
Pellets	\$ 56.25	\$/mmBtu
Coal	\$ 2.17	\$/mmBtu

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