How much coal, natural gas, or petroleum is used to generate a kilowatthour of electricity?

The annual average amounts of coal, natural gas, and petroleum fuels used to generate a kilowatthour (kWh) of electricity by U.S. electric utilities and independent power producers in 2021 were:1

- · Coal–1.12 pounds/kWh
- · Natural gas-7.36 cubic feet/kWh
- · Petroleum liquids-0.08 gallons/kWh
- · Petroleum coke-0.82 pounds/kWh

1 pound of carbon combines with 2.66 pounds of oxygen to produce 3.667 pounds of carbon dioxide. Hence 1.12 pounds of coal produces 4.1 lbs of CO2. 19.3%production rate times 4.1= 0.7913 CO2

Gasoline GGE per kwh = 0.029678483099753

1 gallon of gasoline burned produces 20 lbs of CO2.

Hence, 0.0296784...x20 #CO2 = 0.593568#CO2

1 kwh of coal produces 0.793 lbs. CO2

1 kwh of gasoline produces 0.593568 lbs CO2

FROM EIA (U.S. ENERGY INFORMATION ADMINISTRATION

FREQUENTLY ASKED QUESTIONS (FAQS)

Gasoline produces less CO2.

I really wished to forward an email to you but your site would not accept it.

Do you have an email address I could forward it to?

Thanks, Hank