

Renewable Energy Consumption, Nebraska, 2020 – 2023

[Trillion British Thermal Units (Btu)]

Year	Primary Energy Resources					
	Renewable Energy					
	Geothermal	Hydroelectric Power	Photovoltaic and Solar Thermal	Wind	Biomass	
					Biofuels	Wood and Waste
2023	1.21	3.90	0.47	40.42	113.98	4.53
2022	1.21	3.61	0.40	43.04	115.60	4.52
2021	1.21	3.83	0.32	32.73	115.82	4.35
2020	1.21	4.74	0.28	31.10	104.15	4.24

Sources: *State Energy Data Report*. Energy Information Administration, Washington, DC. Nebraska Department of Water, Energy, and Environment, Lincoln, NE.

Notes: Totals may not equal the sum of the components due to independent rounding. NA = Not Available. (s) = Btu value less than 0.05. In October 2023, the Energy Information Administration (EIA) updated the way they calculate primary energy consumption of electricity generation from noncombustible renewable energy sources (solar, wind, hydroelectric, and geothermal). Beginning with the 2022 State Energy Data System (SEDS) data cycle, EIA calculated consumption of noncombustible renewable energy for electricity generation using the captured energy approach, which applies a constant conversion factor of 3,412 British thermal units per kilowatthour (Btu/kWh), that is, the heat content of electricity. This approach is a change from EIA's old methodology, called the fossil fuel equivalency approach. The captured energy approach is more consistent with international energy statistics standards than fossil fuel equivalency. For renewable-sourced electricity generation, EIA used the fossil fuel equivalency approach to convert the data that they collected in kWh to Btu. For this method, EIA used the average annual heat rate in Btu/kWh of the nation's fossil fuel-fired power plants (natural gas, coal, petroleum). The resulting Btu value is the equivalent amount of fossil fuels that would need to be consumed to produce the same amount of electricity from these noncombustible energy sources. For the captured energy approach, instead of using the average annual heat rate of the nation's fossil-fuel fired power plants, which can vary from year to year, EIA used the constant conversion factor of 3,412 Btu/kWh.

