

Table HC8.3 Water heating in U.S. homes, by year of construction, 2020

	Number of housing units (million)									
	Year of construction									
	Total U.S. ^a	Before 1950	1950 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999	2000 to 2009	2010 to 2015	2016 to 2020
All homes	123.53	20.26	12.48	12.76	18.34	16.30	17.16	16.16	5.53	4.56
Fuel used by main water heater										
Natural gas	57.96	11.74	7.21	6.81	7.63	6.25	7.42	7.05	2.11	1.73
Electricity	58.24	7.05	4.55	5.17	9.75	9.21	8.66	8.10	3.13	2.61
Propane	4.28	0.60	0.27	0.33	0.54	0.49	0.83	0.77	0.25	0.20
Fuel oil or kerosene	2.64	0.78	0.43	0.41	0.37	0.25	0.20	0.20	Q	Q
Some other fuel	0.41	0.09	Q	0.03	0.05	0.09	0.06	0.05	Q	Q
Size of main water heater										
Small (30 gallons or less)	13.28	2.25	1.33	1.44	2.30	2.17	1.59	1.40	0.44	0.36
Medium (31 to 49 gallons)	55.37	9.76	6.32	6.23	8.35	7.27	7.65	6.26	2.07	1.46
Large (50 gallons or more)	46.83	6.64	4.06	4.34	6.74	6.10	6.95	7.72	2.35	1.93
Tankless	8.05	1.61	0.76	0.74	0.94	0.76	0.96	0.79	0.66	0.82
Age of main water heater										
Less than 2 years old	17.65	2.80	1.78	1.81	2.76	2.32	2.48	2.01	0.32	1.37
2 to 4 years old	22.49	3.53	2.23	2.36	3.28	2.68	2.74	2.37	0.64	2.66
5 to 9 years old	38.96	6.45	4.02	3.79	5.87	5.56	5.21	3.89	3.67	0.48
10 to 14 years old	25.10	4.11	2.43	2.72	3.61	3.26	3.37	4.69	0.86	Q
15 to 19 years old	10.35	1.46	1.02	1.07	1.36	1.44	1.34	2.61	Q	Q
20 years or more	8.98	1.91	0.99	0.99	1.46	1.03	2.01	0.58	N	Q
Fuel used by secondary water heater										
Natural gas	2.35	0.39	0.20	0.23	0.24	0.21	0.35	0.43	0.10	0.20
Electricity	2.91	0.37	0.16	0.16	0.35	0.45	0.51	0.47	0.13	0.32
Some other fuel	0.47	0.10	Q	Q	Q	0.05	Q	0.09	Q	0.06
Does not have a secondary water heater	117.80	19.40	12.11	12.33	17.72	15.59	16.26	15.18	5.24	3.97

Source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-457A of the 2020 Residential Energy Consumption Survey

Notes: Because of rounding, data may not sum to totals. See RECS Terminology for the definitions of terms used in these tables.

^a Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

Q = Data withheld because either the relative standard error (RSE) was greater than 50% or fewer than 10 households were in the reporting sample.

N = No households in reporting sample.

Relative standard errors (RSEs) for Table HC8.3 Water heating in U.S. homes, by year of construction, 2020

RSEs for number of housing units

	Year of construction									
	Total U.S. ^a	Before 1950	1950 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999	2000 to 2009	2010 to 2015	2016 to 2020
All homes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.84	3.44
Fuel used by main water heater										
Natural gas	0.84	1.94	2.49	2.42	2.14	2.83	2.83	2.11	5.45	6.40
Electricity	0.82	2.92	3.66	2.95	1.87	1.93	2.14	1.93	4.50	4.69
Propane	4.49	11.74	14.65	16.92	11.78	11.98	8.67	10.45	15.73	17.69
Fuel oil or kerosene	5.20	9.80	14.04	12.37	12.59	12.91	13.25	13.99	71.25	100.85
Some other fuel	15.84	32.92	70.10	40.21	43.57	27.15	27.25	27.34	45.32	66.48
Size of main water heater										
Small (30 gallons or less)	2.50	5.03	7.34	8.63	5.93	6.02	7.77	7.72	13.47	14.78
Medium (31 to 49 gallons)	1.02	2.17	2.85	2.70	2.45	2.90	2.89	2.17	6.10	6.58
Large (50 gallons or more)	1.04	3.46	4.34	3.44	3.12	3.11	2.64	1.81	5.31	5.29
Tankless	3.51	7.60	11.06	9.56	10.21	10.10	8.84	10.04	11.06	8.49
Age of main water heater										
Less than 2 years old	2.02	6.29	6.46	6.50	4.43	6.16	6.42	4.78	14.91	6.94
2 to 4 years old	1.87	5.59	5.84	5.27	4.79	5.09	5.61	5.87	10.86	4.99
5 to 9 years old	1.12	3.15	4.01	4.22	3.23	3.21	3.73	4.03	4.24	13.77
10 to 14 years old	1.66	4.52	6.54	4.88	3.40	5.42	4.92	3.78	9.30	41.77
15 to 19 years old	2.95	7.75	8.17	9.08	8.20	8.16	7.65	5.57	46.83	90.16
20 years or more	3.03	6.48	9.48	8.59	7.11	8.63	5.89	11.25	0.00	100.38
Fuel used by secondary water heater										
Natural gas	5.76	17.00	19.72	19.03	18.08	20.23	14.28	11.67	27.57	18.97
Electricity	4.81	14.08	22.82	24.01	13.83	13.56	14.58	11.97	18.79	16.74
Some other fuel	12.65	27.69	63.99	43.76	44.29	36.33	42.40	25.90	39.49	31.13
Does not have a secondary water heater	0.16	0.42	0.47	0.43	0.36	0.46	0.57	0.49	2.76	3.76

Source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-457A of the 2020 Residential Energy Consumption Survey

Notes: See RECS Terminology for the definitions of terms used in these tables.

^a Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.