Table HC8.9 Water heating in U.S. homes, by home size, 2020

Number of housing units (million)

Size of home in square feet ^b											
All homes	123.53	30.01	28.08	22.22	15.62	10.31	17.29				
Fuel used by main water heater											
Natural gas	59.33	12.56	12.18	11.14	7.93	5.91	9.62				
Electricity	57.04	16.40	14.86	9.73	6.51	3.66	5.90				
Propane	4.12	0.45	0.58	0.80	0.67	0.47	1.16				
Fuel oil or kerosene	2.62	0.51	0.35	0.50	0.46	0.23	0.57				
Some other fuel	0.41	0.10	0.11	0.06	0.05	0.04	0.04				
Size of main water heater											
Small (30 gallons or less)	13.28	5.78	3.85	1.93	0.82	0.45	0.45				
Medium (31 to 49 gallons)	55.37	12.68	14.53	10.83	7.23	4.38	5.73				
Large (50 gallons or more)	46.85	10.18	8.45	7.95	6.32	4.67	9.28				
Tankless	8.03	1.38	1.25	1.51	1.24	0.81	1.84				
Age of main water heater											
Less than 2 years old	17.65	3.13	4.01	3.79	2.39	1.75	2.59				
2 to 4 years old	22.49	4.90	4.97	4.34	2.90	1.94	3.43				
5 to 9 years old	38.96	10.24	8.91	6.71	4.91	3.07	5.13				
10 to 14 years old	25.10	6.46	5.84	3.98	3.32	2.10	3.40				
15 to 19 years old	10.35	2.63	2.28	1.95	1.18	0.78	1.53				
20 years or more	8.98	2.66	2.07	1.45	0.92	0.68	1.21				
Fuel used by secondary water heate	r										
Natural gas	2.34	0.26	0.21	0.18	0.26	0.30	1.12				
Electricity	2.92	0.45	0.28	0.38	0.38	0.37	1.07				
Some other fuel	0.48	Q	Q	0.07	0.06	Q	0.25				
Does not have a secondary water											
heater	117.78	29.28	27.56	21.59	14.91	9.59	14.86				

Data 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.

^b Total square footage includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.

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 HC8.9 Water heating in U.S. homes, by home size, 2020

Size of home in square feet ^b											
	Total U.S. ^a	Less than 1,000	1,000 to 1,499	1,500 to 1,999	2,000 to 2,499	2,500 to 2,999	3,000 or more				
All homes	0.00	1.20	1.54	1.59	2.32	2.55	1.93				
Fuel used by main water heater											
Natural gas	0.75	2.52	2.74	2.19	3.07	3.75	2.89				
Electricity	0.80	1.90	2.11	2.55	3.49	4.09	3.43				
Propane	4.44	16.28	11.32	8.81	11.92	14.42	8.00				
Fuel oil or kerosene	5.20	14.69	16.28	13.22	10.61	15.88	9.53				
Some other fuel	16.08	32.34	27.26	29.93	30.76	31.61	32.83				
Size of main water heater											
Small (30 gallons or less)	2.50	3.32	5.07	7.05	10.19	14.52	11.28				
Medium (31 to 49 gallons)	1.02	2.17	2.48	2.71	3.02	3.64	3.83				
Large (50 gallons or more)	1.04	2.75	2.98	3.20	3.65	3.40	2.34				
Tankless	3.52	9.78	9.54	7.61	8.10	10.26	5.72				
Age of main water heater											
Less than 2 years old	2.02	5.40	4.64	4.37	6.25	7.19	4.48				
2 to 4 years old	1.87	4.17	5.08	4.20	5.63	6.14	4.66				
5 to 9 years old	1.12	2.81	3.32	3.26	3.99	4.77	3.98				
10 to 14 years old	1.66	3.66	4.14	4.66	4.20	6.15	4.30				
15 to 19 years old	2.95	5.70	6.45	6.46	7.78	9.61	7.35				
20 years or more	3.03	6.37	5.91	8.75	9.01	9.76	9.81				
Fuel used by secondary water heate	er										
Natural gas	5.83	21.36	21.06	18.34	17.21	14.22	7.97				
Electricity	4.87	14.98	17.01	14.90	13.57	13.36	8.25				
Some other fuel	12.64	64.18	59.32	30.75	34.82	34.73	17.58				
Does not have a secondary water	* **** ***										
heater	0.17	1.23	1.52	1.56	2.48	2.77	2.22				

RSEs for number of housing units

Data 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.

^b Total square footage includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.