

U.S. Residential Energy by Fuel (Quad Btu)

End-Use	2015 Reference Case Consumption	2025 Consumption by Case			2025 Savings Relative to Reference Case			
		Reference	High Technology	Best Available Technology	High Technology	Best Available Technology	Average	Priority
Purchased Electricity								
Space Cooling	0.82	0.98	0.86	0.66	0.12	0.32	0.22	High
Lighting	0.50	0.39	0.20	0.21	0.19	0.18	0.18	High
Water Heating	0.46	0.49	0.30	0.32	0.19	0.17	0.18	High
Other Uses 4/	1.15	1.34	1.32	1.29	0.03	0.05	0.04	High
Clothes Dryers	0.20	0.22	0.19	0.17	0.03	0.05	0.04	Medium
Space Heating	0.36	0.35	0.32	0.30	0.02	0.05	0.04	Medium
Televisions and Related Equipment 2/	0.33	0.33	0.32	0.31	0.02	0.03	0.02	Medium
Dishwashers 1/	0.10	0.10	0.10	0.06	0.00	0.04	0.02	Medium
Refrigeration	0.38	0.38	0.37	0.36	0.00	0.02	0.01	Medium
Freezers	0.08	0.08	0.07	0.07	0.00	0.01	0.01	Low
Clothes Washers 1/	0.03	0.02	0.02	0.02	0.00	0.00	0.00	Low
Furnace Fans and Boiler Circulation Pumps	0.11	0.12	0.12	0.12	(0.00)	0.00	0.00	Low
Computers and Related Equipment 3/	0.11	0.08	0.08	0.08	0.00	(0.00)	0.00	Low
Cooking	0.11	0.12	0.12	0.13	(0.00)	(0.00)	(0.00)	Low
Delivered Energy	4.74	5.00	4.41	4.09	0.60	0.91	0.76	n/a
Natural Gas								
Water Heating	1.21	1.22	1.04	0.87	0.18	0.35	0.26	High
Space Heating	2.87	2.76	2.64	2.36	0.12	0.40	0.26	High
Cooking	0.21	0.21	0.21	0.20	0.00	0.01	0.00	Low
Clothes Dryers	0.05	0.06	0.06	0.05	0.00	0.00	0.00	Low
Space Cooling	0.02	0.02	0.02	0.02	0.00	0.00	0.00	Low
Other Uses 5/	0.24	0.23	0.23	0.23	(0.00)	0.00	0.00	Low
Delivered Energy	4.60	4.50	4.19	3.74	0.31	0.76	0.53	n/a

Source: Energy Solutions analysis of U.S. Energy Information Administration (EIA), *Annual Energy Outlook 2014*.

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Notes:

- 1/ Does not include water heating portion of load.
- 2/ Includes televisions, set-top boxes, home theater systems, DVD players, and video game consoles.
- 3/ Includes desktop and laptop computers, monitors, and networking equipment.
- 4/ Includes small electric devices, heating elements, and motors not listed above. Electric vehicles are included in the transportation sector.
- 5/ Includes such appliances as outdoor grills, exterior lights, pool heaters, spa heaters, and backup electricity generators.

Cases:

Reference case projection is a business-as-usual trend estimate, given known technology and technological and demographic trends. See *AEO 2014* for more details on assumptions.

High Demand Technology case assumes that residential advanced equipment is available earlier, at lower costs, and/or at higher efficiencies. Existing building shell efficiencies exhibit 50% more improvement than in the Reference case after 2013. For new construction, building code compliance is assumed to improve after 2013, and building shell efficiencies are assumed to meet ENERGY STAR requirements by 2023. Consumers evaluate investments in energy efficiency at a 7% real discount rate.

Best Available Technology case assumes that all future residential equipment purchases are made from a menu of technologies that includes only the most efficient models available in a particular year for each technology class, regardless of cost. Existing building shell efficiencies have twice the improvement of the Reference case after 2013. For new construction, 100% compliance with building codes is assumed, and building shell efficiencies are assumed to meet the criteria for the most efficient components after 2013. Consumers evaluate investments in energy efficiency at a 7% real discount rate.