

Table 23. Total energy consumption (all sectors), projected versus actual

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Projected (quadrillion Btu)																														
AEO1994	88.0	89.5	90.7	91.7	92.7	93.6	94.6	95.7	96.7	97.7	98.9	99.9	100.7	101.6	102.4	103.3	103.9	104.7												
AEO1995		89.2	90.0	90.6	91.9	93.0	93.8	94.6	95.3	96.2	97.2	98.3	99.3	100.2	100.9	101.8	102.5	103.4												
AEO1996			90.6	91.3	92.5	93.5	94.3	95.1	95.9	96.9	98.0	99.1	100.3	101.3	101.8	102.8	103.4	104.2	105.0	106.0	106.8	107.2	107.7							
AEO1997				92.6	93.6	95.1	96.6	97.9	98.8	99.9	101.2	102.3	103.3	104.6	105.5	106.3	106.8	107.4	108.1	108.9	109.6	110.1	110.5							
AEO1998					94.7	96.7	98.6	99.8	101.3	102.4	103.4	104.4	105.7	107.2	108.3	109.5	110.7	111.7	112.6	113.6	114.3	114.8	115.4	115.9	116.5	117.1	117.7	118.2		
AEO1999						94.6	97.0	99.2	100.9	102.0	102.8	103.5	104.6	105.8	106.9	108.1	109.3	110.3	111.3	112.2	113.3	114.2	115.2	116.0	116.9	117.8	118.6	119.5		
AEO2000							96.4	98.1	99.4	100.9	102.4	103.7	105.2	106.5	107.6	108.8	109.8	110.8	111.6	112.7	113.9	115.1	116.3	117.0	117.9	118.7	119.6	120.6		
AEO2001								97.6	99.9	102.2	104.1	105.6	107.0	108.4	109.8	111.1	112.3	113.6	114.8	116.1	117.6	118.9	120.4	121.6	122.9	124.0	125.3	126.7		
AEO2002									98.3	101.0	104.0	105.8	107.5	109.2	110.5	111.9	113.4	115.1	117.0	118.6	120.4	121.8	123.3	124.7	126.1	127.6	129.1	130.5		
AEO2003										97.5	99.9	101.6	103.1	105.0	107.0	108.9	110.7	112.8	114.7	116.6	118.4	120.0	121.5	123.1	124.6	126.2	128.0	129.8	131.3	
AEO2004											98.1	100.1	102.7	104.8	106.5	108.2	109.5	111.3	113.0	114.7	116.6	118.0	119.4	120.9	122.5	124.2	125.9	127.6	128.9	
AEO2005												99.8	101.8	103.5	105.3	107.5	109.3	110.8	112.3	113.8	115.2	116.7	117.9	119.3	120.9	122.4	123.8	125.2	126.5	
AEO2006													100.4	101.2	103.1	104.6	105.9	107.4	108.6	110.1	111.4	112.5	113.8	115.2	116.5	117.8	119.0	120.3	121.4	
AEO2007														100.6	102.1	103.4	104.6	106.0	107.2	108.4	109.7	110.9	111.9	113.1	114.1	115.2	116.5	117.8	118.9	
AEO2008															101.1	102.0	101.8	102.8	104.1	105.0	105.4	106.1	106.9	107.7	108.4	109.1	109.7	110.5	111.4	
AEO2009																100.2	97.6	98.6	100.0	101.1	101.8	101.8	101.7	102.0	102.4	102.9	103.5	104.3	104.8	
AEO2010																	95.2	96.1	98.0	99.5	100.2	100.9	101.2	101.8	102.4	103.0	103.9	104.6	105.2	
AEO2011																		97.3	97.8	98.9	100.4	100.7	101.7	102.2	102.7	103.2	103.8	104.6	105.1	
AEO2012																			97.8	97.4	96.3	96.8	97.1	97.5	97.7	98.0	98.5	99.0	99.4	
AEO2013																				95.5	95.9	96.2	97.4	98.0	98.8	99.5	100.3	100.7	100.9	
AEO2014																					96.1	96.3	97.4	98.1	99.0	99.6	100.1	100.4	100.8	
AEO2015																						98.5	97.8	98.7	99.0	99.7	100.5	100.8	101.0	
AEO2016																							96.7	97.6	98.7	99.4	100.2	100.5	100.8	
AEO2017																								96.5	97.3	98.6	99.5	99.7	100.0	
AEO2018																									97.3	99.0	99.9	100.3	100.2	
AEO2019																											100.1	100.3	100.2	100.1
AEO2020																												100.0	99.6	100.2
AEO2021																													92.9	95.1
AEO2022																														97.0
Actual	87.4	89.1	91.0	94.0	94.6	95.0	96.7	98.8	96.2	97.6	97.9	100.1	100.2	99.5	101.0	98.9	94.1	97.5	96.9	94.5	97.2	98.5	97.5	97.6	97.7	101.1	100.3	93.0	97.3	
Average absolute difference	0.7	0.3	0.6	2.5	1.5	1.2	1.4	1.9	2.6	2.5	3.1	2.5	3.1	4.8	4.3	7.2	12.1	9.6	11.0	13.8	11.7	11.0	11.7	11.9	12.0	10.4	10.6	10.4	6.9	

Table 23. Total energy consumption (all sectors), projected versus actual (continued)

Projected versus actual
(percentage difference)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
AEO1994	0.7	0.5	-0.3	-2.4	-2.0	-1.5	-2.2	-3.1	0.5	0.0	1.0	-0.1	0.5	2.1	1.4	4.4	10.3	7.4												
AEO1995		0.1	-1.2	-3.7	-2.8	-2.1	-2.9	-4.3	-0.9	-1.5	-0.8	-1.8	-0.9	0.7	-0.1	2.9	8.9	6.1												
AEO1996			-0.5	-2.9	-2.2	-1.6	-2.5	-3.8	-0.2	-0.7	0.0	-0.9	0.1	1.8	0.8	3.9	9.8	6.9	8.3	12.1	9.9	8.9	10.4							
AEO1997				-1.5	-1.1	0.1	-0.1	-1.0	2.7	2.3	3.3	2.3	3.1	5.1	4.5	7.4	13.4	10.2	11.5	15.2	12.7	11.9	13.3							
AEO1998					0.1	1.8	2.0	1.0	5.3	4.9	5.6	4.3	5.5	7.7	7.2	10.7	17.5	14.6	16.2	20.2	17.6	16.6	18.3	18.8	19.2	15.8	17.4	27.2		
AEO1999						-0.4	0.3	0.4	4.9	4.5	5.0	3.4	4.4	6.4	5.8	9.3	16.1	13.2	14.8	18.8	16.5	16.0	18.1	18.9	19.6	16.5	18.3	28.6		
AEO2000							-0.3	-0.7	3.3	3.3	4.6	3.6	5.0	7.1	6.6	10.0	16.6	13.6	15.2	19.3	17.2	16.9	19.2	19.9	20.6	17.4	19.2	29.7		
AEO2001								-1.2	3.9	4.7	6.3	5.5	6.7	8.9	8.7	12.3	19.3	16.6	18.5	22.8	20.9	20.8	23.4	24.7	25.8	22.7	24.9	36.3		
AEO2002									2.2	3.5	6.2	5.7	7.3	9.7	9.4	13.1	20.5	18.1	20.8	25.6	23.8	23.7	26.4	27.9	29.1	26.2	28.7	40.4		
AEO2003										-0.1	2.0	1.5	2.9	5.5	5.9	10.1	17.6	15.7	18.4	23.4	21.7	21.9	24.6	26.1	27.5	24.8	27.6	39.6	35.0	
AEO2004											0.1	0.1	2.5	5.3	5.4	9.4	16.3	14.2	16.6	21.4	19.9	19.8	22.4	23.9	25.4	22.8	25.5	37.2	32.5	
AEO2005												-0.3	1.6	4.0	4.2	8.7	16.1	13.6	15.9	20.4	18.5	18.6	20.9	22.3	23.7	21.1	23.5	34.7	30.0	
AEO2006													0.2	1.7	2.0	5.7	12.5	10.1	12.1	16.5	14.5	14.3	16.7	18.1	19.2	16.5	18.6	29.4	24.8	
AEO2007														1.1	1.1	4.5	11.2	8.7	10.6	14.8	12.8	12.6	14.8	16.0	16.8	14.0	16.1	26.7	22.2	
AEO2008															0.1	3.1	8.1	5.5	7.4	11.1	8.4	7.8	9.6	10.4	10.9	7.9	9.4	18.9	14.5	
AEO2009																	1.3	3.7	1.1	3.2	7.0	4.7	3.4	4.3	4.6	4.8	1.8	3.2	12.2	7.7
AEO2010																		1.1	-1.4	1.2	5.4	3.1	2.5	3.8	4.3	4.8	1.9	3.5	12.6	8.1
AEO2011																			-0.2	0.9	4.7	3.3	2.3	4.2	4.8	5.1	2.1	3.5	12.5	8.0
AEO2012																				1.0	3.1	-1.0	-1.6	-0.5	-0.1	-0.1	-3.1	-1.8	6.5	2.2
AEO2013																					1.1	-1.4	-2.3	-0.2	0.4	1.1	-1.5	0.0	8.3	3.7
AEO2014																						-1.1	-2.2	-0.2	0.6	1.3	-1.5	-0.3	8.0	3.6
AEO2015																							0.0	0.3	1.2	1.3	-1.4	0.1	8.5	3.8
AEO2016																								-0.8	0.0	1.0	-1.7	-0.1	8.2	3.6
AEO2017																									-1.1	-0.4	-2.5	-0.8	7.2	2.7
AEO2018																										-0.4	-2.1	-0.4	7.9	3.0
AEO2019																											-1.0	-0.1	7.8	2.8
AEO2020																												-0.3	7.1	3.0
AEO2021																													0.0	-2.3
AEO2022																														-0.3
Average absolute percentage difference	0.7	0.3	0.7	2.6	1.6	1.3	1.5	1.9	2.7	2.5	3.2	2.5	3.1	4.8	4.2	7.3	12.9	9.8	11.3	14.6	12.1	11.2	12.0	12.2	12.3	10.3	10.6	19.0	10.7	

Data source: Historical data are from the U.S. Energy Information Administration open data API (accessed April 2022), <http://www.eia.gov/opendata/>, series: TOTAL.TETCBUS.A; projections: Annual Energy Outlook, Reference case projections from various editions

Notes: shading indicates overestimation (blue) or underestimation (green).