

Appendix E

Low Oil Price case projections

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Table E1. World total primary energy consumption by region, Low Oil Price case, 2011–40
(quadrillion Btu)

Region	History		Projections					Average annual percent change, 2012–s40
	2011	2012	2020	2025	2030	2035	2040	
OECD								
OECD Americas	120.6	118.1	126.5	129.2	131.8	135.0	138.9	0.6
United States ^a	96.8	94.4	101.2	102.7	103.6	104.6	106.1	0.4
Canada	14.5	14.5	15.3	15.8	16.5	17.4	18.3	0.8
Mexico and Chile	9.3	9.2	10.0	10.7	11.8	13.0	14.5	1.6
OECD Europe	82.0	81.4	85.4	88.1	91.1	94.1	96.5	0.6
OECD Asia	39.4	39.0	43.9	45.6	46.8	48.2	48.9	0.8
Japan	21.2	20.8	22.1	22.6	22.7	22.6	21.8	0.2
South Korea	11.3	11.4	14.1	14.9	15.6	16.4	17.0	1.4
Australia and New Zealand	6.9	6.8	7.6	8.1	8.5	9.2	10.1	1.4
Total OECD	242.0	238.4	255.8	262.9	269.8	277.3	284.4	0.6
Non-OECD								
Non-OECD Europe and Eurasia	49.9	50.7	52.0	54.7	56.3	57.5	57.0	0.4
Russia	30.9	32.1	33.3	34.6	35.0	35.2	33.9	0.2
Other	19.0	18.6	18.8	20.1	21.4	22.4	23.1	0.8
Non-OECD Asia	168.2	175.9	223.2	243.7	263.6	284.1	300.5	1.9
China	109.4	115.0	147.0	156.6	165.0	172.3	173.9	1.5
India	25.0	26.2	32.9	38.2	44.3	51.7	60.5	3.0
Other	33.7	34.7	43.3	48.9	54.3	60.1	66.1	2.3
Middle East	29.9	31.7	41.5	45.2	49.9	54.8	59.0	2.2
Africa	20.1	21.5	26.5	30.2	33.9	38.4	43.8	2.6
Non-OECD Americas	30.5	31.0	34.0	36.8	39.5	42.6	46.2	1.4
Brazil	14.8	15.2	16.5	18.2	19.8	21.7	23.8	1.6
Other	15.7	15.8	17.5	18.7	19.7	20.9	22.4	1.3
Total Non-OECD	298.6	310.8	377.1	410.7	443.2	477.5	506.5	1.8
Total World	540.5	549.3	632.9	673.6	713.0	754.8	790.9	1.3

^aIncludes the 50 States and the District of Columbia.

Notes: Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of May 2015), www.eia.gov/ies; and International Energy Agency, "Balances of OECD and Non-OECD Statistics" (2014), www.iea.org (subscription site). **Projections:** EIA, *Annual Energy Outlook 2015*, DOE/EIA-0383(2015) (Washington, DC: April 2015); AEO2015 National Energy Modeling System, run LOWPRICE.D021915A, www.eia.gov/aeo; and World Energy Projection System Plus (2016), run IEO2016-oil_price_low_2016.02.19_115103.

Table E2. World gross domestic product (GDP) by region expressed in purchasing power parity, Low Oil Price case, 2011–40
(billion 2010 dollars)

Region	History		Projections					Average annual percent change, 2012–40
	2011	2012	2020	2025	2030	2035	2040	
OECD								
OECD Americas	18,616	19,080	23,330	26,574	29,998	33,626	37,702	2.5
United States ^a	15,021	15,369	18,742	21,299	23,963	26,735	29,885	2.4
Canada	1,396	1,422	1,700	1,881	2,073	2,290	2,521	2.1
Mexico and Chile	2,200	2,288	2,889	3,394	3,962	4,601	5,296	3.0
OECD Europe	18,670	18,638	21,493	23,604	25,662	27,741	29,880	1.7
OECD Asia	6,904	7,051	8,036	8,576	9,094	9,644	10,108	1.3
Japan	4,299	4,373	4,697	4,890	5,032	5,151	5,159	0.6
South Korea	1,528	1,563	1,961	2,134	2,324	2,527	2,703	2.0
Australia and New Zealand	1,077	1,115	1,379	1,552	1,737	1,966	2,247	2.5
Total OECD	44,189	44,769	52,859	58,754	64,753	71,012	77,690	2.0
Non-OECD								
Non-OECD Europe and Eurasia	5,380	5,535	6,591	7,693	8,858	10,169	11,432	2.6
Russia	3,165	3,273	3,626	4,047	4,473	4,939	5,249	1.7
Other	2,215	2,262	2,965	3,646	4,385	5,230	6,183	3.7
Non-OECD Asia	26,261	27,914	43,635	54,750	66,564	79,429	91,901	4.3
China	13,286	14,309	22,824	28,516	34,327	40,319	44,931	4.2
India	5,706	5,957	10,011	13,039	16,406	20,344	25,009	5.3
Other	7,268	7,648	10,801	13,195	15,831	18,765	21,962	3.8
Middle East	4,986	5,072	6,805	8,241	9,705	11,200	12,697	3.3
Africa	4,355	4,561	6,469	8,132	10,259	12,969	16,367	4.7
Non-OECD Americas	6,427	6,604	7,835	9,010	10,147	11,367	12,747	2.4
Brazil	2,916	2,968	3,359	3,836	4,305	4,795	5,333	2.1
Other	3,510	3,636	4,476	5,174	5,843	6,572	7,414	2.6
Total Non-OECD	47,408	49,686	71,335	87,826	105,533	125,134	145,145	3.9
Total World	91,598	94,455	124,194	146,579	170,286	196,146	222,835	3.1

^aIncludes the 50 States and the District of Columbia.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Derived from Oxford Economic Model (June 2015), www.oxfordeconomics.com (subscription site); and EIA, *Annual Energy Outlook 2015*, DOE/EIA-0383(2015) (Washington, DC: April 2015); AEO2015 National Energy Modeling System, run LowPRICE.D021915A, www.eia.gov/aeo.

Table E3. World liquids consumption by region, Low Oil Price case, 2011–40
(million barrels per day)

Region	History		Projections					Average annual percent change, 2012–40
	2011	2012	2020	2025	2030	2035	2040	
OECD								
OECD Americas	23.6	23.2	24.9	25.0	25.2	25.5	26.1	0.4
United States ^a	18.9	18.5	20.0	20.1	20.1	20.2	20.4	0.4
Canada	2.3	2.4	2.4	2.4	2.5	2.6	2.6	0.4
Mexico and Chile	2.4	2.4	2.5	2.5	2.6	2.8	3.1	0.8
OECD Europe	14.5	14.1	14.0	13.9	14.0	14.2	14.4	0.1
OECD Asia	7.9	8.2	7.9	7.8	7.8	7.8	7.8	-0.2
Japan	4.4	4.7	4.0	3.9	3.8	3.7	3.6	-0.9
South Korea	2.3	2.3	2.5	2.5	2.5	2.6	2.7	0.5
Australia and New Zealand	1.2	1.2	1.4	1.4	1.4	1.5	1.5	0.8
Total OECD	46.0	45.5	46.8	46.7	46.9	47.5	48.4	0.2
Non-OECD								
Non-OECD Europe and Eurasia	5.3	5.3	5.9	6.2	6.2	6.2	6.1	0.6
Russia	3.4	3.4	3.7	3.8	3.8	3.7	3.6	0.1
Other	1.9	1.8	2.2	2.4	2.5	2.5	2.6	1.2
Non-OECD Asia	20.5	21.5	27.2	29.8	32.5	35.4	38.3	2.1
China	9.5	10.2	12.9	13.8	14.7	15.3	15.5	1.5
India	3.5	3.6	4.7	5.3	6.1	7.1	8.3	3.0
Other	7.5	7.7	9.7	10.7	11.7	13.0	14.4	2.3
Middle East	7.4	7.7	10.3	10.6	11.4	12.4	13.2	1.9
Africa	3.4	3.6	4.6	5.2	5.6	6.2	7.0	2.4
Non-OECD Americas	6.4	6.7	7.8	8.2	8.7	9.2	9.8	1.4
Brazil	2.8	2.9	3.5	3.8	4.1	4.5	4.8	1.8
Other	3.6	3.8	4.2	4.4	4.6	4.7	5.0	1.0
Total Non-OECD	43.1	44.8	55.8	60.0	64.4	69.4	74.5	1.8
Total World	89.1	90.3	102.6	106.7	111.4	116.9	122.8	1.1

^aIncludes the 50 States and the District of Columbia.

Note: Totals may not equal sum of components due to independent rounding.

Sources: History: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of May 2015), www.eia.gov/ies.

Projections: EIA, *Annual Energy Outlook 2015*, DOE/EIA-0383(2015) (Washington, DC: April 2015); AEO2015 National Energy Modeling System, run LOWPRICE.D021915A, www.eia.gov/aeo; and World Energy Projection System Plus (2016), run IEO2016-oil_price_low_2016.02.19_115013.