Table 1. Africa total primary energy consumption, by case, 2015-40

(quadrillion Btu)

Average annual percent change Case 2015 2020 2025 2030 2035 2040 (2015-40) IEO2018 Reference case<sup>a</sup> 22.7 24.9 26.0 28.6 31.7 34.8 1.7% Africa High Economic Growth case 22.7 25.4 28.0 32.5 37.5 43.6 2.6%

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 2. Africa gross domestic product (GDP) expressed in real purchasing power parity, by case, 2015-40

(billion 2010 dollars)

Case	2015	2020	2025	2030	2035	2040	Average annual percent change (2015-40)
IEO2018 Reference case <sup>a</sup>	5,477	6,390	7,813	9,474	11,464	13,888	3.8%
Africa High Economic Growth case	5,477	6,605	8,605	11,091	14,250	18,342	5.0%

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_Cl\_EQUAL\_20180327\_full1p33\_180327.164420

Table 3. Africa gross domestic product (GDP) expressed in nominal purchasing power parity, by case, 2015-40

(billion nominal dollars)

Case	2015	2020	2025	2030	2035	2040	Average annual percent change (2015-40)
IEO2018 Reference case <sup>a</sup>	5,913	7,441	10,081	13,458	17,838	23,710	5.7%
Africa High Economic Growth case	5,913	7,640	10,996	15,522	21,782	30,801	6.8%

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_Cl\_EQUAL\_20180327\_full1p33\_180327.164420

Table 4. Africa gross domestic product (GDP) expressed in real market exchange rates, by case, 2015-40

(billion 2010 dollars)

Average annual percent change (2015-

Case	2015	2020	2025	2030	2035	2040	40)
IEO2018 Reference case <sup>a</sup>	2,300	2,636	3,199	3,858	4,641	5,597	3.6%
Africa High Economic Growth case	2,300	2,723	3,528	4,534	5,809	7,470	4.8%

<sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 5. Africa gross domestic product (GDP) expressed in nominal market exchange rates, by case, 2015-40

(billion nominal dollars)

Average annual percent change Case 2015 2020 2025 2030 2035 2040 (2015-40) IEO2018 Reference case<sup>a</sup> 3,787 5,210 5.9% 2,320 2,671 7,081 9,681 Africa High Economic Growth case 2,320 2,742 3,963 5,427 7,445 10,506 6.2%

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 6. Africa industrial sector energy consumption, by case and sector, 2015-40

(quadrillion Btu)

Average annual percent change (2015-

					•	
2015	2020	2025	2030	2035	2040	40)
2.5	2.7	3.0	3.3	3.6	3.9	1.8%
6.1	6.5	6.5	7.0	7.5	7.9	1.0%
1.6	1.6	1.7	1.8	2.0	2.2	1.5%
10.2	10.8	11.1	12.0	13.0	14.1	1.3%
2.5	2.8	3.2	3.7	4.2	4.9	2.7%
6.1	6.7	7.2	8.2	9.5	10.9	2.3%
1.6	1.6	1.7	2.0	2.3	2.7	2.3%
10.2	11.1	12.1	14.0	16.1	18.5	2.4%
	2.5 6.1 1.6 10.2 2.5 6.1 1.6	2.5 2.7 6.1 6.5 1.6 1.6 10.2 10.8  2.5 2.8 6.1 6.7 1.6 1.6	2.5     2.7     3.0       6.1     6.5     6.5       1.6     1.6     1.7       10.2     10.8     11.1       2.5     2.8     3.2       6.1     6.7     7.2       1.6     1.6     1.7	2.5     2.7     3.0     3.3       6.1     6.5     6.5     7.0       1.6     1.6     1.7     1.8       10.2     10.8     11.1     12.0       2.5     2.8     3.2     3.7       6.1     6.7     7.2     8.2       1.6     1.6     1.7     2.0	2.5     2.7     3.0     3.3     3.6       6.1     6.5     6.5     7.0     7.5       1.6     1.6     1.7     1.8     2.0       10.2     10.8     11.1     12.0     13.0       2.5     2.8     3.2     3.7     4.2       6.1     6.7     7.2     8.2     9.5       1.6     1.6     1.7     2.0     2.3	2015         2020         2025         2030         2035         2040           2.5         2.7         3.0         3.3         3.6         3.9           6.1         6.5         6.5         7.0         7.5         7.9           1.6         1.6         1.7         1.8         2.0         2.2           10.2         10.8         11.1         12.0         13.0         14.1           2.5         2.8         3.2         3.7         4.2         4.9           6.1         6.7         7.2         8.2         9.5         10.9           1.6         1.6         1.7         2.0         2.3         2.7

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

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 7. Africa gross output expressed in real purchasing power parity, by case and sector, 2015-40

(billion 2010 dollars)

Average annual

						percent change (2015-		
Case/sector	2015	2020	2025	2030	2035	2040	40)	
IEO2018 Reference case <sup>a</sup>								
Energy-intensive manufacturing	821	1,058	1,247	1,478	1,787	2,143	3.9%	
Nonenergy-intensive manufacturing	848	1,035	1,175	1,335	1,506	1,684	2.8%	
Agriculture	1,151	1,309	1,523	1,771	2,011	2,267	2.7%	
Extraction	1,357	1,355	1,366	1,400	1,479	1,575	0.6%	
Construction	1,082	1,322	1,663	2,036	2,474	2,986	4.1%	
Services	4,760	5,402	6,488	7,713	9,045	10,517	3.2%	
Total	10,020	11,481	13,461	15,733	18,302	21,171	3.0%	
Africa High Economic Growth case								
Energy-intensive manufacturing	821	1,093	1,375	1,736	2,228	2,838	5.1%	
Nonenergy-intensive manufacturing	848	1,067	1,301	1,589	1,927	2,317	4.1%	
Agriculture	1,151	1,318	1,575	1,889	2,217	2,586	3.3%	
Extraction	1,357	1,389	1,481	1,623	1,830	2,076	1.7%	
Construction	1,082	1,362	1,807	2,322	2,948	3,709	5.0%	
Services	4,760	5,489	6,801	8,242	9,802	11,518	3.6%	
Total	10,020	11,718	14,339	17,401	20,952	25,043	3.7%	

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

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 8. Africa gross output expressed in nominal purchasing power parity, by case and sector, 2015-40

(billion nominal dollars)

Average annual

						percent change (2015		
Case/sector	2015	2020	2025	2030	2035	2040	40)	
IEO2018 Reference case <sup>a</sup>								
Energy-intensive manufacturing	778	1,167	1,566	2,081	2,785	3,664	6.4%	
Nonenergy-intensive manufacturing	906	1,049	1,227	1,449	1,706	1,990	3.2%	
Agriculture	1,595	1,289	1,592	1,973	2,382	2,842	2.3%	
Extraction	962	1,111	1,291	1,480	1,749	2,057	3.1%	
Construction	1,388	1,669	2,280	3,035	4,014	5,260	5.5%	
Services	5,047	5,643	7,086	9,001	11,312	14,072	4.2%	
Total	10,675	11,929	15,043	19,020	23,949	29,886	4.2%	
Africa High Economic Growth case								
Energy-intensive manufacturing	778	1,192	1,670	2,346	3,395	4,918	7.7%	
Nonenergy-intensive manufacturing	906	1,068	1,290	1,565	1,904	2,318	3.8%	
Agriculture	1,595	1,282	1,594	2,016	2,533	3,187	2.8%	
Extraction	962	1,122	1,336	1,597	2,014	2,572	4.0%	
Construction	1,388	1,697	2,374	3,226	4,405	6,025	6.0%	
Services	5,047	5,635	6,920	8,315	9,748	11,185	3.2%	
Total	10,675	11,995	15,184	19,065	23,999	30,206	4.2%	

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

<sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420

Table 9. Africa total delivered energy consumption, by case and end-use sector, 2015-40

(quadrillion Btu)

Case/sector	2015	2020	2025	2030	2035	2040	Average annual percent change (2015-40)
IEO2018 Reference case <sup>a</sup>							
Industrial end-use sector	10.2	10.8	11.1	12.0	13.0	14.1	1.3%
All other end-use sectors	7.2	7.8	8.8	9.9	11.1	12.6	2.3%
Total delivered energy	17.4	18.6	20.0	21.9	24.1	26.6	1.7%
Africa High Economic Growth case							
Industrial end-use sector	10.2	11.1	12.1	14.0	16.1	18.5	2.4%
All other end-use sectors	7.2	8.0	9.4	10.9	12.8	15.3	3.1%
Total delivered energy	17.4	19.1	21.5	24.9	28.8	33.7	2.7%

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

<sup>&</sup>lt;sup>a</sup>The IEO2018 Reference case includes updates to the macroeconomic information, but no modeling changes have been made to other end-use sectors or assumptions Sources: U.S. Energy Information Administration (EIA), World Energy Projection System Plus (2018), IEO2018 Reference case; run tPGDfix\_AEO2018\_Nov30dbs\_180104.155422 and Africa High Economic Growth case; run AFR\_Hi\_CI\_EQUAL\_20180327\_full1p33\_180327.164420