

Table A3. Energy prices by sector and source
 (2013 dollars per million Btu, unless otherwise noted)

| Sector and source | Reference case | | | | | | | Annual growth 2013-2040 (percent) |
|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|---|
| | 2012 | 2013 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Residential | | | | | | | | |
| Propane | 24.3 | 23.3 | 23.0 | 23.7 | 24.4 | 25.5 | 26.6 | 0.5% |
| Distillate fuel oil..... | 27.3 | 27.2 | 21.5 | 23.7 | 26.3 | 29.4 | 32.9 | 0.7% |
| Natural gas | 10.6 | 10.0 | 11.6 | 12.7 | 12.8 | 13.7 | 15.5 | 1.6% |
| Electricity | 35.3 | 35.6 | 37.8 | 39.6 | 40.0 | 40.8 | 42.4 | 0.6% |
| Commercial | | | | | | | | |
| Propane | 21.0 | 20.0 | 19.4 | 20.2 | 21.1 | 22.5 | 23.9 | 0.7% |
| Distillate fuel oil..... | 26.8 | 26.7 | 21.0 | 23.2 | 25.8 | 28.9 | 32.5 | 0.7% |
| Residual fuel oil | 22.9 | 22.1 | 14.2 | 16.0 | 18.1 | 20.6 | 24.3 | 0.4% |
| Natural gas | 8.2 | 8.1 | 9.6 | 10.5 | 10.4 | 11.1 | 12.6 | 1.6% |
| Electricity | 30.0 | 29.7 | 31.1 | 32.5 | 32.6 | 33.1 | 34.5 | 0.6% |
| Industrial¹ | | | | | | | | |
| Propane | 21.3 | 20.3 | 19.6 | 20.5 | 21.5 | 22.9 | 24.5 | 0.7% |
| Distillate fuel oil..... | 27.4 | 27.3 | 21.2 | 23.5 | 26.1 | 29.2 | 32.7 | 0.7% |
| Residual fuel oil | 20.6 | 20.0 | 13.3 | 15.1 | 17.2 | 19.7 | 23.5 | 0.6% |
| Natural gas ² | 3.8 | 4.6 | 6.2 | 6.9 | 6.8 | 7.5 | 8.8 | 2.5% |
| Metallurgical coal | 7.3 | 5.5 | 5.8 | 6.2 | 6.7 | 6.9 | 7.2 | 1.0% |
| Other industrial coal..... | 3.3 | 3.2 | 3.3 | 3.5 | 3.6 | 3.7 | 3.9 | 0.7% |
| Coal to liquids | -- | -- | -- | -- | -- | -- | -- | -- |
| Electricity | 19.8 | 20.2 | 21.3 | 22.4 | 22.6 | 23.3 | 24.7 | 0.7% |
| Transportation | | | | | | | | |
| Propane | 25.3 | 24.6 | 24.0 | 24.7 | 25.5 | 26.5 | 27.6 | 0.4% |
| E85 ³ | 35.7 | 33.1 | 30.4 | 29.0 | 31.2 | 33.2 | 35.4 | 0.3% |
| Motor gasoline ⁴ | 30.7 | 29.3 | 22.5 | 24.3 | 26.4 | 29.1 | 32.3 | 0.4% |
| Jet fuel ⁵ | 23.0 | 21.8 | 16.1 | 18.3 | 21.3 | 24.5 | 28.3 | 1.0% |
| Diesel fuel (distillate fuel oil) ⁶ | 28.8 | 28.2 | 23.1 | 25.5 | 28.0 | 31.1 | 34.7 | 0.8% |
| Residual fuel oil | 20.0 | 19.3 | 11.7 | 13.3 | 15.4 | 17.6 | 20.3 | 0.2% |
| Natural gas ⁷ | 20.4 | 17.6 | 17.8 | 16.8 | 15.7 | 17.1 | 19.6 | 0.4% |
| Electricity | 27.8 | 28.5 | 30.2 | 32.3 | 32.9 | 33.9 | 36.0 | 0.9% |
| Electric power⁸ | | | | | | | | |
| Distillate fuel oil..... | 24.1 | 24.0 | 18.8 | 20.9 | 23.6 | 26.7 | 30.2 | 0.9% |
| Residual fuel oil | 20.8 | 18.9 | 11.5 | 13.3 | 15.4 | 17.8 | 21.6 | 0.5% |
| Natural gas | 3.5 | 4.4 | 5.4 | 6.3 | 6.2 | 7.0 | 8.3 | 2.4% |
| Steam coal..... | 2.4 | 2.3 | 2.4 | 2.5 | 2.7 | 2.8 | 2.9 | 0.8% |
| Average price to all users⁹ | | | | | | | | |
| Propane | 22.9 | 21.9 | 21.1 | 21.8 | 22.6 | 23.8 | 25.2 | 0.5% |
| E85 ³ | 35.7 | 33.1 | 30.4 | 29.0 | 31.2 | 33.2 | 35.4 | 0.3% |
| Motor gasoline ⁴ | 30.4 | 29.0 | 22.5 | 24.3 | 26.4 | 29.1 | 32.3 | 0.4% |
| Jet fuel ⁵ | 23.0 | 21.8 | 16.1 | 18.3 | 21.3 | 24.5 | 28.3 | 1.0% |
| Distillate fuel oil..... | 28.3 | 27.9 | 22.6 | 25.0 | 27.6 | 30.7 | 34.2 | 0.8% |
| Residual fuel oil | 20.3 | 19.4 | 12.2 | 14.0 | 16.0 | 18.4 | 21.5 | 0.4% |
| Natural gas | 5.5 | 6.1 | 7.5 | 8.3 | 8.2 | 9.0 | 10.5 | 2.0% |
| Metallurgical coal | 7.3 | 5.5 | 5.8 | 6.2 | 6.7 | 6.9 | 7.2 | 1.0% |
| Other coal | 2.5 | 2.4 | 2.4 | 2.6 | 2.7 | 2.8 | 3.0 | 0.8% |
| Coal to liquids | -- | -- | -- | -- | -- | -- | -- | -- |
| Electricity | 29.3 | 29.5 | 30.8 | 32.1 | 32.4 | 33.2 | 34.7 | 0.6% |
| Non-renewable energy expenditures by sector (billion 2013 dollars) | | | | | | | | |
| Residential..... | 234 | 243 | 254 | 268 | 276 | 289 | 311 | 0.9% |
| Commercial..... | 174 | 177 | 194 | 210 | 219 | 234 | 259 | 1.4% |
| Industrial ¹ | 218 | 224 | 264 | 302 | 323 | 349 | 389 | 2.1% |
| Transportation..... | 738 | 719 | 565 | 596 | 638 | 706 | 791 | 0.4% |
| Total non-renewable expenditures..... | 1,364 | 1,364 | 1,276 | 1,376 | 1,456 | 1,579 | 1,751 | 0.9% |
| Transportation renewable expenditures..... | 0 | 1 | 1 | 4 | 6 | 8 | 10 | 10.2% |
| Total expenditures | 1,365 | 1,364 | 1,277 | 1,379 | 1,462 | 1,587 | 1,761 | 0.9% |

Table A3. Energy prices by sector and source (continued)
 (nominal dollars per million Btu, unless otherwise noted)

| Sector and source | Reference case | | | | | | | Annual growth 2013-2040 (percent) |
|--|----------------|------|------|------|------|------|------|---|
| | 2012 | 2013 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Residential | | | | | | | | |
| Propane | 23.9 | 23.3 | 26.1 | 29.1 | 32.8 | 37.5 | 43.1 | 2.3% |
| Distillate fuel oil..... | 26.9 | 27.2 | 24.4 | 29.1 | 35.3 | 43.2 | 53.3 | 2.5% |
| Natural gas | 10.4 | 10.0 | 13.2 | 15.7 | 17.1 | 20.2 | 25.1 | 3.5% |
| Electricity | 34.8 | 35.6 | 42.9 | 48.8 | 53.6 | 60.0 | 68.8 | 2.5% |
| Commercial | | | | | | | | |
| Propane | 20.7 | 20.0 | 22.0 | 24.9 | 28.3 | 33.0 | 38.8 | 2.5% |
| Distillate fuel oil..... | 26.4 | 26.7 | 23.8 | 28.6 | 34.6 | 42.5 | 52.6 | 2.5% |
| Residual fuel oil | 22.6 | 22.1 | 16.1 | 19.7 | 24.3 | 30.3 | 39.4 | 2.2% |
| Natural gas | 8.0 | 8.1 | 10.8 | 13.0 | 13.9 | 16.4 | 20.5 | 3.5% |
| Electricity | 29.6 | 29.7 | 35.3 | 40.0 | 43.7 | 48.7 | 56.0 | 2.4% |
| Industrial¹ | | | | | | | | |
| Propane | 21.0 | 20.3 | 22.3 | 25.2 | 28.8 | 33.7 | 39.7 | 2.5% |
| Distillate fuel oil..... | 27.0 | 27.3 | 24.1 | 29.0 | 35.0 | 42.9 | 53.0 | 2.5% |
| Residual fuel oil | 20.3 | 20.0 | 15.1 | 18.6 | 23.1 | 29.0 | 38.0 | 2.4% |
| Natural gas ² | 3.8 | 4.6 | 7.0 | 8.5 | 9.1 | 11.1 | 14.2 | 4.3% |
| Metallurgical coal..... | 7.2 | 5.5 | 6.6 | 7.7 | 8.9 | 10.2 | 11.6 | 2.8% |
| Other industrial coal..... | 3.3 | 3.2 | 3.8 | 4.3 | 4.8 | 5.5 | 6.3 | 2.5% |
| Coal to liquids | -- | -- | -- | -- | -- | -- | -- | -- |
| Electricity | 19.5 | 20.2 | 24.2 | 27.5 | 30.3 | 34.2 | 40.0 | 2.6% |
| Transportation | | | | | | | | |
| Propane | 24.9 | 24.6 | 27.2 | 30.4 | 34.1 | 38.9 | 44.8 | 2.2% |
| E85 ³ | 35.2 | 33.1 | 34.4 | 35.8 | 41.9 | 48.8 | 57.4 | 2.1% |
| Motor gasoline ⁴ | 30.2 | 29.3 | 25.5 | 29.9 | 35.3 | 42.8 | 52.4 | 2.2% |
| Jet fuel ⁵ | 22.6 | 21.8 | 18.3 | 22.6 | 28.6 | 36.0 | 45.8 | 2.8% |
| Diesel fuel (distillate fuel oil) ⁶ | 28.4 | 28.2 | 26.2 | 31.4 | 37.6 | 45.7 | 56.2 | 2.6% |
| Residual fuel oil | 19.7 | 19.3 | 13.2 | 16.4 | 20.6 | 25.9 | 32.9 | 2.0% |
| Natural gas ⁷ | 20.1 | 17.6 | 20.2 | 20.6 | 21.0 | 25.2 | 31.8 | 2.2% |
| Electricity | 27.4 | 28.5 | 34.3 | 39.8 | 44.1 | 49.9 | 58.4 | 2.7% |
| Electric power⁸ | | | | | | | | |
| Distillate fuel oil..... | 23.8 | 24.0 | 21.3 | 25.8 | 31.7 | 39.3 | 49.0 | 2.7% |
| Residual fuel oil | 20.5 | 18.9 | 13.0 | 16.3 | 20.6 | 26.2 | 35.0 | 2.3% |
| Natural gas | 3.5 | 4.4 | 6.1 | 7.7 | 8.3 | 10.3 | 13.4 | 4.2% |
| Steam coal..... | 2.4 | 2.3 | 2.7 | 3.1 | 3.6 | 4.1 | 4.7 | 2.6% |

Table A3. Energy prices by sector and source (continued)
 (nominal dollars per million Btu, unless otherwise noted)

| Sector and source | Reference case | | | | | | | Annual growth 2013-2040 (percent) |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------------------|
| | 2012 | 2013 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Average price to all users⁹ | | | | | | | | |
| Propane | 22.6 | 21.9 | 23.9 | 26.8 | 30.3 | 35.0 | 40.9 | 2.3% |
| E85 ³ | 35.2 | 33.1 | 34.4 | 35.8 | 41.9 | 48.8 | 57.4 | 2.1% |
| Motor gasoline ⁴ | 30.0 | 29.0 | 25.5 | 29.9 | 35.3 | 42.8 | 52.4 | 2.2% |
| Jet fuel ⁵ | 22.6 | 21.8 | 18.3 | 22.6 | 28.6 | 36.0 | 45.8 | 2.8% |
| Distillate fuel oil | 27.9 | 27.9 | 25.7 | 30.8 | 36.9 | 45.1 | 55.5 | 2.6% |
| Residual fuel oil | 20.0 | 19.4 | 13.8 | 17.2 | 21.5 | 27.0 | 34.8 | 2.2% |
| Natural gas | 5.4 | 6.1 | 8.5 | 10.2 | 11.0 | 13.2 | 17.0 | 3.8% |
| Metallurgical coal | 7.2 | 5.5 | 6.6 | 7.7 | 8.9 | 10.2 | 11.6 | 2.8% |
| Other coal | 2.4 | 2.4 | 2.8 | 3.2 | 3.7 | 4.2 | 4.8 | 2.6% |
| Coal to liquids | -- | -- | -- | -- | -- | -- | -- | -- |
| Electricity | 28.8 | 29.5 | 34.9 | 39.5 | 43.4 | 48.7 | 56.2 | 2.4% |
| Non-renewable energy expenditures by sector (billion nominal dollars) | | | | | | | | |
| Residential | 231 | 243 | 288 | 330 | 370 | 425 | 504 | 2.7% |
| Commercial | 172 | 177 | 220 | 259 | 294 | 344 | 420 | 3.2% |
| Industrial ¹ | 215 | 224 | 299 | 372 | 433 | 513 | 631 | 3.9% |
| Transportation | 727 | 719 | 641 | 734 | 855 | 1,038 | 1,283 | 2.2% |
| Total non-renewable expenditures | 1,344 | 1,364 | 1,448 | 1,694 | 1,952 | 2,320 | 2,839 | 2.8% |
| Transportation renewable expenditures | 0 | 1 | 1 | 4 | 8 | 12 | 16 | 12.2% |
| Total expenditures | 1,345 | 1,364 | 1,449 | 1,698 | 1,960 | 2,332 | 2,855 | 2.8% |

¹Includes energy for combined heat and power plants that have a non-regulatory status, and small on-site generating systems.

²Excludes use for lease and plant fuel.

³E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁴Sales weighted-average price for all grades. Includes Federal, State, and local taxes.

⁵Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.

⁶Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.

⁷Natural gas used as fuel in motor vehicles, trains, and ships. Includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

⁸Includes electricity-only and combined heat and power plants that have a regulatory status.

⁹Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

-- = Not applicable.

Note: Data for 2012 and 2013 are model results and may differ from official EIA data reports.

Sources: 2012 and 2013 prices for motor gasoline, distillate fuel oil, and jet fuel are based on prices in the U.S. Energy Information Administration (EIA), *Petroleum Marketing Monthly*, DOE/EIA-0380(2014/08) (Washington, DC, August 2014). 2012 residential, commercial, and industrial natural gas delivered prices: EIA, *Natural Gas Annual 2013*, DOE/EIA-0131(2013) (Washington, DC, October 2014). 2013 residential, commercial, and industrial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2014/07) (Washington, DC, July 2014). 2012 transportation sector natural gas delivered prices are based on: EIA, *Natural Gas Annual 2013*, DOE/EIA-0131(2013) (Washington, DC, October 2014), EIA, *State Energy Data Report 2012*, DOE/EIA-0214(2012) (Washington, DC, June 2014) and estimated State and Federal motor fuel taxes and dispensing costs or charges. 2013 transportation sector natural gas delivered prices are model results. 2012 and 2013 electric power sector distillate and residual fuel oil prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(2014/11) (Washington, DC, November 2014). 2012 and 2013 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, April 2013 and April 2014, Table 4.2, and EIA, *State Energy Data Report 2012*, DOE/EIA-0214(2012) (Washington, DC, June 2014). 2012 and 2013 coal prices based on: EIA, *Quarterly Coal Report, October–December 2013*, DOE/EIA-0121(2013/4Q) (Washington, DC, March 2014) and EIA, AEO2015, National Energy Modeling System run REF2015.D021915A. 2012 and 2013 electricity prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(2014/11) (Washington, DC, November 2014). 2012 and 2013 E85 prices derived from monthly prices in the Clean Cities Alternative Fuel Price Report. **Projections:** EIA, AEO2015 National Energy Modeling System run REF2015.D021915A.