

| Table 1. Total Energy Supply and Disposition Summary<br>(Quadrillion Btu per Year, Unless Otherwise Noted) |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
|--|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
|  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
|  | 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   | 1996-2020 |
| <b>Production</b>  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
| Crude Oil & Lease Condensate   | 13.71 | 13.57 | 13.54 | 13.41 | 13.27 | 13.10  | 12.96  | 12.88  | 12.79  | 12.71  | 12.61  | 12.53 | 12.42 | 12.29 | 12.14 | 11.99  | 11.84  | 11.69  | 11.50  | 11.31  | 11.13  | 10.95  | 10.77  | 10.60  | 10.44  | -1.1%     |
| Natural Gas Plant Liquids  | 2.46  | 2.50  | 2.37  | 2.36  | 2.33  | 2.31   | 2.37   | 2.41   | 2.47   | 2.59   | 2.72   | 2.86  | 2.95  | 3.02  | 3.11  | 3.17   | 3.44   | 3.34   | 3.40   | 3.61   | 3.47   | 3.49   | 3.53   | 3.55   | 3.57   | 1.6%      |
| Dry Natural Gas  | 19.55 | 18.89 | 19.33 | 20.59 | 20.34 | 20.19  | 20.65  | 20.98  | 21.51  | 22.53  | 23.53  | 24.71 | 25.40 | 25.97 | 26.67 | 27.21  | 27.92  | 28.55  | 29.03  | 29.26  | 29.56  | 29.67  | 30.01  | 30.13  | 30.27  | 1.8%      |
| Coal   | 22.64 | 23.14 | 23.92 | 24.19 | 24.22 | 24.38  | 24.42  | 24.41  | 24.44  | 21.02  | 19.07  | 16.80 | 15.27 | 14.21 | 13.69 | 13.12  | 12.36  | 11.70  | 11.10  | 10.66  | 10.21  | 9.79   | 9.52   | 9.13   | 9.08   | -3.7%     |
| Nuclear Power  | 7.20  | 6.88  | 7.00  | 7.25  | 7.30  | 7.35   | 7.41   | 7.45   | 7.38   | 7.30   | 7.25   | 7.21  | 7.14  | 7.12  | 6.98  | 6.84   | 6.78   | 6.60   | 6.55   | 6.31   | 6.21   | 5.98   | 5.90   | 5.89   | 5.90   | -0.8%     |
| Renewable Energy 1/  | 6.83  | 6.92  | 6.62  | 6.70  | 6.77  | 6.82   | 6.90   | 6.94   | 7.02   | 7.18   | 7.26   | 7.38  | 7.48  | 7.60  | 7.70  | 7.83   | 8.11   | 8.20   | 8.39   | 8.58   | 8.75   | 9.01   | 9.26   | 9.49   | 9.73   | 1.5%      |
| Other 2/   | 1.33  | 0.99  | 1.14  | 0.51  | 0.53  | 0.54   | 0.54   | 0.56   | 0.56   | 0.52   | 0.54   | 0.55  | 0.58  | 0.57  | 0.56  | 0.51   | 0.55   | 0.60   | 0.59   | 0.63   | 0.64   | 0.62   | 0.63   | 0.65   | 0.66   | -2.9%     |
| Total  | 73.73 | 72.90 | 73.91 | 75.00 | 74.76 | 74.69  | 75.26  | 75.63  | 76.17  | 73.84  | 72.98  | 72.05 | 71.25 | 70.78 | 70.85 | 70.67  | 71.00  | 70.69  | 70.56  | 70.37  | 69.97  | 69.50  | 69.63  | 69.44  | 69.65  | -0.2%     |
| <b>Imports</b>   |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
| Crude Oil 3/   | 16.30 | 17.17 | 17.46 | 19.29 | 19.47 | 20.32  | 20.72  | 21.02  | 21.33  | 21.33  | 21.43  | 21.53 | 21.65 | 21.67 | 21.94 | 22.33  | 22.51  | 22.81  | 23.05  | 23.24  | 23.51  | 23.74  | 23.97  | 24.20  | 24.67  | 1.7%      |
| Petroleum Products 4/  | 3.98  | 4.21  | 4.41  | 4.21  | 4.72  | 4.89   | 5.00   | 5.21   | 5.53   | 5.23   | 5.43   | 4.92  | 5.01  | 5.29  | 5.34  | 5.62   | 5.87   | 5.97   | 6.33   | 6.65   | 6.69   | 7.11   | 7.24   | 7.43   | 7.42   | 2.6%      |
| Natural Gas  | 2.93  | 3.25  | 3.44  | 3.91  | 4.13  | 4.60   | 4.63   | 4.70   | 4.77   | 4.93   | 5.08   | 5.23  | 5.31  | 5.43  | 5.49  | 5.61   | 5.72   | 5.83   | 5.93   | 5.99   | 6.06   | 6.07   | 6.08   | 6.09   | 6.10   | 3.1%      |
| Other Imports 5/   | 0.57  | 0.63  | 0.60  | 0.54  | 1.05  | 1.05   | 1.06   | 1.02   | 1.08   | 0.52   | 0.44   | 0.44  | 0.42  | 0.44  | 0.44  | 0.46   | 0.46   | 0.46   | 0.45   | 0.45   | 0.45   | 0.46   | 0.47   | 0.48   | 0.49   | -0.6%     |
| Total  | 23.78 | 25.26 | 25.91 | 27.96 | 29.38 | 30.86  | 31.42  | 31.96  | 32.71  | 32.00  | 32.38  | 32.12 | 32.39 | 32.84 | 33.21 | 34.01  | 34.56  | 35.07  | 35.76  | 36.32  | 36.72  | 37.39  | 37.76  | 38.20  | 38.67  | 2.0%      |
| <b>Exports</b>   |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum 6/   | 2.04  | 1.98  | 1.94  | 1.97  | 2.00  | 2.07   | 2.01   | 2.01   | 2.11   | 1.88   | 2.06   | 1.91  | 1.94  | 1.95  | 1.87  | 1.88   | 1.79   | 1.80   | 1.75   | 1.72   | 1.66   | 1.64   | 1.64   | 1.67   | 1.67   | -0.8%     |
| Natural Gas  | 0.16  | 0.15  | 0.16  | 0.16  | 0.16  | 0.15   | 0.15   | 0.15   | 0.15   | 0.15   | 0.14   | 0.14  | 0.14  | 0.14  | 0.14  | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | -0.5%     |
| Coal   | 2.37  | 2.24  | 2.25  | 2.26  | 2.27  | 2.29   | 2.30   | 2.29   | 2.28   | 2.27   | 2.26   | 2.26  | 2.27  | 2.28  | 2.28  | 2.27   | 2.27   | 2.29   | 2.30   | 2.31   | 2.32   | 2.33   | 2.35   | 2.36   | 2.37   | 0.0%      |
| Total  | 4.57  | 4.37  | 4.35  | 4.39  | 4.43  | 4.51   | 4.46   | 4.45   | 4.54   | 4.30   | 4.47   | 4.31  | 4.36  | 4.37  | 4.29  | 4.29   | 4.20   | 4.23   | 4.19   | 4.17   | 4.13   | 4.12   | 4.13   | 4.16   | 4.18   | -0.4%     |
| Discrepancy 7/   | 0.82  | 0.35  | 0.88  | -0.09 | -0.04 | -0.07  | -0.10  | -0.08  | -0.10  | 0.07   | -0.02  | -0.21 | -0.10 | -0.06 | -0.20 | -0.22  | -0.39  | -0.20  | -0.22  | -0.33  | -0.14  | -0.06  | -0.20  | -0.20  | -0.34  | N/A       |
| <b>Consumption</b>   |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum Products 8/  | 36.01 | 36.76 | 36.94 | 37.85 | 38.35 | 39.09  | 39.55  | 40.01  | 40.52  | 40.36  | 40.58  | 40.32 | 40.50 | 40.76 | 41.12 | 41.54  | 42.03  | 42.43  | 42.93  | 43.40  | 43.61  | 44.09  | 44.30  | 44.56  | 44.78  | 0.9%      |
| Natural Gas  | 22.43 | 22.04 | 23.35 | 24.23 | 24.20 | 24.53  | 25.03  | 25.42  | 26.02  | 27.18  | 28.32  | 29.66 | 30.44 | 31.09 | 31.82 | 32.47  | 33.30  | 34.04  | 34.61  | 34.91  | 35.26  | 35.39  | 35.74  | 35.87  | 36.02  | 2.0%      |
| Coal   | 20.90 | 21.17 | 22.10 | 22.19 | 22.25 | 22.39  | 22.42  | 22.44  | 22.46  | 19.28  | 17.22  | 14.82 | 13.38 | 12.34 | 11.68 | 11.22  | 10.48  | 9.80   | 9.19   | 8.73   | 8.32   | 7.97   | 7.58   | 7.18   | 7.06   | -4.4%     |
| Nuclear Power  | 7.20  | 6.88  | 7.00  | 7.25  | 7.30  | 7.35   | 7.41   | 7.45   | 7.38   | 7.30   | 7.25   | 7.21  | 7.14  | 7.12  | 6.98  | 6.84   | 6.78   | 6.60   | 6.55   | 6.31   | 6.21   | 5.98   | 5.90   | 5.89   | 5.90   | -0.8%     |
| Renewable Energy 1/  | 6.84  | 6.93  | 6.63  | 6.70  | 6.77  | 6.83   | 6.91   | 6.95   | 7.03   | 7.20   | 7.28   | 7.40  | 7.50  | 7.62  | 7.72  | 7.86   | 8.13   | 8.23   | 8.42   | 8.61   | 8.78   | 9.04   | 9.30   | 9.52   | 9.77   | 1.5%      |
| Other 9/   | 0.39  | 0.36  | 0.34  | 0.27  | 0.78  | 0.78   | 0.80   | 0.77   | 0.84   | 0.30   | 0.23   | 0.24  | 0.23  | 0.25  | 0.25  | 0.24   | 0.23   | 0.23   | 0.23   | 0.23   | 0.24   | 0.25   | 0.25   | 0.26   | 0.26   | -1.8%     |
| Total  | 93.77 | 94.14 | 96.35 | 98.48 | 99.66 | 100.97 | 102.13 | 103.05 | 104.24 | 101.61 | 100.87 | 99.65 | 99.18 | 99.18 | 99.57 | 100.17 | 100.96 | 101.32 | 101.92 | 102.19 | 102.43 | 102.72 | 103.06 | 103.27 | 103.79 | 0.4%      |
| Net Imports - Petroleum  | 18.25 | 19.41 | 19.92 | 21.53 | 22.19 | 23.14  | 23.72  | 24.22  | 24.75  | 24.68  | 24.80  | 24.54 | 24.71 | 25.01 | 25.41 | 26.07  | 26.59  | 26.97  | 27.63  | 28.16  | 28.54  | 29.21  | 29.57  | 29.96  | 30.42  | 2.2%      |
| <b>Prices (1996 dollars per unit)</b>  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |
| World Oil Price (\$ per bbl) 10/   | 20.48 | 18.16 | 17.98 | 18.49 | 19.00 | 19.28  | 19.41  | 19.72  | 19.92  | 19.96  | 19.76  | 19.54 | 19.28 | 18.99 | 18.72 | 18.81  | 18.87  | 18.99  | 19.10  | 19.15  | 19.18  | 19.33  | 19.44  | 19.57  | 19.73  | -0.2%     |
| Gas Wellhead Price(\$/McF) 11/   | 2.24  | 2.25  | 2.10  | 2.14  | 2.14  | 2.13   | 2.14   | 2.15   | 2.16   | 2.21   | 2.29   | 2.41  | 2.52  | 2.64  | 2.78  | 2.92   | 3.07   | 3.20   | 3.32   | 3.42   | 3.50   | 3.56   | 3.62   | 3.66   | 3.71   | 2.1%      |
| Coal Minemouth Price (\$ / ton)  | 18.50 | 18.18 | 17.58 | 17.17 | 16.86 | 16.38  | 16.09  | 15.91  | 15.68  | 16.10  | 16.17  | 16.52 | 16.53 | 16.49 | 16.42 | 16.17  | 16.10  | 16.11  | 16.14  | 16.25  | 16.33  | 16.51  | 16.41  | 16.51  | 16.24  | -0.5%     |
| Aver. Electricity (cents / Kwh)  | 6.8   | 6.6   | 6.5   | 6.4   | 6.3   | 6.2    | 6.2    | 6.1    | 6.0    | 7.4    | 8.0    | 8.6   | 8.8   | 8.8   | 8.6   | 8.4    | 8.4    | 8.3    | 8.2    | 8.3    | 8.2    | 8.2    | 8.2    | 8.1    | 0.7%   |           |

Table 1. Total Energy Supply and Disposition Summary Notes

1/ Includes grid-connected electricity from conventional hydroelectric; wood and wood waste; landfill gas; municipal solid waste; other biomass; wind; photovoltaic and solar thermal sources; non-electric energy from renewable sources, such as active and passive solar systems, and wood; and both the ethanol and gasoline components of E85, but not the ethanol components of blends less than 85 percent. Excludes electricity imports using renewable sources and nonmarketed renewable energy. See Table 18 for selected nonmarketed residential and commercial renewable energy.

2/ Includes liquid hydrogen, methanol, supplemental natural gas, and some domestic inputs to refineries.

3/ Includes imports of crude oil for the Strategic Petroleum Reserve.

4/ Includes imports of finished petroleum products, imports of unfinished oils, alcohols, ethers, and blending components.

5/ Includes coal, coal coke (net), and electricity (net).

6/ Includes crude oil and petroleum products.

7/ Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.

8/ Includes natural gas plant liquids, crude oil consumed as a fuel, and nonpetroleum based liquids for blending, such as ethanol.

9/ Includes net electricity imports, methanol, and liquid hydrogen.

10/ Average refiner acquisition cost for imported crude oil.

11/ Represents lower 48 onshore and offshore supplies.

Btu = British thermal unit.

Mcf = Thousand cubic feet.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Figures for 1996 may differ from published data due to internal conversion factors.

Sources: 1996 natural gas values: Energy Information administration (EIA), Natural Gas Monthly, DOE/EIA-0130(97/06) (Washington, DC). 1996 coal minemouth price: EIA, Coal Industry Annual 1996 DOE/EIA-0584(96) (Washington, DC, November 1997). Coal production and exports derived from: EIA, Monthly Energy Review, DOE/EIA-0035(97/08) (Washington, DC, August 1997). Other 1996 values: EIA, Annual Energy Review 1996, DOE/EIA-0384(96) (Washington, DC, July 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 2. Energy Consumption by Sector and Source<br>(Quadrillion Btu per Year, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
|  | 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  | 1996-2020 |       |
| <b>Energy Consumption</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| <b>Residential</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel  | 0.89  | 0.88  | 0.88  | 0.85  | 0.84  | 0.83  | 0.81  | 0.80  | 0.79  | 0.74  | 0.72  | 0.69  | 0.68  | 0.66  | 0.65  | 0.65  | 0.64  | 0.63  | 0.63  | 0.62  | 0.62  | 0.61  | 0.60  | 0.59  | 0.59  | -1.7%     |       |
| Kerosene   | 0.08  | 0.09  | 0.07  | 0.08  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | -1.3%     |       |
| Liquefied Petroleum Gas  | 0.42  | 0.42  | 0.42  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.42  | 0.43  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.46  | 0.46  | 0.46  | 0.4%      |       |
| Petroleum Subtotal   | 1.40  | 1.39  | 1.38  | 1.36  | 1.34  | 1.33  | 1.32  | 1.30  | 1.29  | 1.23  | 1.21  | 1.18  | 1.17  | 1.15  | 1.15  | 1.14  | 1.14  | 1.14  | 1.13  | 1.13  | 1.12  | 1.12  | 1.11  | 1.11  | 1.11  | -1.0%     |       |
| Natural Gas  | 5.39  | 5.06  | 5.26  | 5.36  | 5.40  | 5.40  | 5.44  | 5.46  | 5.51  | 5.25  | 5.16  | 5.07  | 5.05  | 5.01  | 5.00  | 5.01  | 5.04  | 5.04  | 5.06  | 5.06  | 5.07  | 5.06  | 5.06  | 5.06  | 5.06  | 5.10      | -0.2% |
| Coal   | 0.05  | 0.06  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | -1.3%     |       |
| Renewable Energy 1/  | 0.61  | 0.60  | 0.62  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.62  | 0.62  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.64  | 0.64  | 0.64  | 0.64  | 0.2%      |       |
| Electricity  | 3.68  | 3.61  | 3.80  | 3.86  | 3.99  | 4.10  | 4.15  | 4.21  | 4.29  | 4.13  | 4.11  | 4.09  | 4.10  | 4.13  | 4.19  | 4.25  | 4.34  | 4.39  | 4.45  | 4.51  | 4.59  | 4.63  | 4.69  | 4.75  | 4.82  | 1.1%      |       |
| Delivered Energy   | 11.13 | 10.72 | 11.11 | 11.24 | 11.40 | 11.48 | 11.57 | 11.63 | 11.76 | 11.26 | 11.13 | 10.98 | 10.98 | 10.96 | 11.00 | 11.07 | 11.19 | 11.23 | 11.32 | 11.38 | 11.46 | 11.48 | 11.55 | 11.60 | 11.71 | 0.2%      |       |
| Electricity Related Losses   | 8.21  | 7.88  | 8.31  | 8.43  | 8.67  | 8.83  | 8.87  | 8.92  | 8.97  | 8.33  | 8.04  | 7.75  | 7.53  | 7.38  | 7.27  | 7.19  | 7.16  | 7.07  | 7.05  | 7.05  | 7.08  | 7.09  | 7.13  | 7.19  | 7.28  | -0.5%     |       |
| Total  | 19.34 | 18.60 | 19.42 | 19.67 | 20.07 | 20.31 | 20.44 | 20.55 | 20.73 | 19.59 | 19.16 | 18.73 | 18.50 | 18.33 | 18.27 | 18.26 | 18.35 | 18.29 | 18.37 | 18.42 | 18.54 | 18.57 | 18.68 | 18.78 | 18.99 | -0.1%     |       |
| <b>Commercial</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel  | 0.44  | 0.44  | 0.41  | 0.41  | 0.41  | 0.40  | 0.40  | 0.40  | 0.39  | 0.36  | 0.35  | 0.34  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.32  | 0.32  | 0.32  | 0.32  | 0.31  | 0.31  | -1.4%     |       |
| Residual Fuel  | 0.15  | 0.15  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | -1.0%     |       |
| Kerosene   | 0.03  | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | -0.3%     |       |
| Liquefied Petroleum Gas  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.7%      |       |
| Motor Gasoline 2/  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | -0.3%     |       |
| Petroleum Subtotal   | 0.71  | 0.72  | 0.65  | 0.65  | 0.65  | 0.65  | 0.64  | 0.64  | 0.61  | 0.60  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.58  | 0.57  | 0.57  | 0.57  | 0.57  | -1.0%     |       |
| Natural Gas  | 3.30  | 3.27  | 3.41  | 3.45  | 3.48  | 3.50  | 3.53  | 3.56  | 3.60  | 3.42  | 3.35  | 3.26  | 3.24  | 3.23  | 3.22  | 3.23  | 3.24  | 3.24  | 3.26  | 3.26  | 3.26  | 3.26  | 3.26  | 3.25  | 3.27  | -0.0%     |       |
| Coal   | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.1%      |       |
| Renewable Energy 3/  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.1%      |       |
| Electricity  | 3.37  | 3.41  | 3.51  | 3.59  | 3.65  | 3.69  | 3.75  | 3.80  | 3.86  | 3.70  | 3.65  | 3.61  | 3.60  | 3.63  | 3.68  | 3.73  | 3.79  | 3.84  | 3.88  | 3.92  | 3.95  | 3.97  | 3.98  | 4.00  | 4.02  | 0.7%      |       |
| Delivered Energy   | 7.47  | 7.49  | 7.65  | 7.78  | 7.87  | 7.93  | 8.02  | 8.10  | 8.19  | 7.82  | 7.69  | 7.54  | 7.51  | 7.52  | 7.56  | 7.63  | 7.70  | 7.74  | 7.81  | 7.85  | 7.87  | 7.88  | 7.91  | 7.91  | 7.94  | 0.3%      |       |
| Electricity Related Losses   | 7.52  | 7.45  | 7.66  | 7.85  | 7.93  | 7.96  | 8.00  | 8.05  | 8.08  | 7.46  | 7.15  | 6.84  | 6.60  | 6.48  | 6.38  | 6.30  | 6.26  | 6.18  | 6.15  | 6.12  | 6.09  | 6.07  | 6.06  | 6.06  | 6.06  | -0.9%     |       |
| Total  | 14.98 | 14.94 | 15.32 | 15.63 | 15.80 | 15.89 | 16.02 | 16.14 | 16.27 | 15.29 | 14.84 | 14.38 | 14.10 | 14.00 | 13.94 | 13.93 | 13.96 | 13.92 | 13.96 | 13.97 | 13.96 | 13.95 | 13.97 | 13.96 | 14.00 | -0.3%     |       |

| Table 2. Energy Consumption by Sector and Source<br>(Quadrillion Btu per Year, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
|  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|  | 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  | 1996-2020 |
| <b>Industrial 4/</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Distillate Fuel  | 1.17  | 1.18  | 1.17  | 1.19  | 1.20  | 1.23  | 1.26  | 1.28  | 1.31  | 1.33  | 1.35  | 1.37  | 1.38  | 1.40  | 1.43  | 1.46  | 1.48  | 1.50  | 1.52  | 1.52  | 1.53  | 1.54  | 1.55  | 1.55  | 1.55  | 1.2%      |
| Liquefied Petroleum Gas  | 2.12  | 2.14  | 2.13  | 2.12  | 2.15  | 2.18  | 2.21  | 2.23  | 2.25  | 2.25  | 2.29  | 2.31  | 2.32  | 2.35  | 2.38  | 2.41  | 2.43  | 2.45  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 0.6%      |
| Petrochemical Feedstocks   | 1.28  | 1.29  | 1.28  | 1.29  | 1.31  | 1.33  | 1.35  | 1.36  | 1.37  | 1.36  | 1.38  | 1.38  | 1.39  | 1.40  | 1.41  | 1.43  | 1.44  | 1.44  | 1.45  | 1.44  | 1.44  | 1.44  | 1.44  | 1.43  | 1.44  | 0.5%      |
| Residual Fuel  | 0.34  | 0.35  | 0.34  | 0.33  | 0.33  | 0.35  | 0.34  | 0.35  | 0.33  | 0.34  | 0.35  | 0.34  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.38  | 0.40  | 0.50  | 0.50  | 0.51  | 0.51  | 0.51  | 0.50  | 1.6%      |
| Motor Gasoline 2/  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.21  | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 1.1%      |
| Other Petroleum 5/   | 4.12  | 4.17  | 4.17  | 4.32  | 4.38  | 4.45  | 4.44  | 4.47  | 4.50  | 4.44  | 4.53  | 4.42  | 4.49  | 4.54  | 4.61  | 4.65  | 4.74  | 4.84  | 4.95  | 5.01  | 4.98  | 5.10  | 5.11  | 5.13  | 5.16  | 0.9%      |
| Petroleum Subtotal   | 9.23  | 9.31  | 9.29  | 9.44  | 9.57  | 9.75  | 9.81  | 9.90  | 9.98  | 9.95  | 10.12 | 10.03 | 10.14 | 10.27 | 10.41 | 10.55 | 10.71 | 10.87 | 11.01 | 11.19 | 11.16 | 11.30 | 11.31 | 11.33 | 11.37 | 0.9%      |
| Natural Gas 6/   | 9.96  | 10.21 | 10.51 | 10.80 | 10.75 | 10.73 | 10.80 | 10.78 | 10.86 | 11.11 | 11.25 | 11.41 | 11.43 | 11.48 | 11.54 | 11.63 | 11.67 | 11.67 | 11.64 | 11.47 | 11.49 | 11.38 | 11.40 | 11.35 | 11.31 | 0.5%      |
| Metallurgical Coal   | 0.85  | 0.86  | 0.86  | 0.85  | 0.83  | 0.82  | 0.80  | 0.78  | 0.77  | 0.75  | 0.72  | 0.69  | 0.66  | 0.63  | 0.61  | 0.58  | 0.56  | 0.53  | 0.51  | 0.49  | 0.47  | 0.45  | 0.43  | 0.42  | 0.40  | -3.1%     |
| Steam Coal   | 1.55  | 1.51  | 1.54  | 1.55  | 1.56  | 1.59  | 1.62  | 1.65  | 1.67  | 1.24  | 1.14  | 1.06  | 1.05  | 1.05  | 1.07  | 1.10  | 1.14  | 1.17  | 1.20  | 1.21  | 1.21  | 1.22  | 1.23  | 1.22  | 1.26  | -0.9%     |
| Net Coal Coke Imports  | 0.00  | 0.10  | 0.10  | 0.11  | 0.11  | 0.12  | 0.14  | 0.14  | 0.15  | 0.15  | 0.17  | 0.18  | 0.19  | 0.21  | 0.23  | 0.25  | 0.27  | 0.28  | 0.29  | 0.30  | 0.30  | 0.31  | 0.32  | 0.33  | 0.33  | N/A       |
| Coal Subtotal  | 2.40  | 2.46  | 2.50  | 2.51  | 2.50  | 2.53  | 2.56  | 2.58  | 2.59  | 2.13  | 2.02  | 1.92  | 1.90  | 1.90  | 1.91  | 1.93  | 1.97  | 1.98  | 2.00  | 2.00  | 1.99  | 1.98  | 1.98  | 1.97  | 1.99  | -0.8%     |
| Renewable Energy 7/  | 1.82  | 1.89  | 1.90  | 1.93  | 1.96  | 1.99  | 2.02  | 2.05  | 2.08  | 2.10  | 2.13  | 2.15  | 2.17  | 2.20  | 2.23  | 2.27  | 2.30  | 2.33  | 2.35  | 2.36  | 2.37  | 2.38  | 2.38  | 2.39  | 2.39  | 1.1%      |
| Electricity  | 3.46  | 3.54  | 3.58  | 3.67  | 3.70  | 3.79  | 3.86  | 3.91  | 3.98  | 3.92  | 3.91  | 3.88  | 3.88  | 3.91  | 3.95  | 4.01  | 4.06  | 4.09  | 4.12  | 4.11  | 4.11  | 4.12  | 4.12  | 4.11  | 4.13  | 0.7%      |
| Delivered Energy   | 26.87 | 27.40 | 27.78 | 28.35 | 28.48 | 28.79 | 29.06 | 29.21 | 29.49 | 29.21 | 29.43 | 29.39 | 29.51 | 29.75 | 30.04 | 30.40 | 30.71 | 30.94 | 31.13 | 31.13 | 31.12 | 31.16 | 31.19 | 31.15 | 31.19 | 0.6%      |
| Electricity Related Losses   | 7.72  | 7.71  | 7.82  | 8.02  | 8.06  | 8.16  | 8.24  | 8.28  | 8.34  | 7.91  | 7.66  | 7.35  | 7.11  | 6.97  | 6.85  | 6.78  | 6.71  | 6.60  | 6.52  | 6.42  | 6.34  | 6.31  | 6.26  | 6.22  | 6.23  | -0.9%     |
| Total  | 34.59 | 35.11 | 35.60 | 36.37 | 36.53 | 36.95 | 37.29 | 37.50 | 37.83 | 37.12 | 37.09 | 36.75 | 36.61 | 36.72 | 36.89 | 37.18 | 37.42 | 37.54 | 37.64 | 37.55 | 37.46 | 37.45 | 37.37 | 37.42 | 0.3%  |           |
| <b>Transportation</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Distillate Fuel 8/   | 4.48  | 4.82  | 4.95  | 5.05  | 5.15  | 5.27  | 5.37  | 5.45  | 5.54  | 5.54  | 5.59  | 5.60  | 5.63  | 5.67  | 5.73  | 5.80  | 5.86  | 5.90  | 5.93  | 5.93  | 5.93  | 5.93  | 5.93  | 5.91  | 5.93  | 1.2%      |
| Jet Fuel 9/  | 3.27  | 3.33  | 3.37  | 3.72  | 3.81  | 3.90  | 4.00  | 4.10  | 4.24  | 4.31  | 4.36  | 4.38  | 4.48  | 4.57  | 4.68  | 4.80  | 4.95  | 5.05  | 5.18  | 5.27  | 5.36  | 5.44  | 5.52  | 5.59  | 5.68  | 2.3%      |
| Motor Gasoline 2/  | 14.94 | 15.18 | 15.47 | 15.73 | 15.95 | 16.21 | 16.44 | 16.63 | 16.83 | 16.81 | 16.76 | 16.62 | 16.57 | 16.52 | 16.55 | 16.61 | 16.72 | 16.81 | 16.94 | 17.06 | 17.13 | 17.25 | 17.34 | 17.42 | 17.49 | 0.7%      |
| Residual Fuel  | 0.90  | 0.86  | 0.88  | 0.91  | 0.94  | 0.97  | 1.00  | 1.03  | 1.06  | 1.10  | 1.13  | 1.16  | 1.19  | 1.22  | 1.26  | 1.30  | 1.33  | 1.36  | 1.39  | 1.42  | 1.45  | 1.48  | 1.51  | 1.53  | 1.56  | 2.3%      |
| Liquefied Petroleum Gas  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.07  | 0.08  | 0.10  | 0.11  | 0.13  | 0.15  | 0.16  | 0.17  | 0.18  | 0.19  | 0.20  | 0.21  | 0.22  | 0.23  | 0.23  | 0.24  | 0.25  | 0.25  | 0.26  | 0.85% |           |
| Other Petroleum 10/  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 0.31  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.33  | 0.33  | 0.34  | 0.34  | 0.35  | 0.35  | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | 1.0%      |
| Petroleum Subtotal   | 23.92 | 24.51 | 25.00 | 25.75 | 26.21 | 26.71 | 27.20 | 27.63 | 28.10 | 28.21 | 28.31 | 28.25 | 28.36 | 28.49 | 28.75 | 29.04 | 29.40 | 29.68 | 30.02 | 30.27 | 30.47 | 30.70 | 30.91 | 31.07 | 31.27 | 1.1%      |
| Pipeline Fuel Natural Gas  | 0.73  | 0.76  | 0.78  | 0.81  | 0.77  | 0.76  | 0.78  | 0.76  | 0.79  | 0.82  | 0.85  | 0.88  | 0.90  | 0.91  | 0.96  | 0.97  | 1.00  | 1.04  | 1.05  | 1.07  | 1.08  | 1.08  | 1.09  | 1.10  | 1.10  | 1.7%      |
| Compressed Natural Gas   | 0.01  | 0.02  | 0.02  | 0.04  | 0.06  | 0.08  | 0.11  | 0.13  | 0.16  | 0.17  | 0.19  | 0.20  | 0.21  | 0.22  | 0.23  | 0.24  | 0.25  | 0.26  | 0.27  | 0.28  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 14.3%     |
| Renewables (E85) 11/   | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.10  | 0.11  | 0.12  | 0.13  | 0.13  | 0.14  | 0.14  | 0.15  | 0.16  | 0.16  | 0.17  | 0.17  | 0.17  | 0.18  | 15.8%     |
| Methanol 12/   | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.05  | 0.05  | 0.07  | 0.08  | 0.10  | 0.11  | 0.12  | 0.13  | 0.14  | 0.15  | 0.16  | 0.17  | 0.17  | 0.18  | 0.19  | 0.20  | 0.20  | 0.21  | 0.21  | 16.1%     |
| Liquid Hydrogen  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 80.2%     |
| Electricity  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 3.1%      |
| Delivered Energy   | 24.73 | 25.36 | 25.88 | 26.68 | 27.13 | 27.68 | 28.24 | 28.70 | 29.25 | 29.45 | 29.61 | 29.61 | 29.79 | 29.97 | 30.30 | 30.64 | 31.06 | 31.40 | 31.77 | 32.07 | 32.29 | 32.55 | 32.79 | 32.97 | 33.19 | 1.2%      |
| Electricity Related Losses   | 0.13  | 0.13  | 0.13  | 0.13  | 0.14  | 0.14  | 0.14  | 0.15  | 0.16  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 1.5%      |
| Total  | 24.86 | 25.49 | 26.02 | 26.82 | 27.27 | 27.82 | 28.38 | 28.85 | 29.42 | 29.61 | 29.78 | 29.78 | 29.96 | 30.14 | 30.47 | 30.81 | 31.23 | 31.57 | 31.95 | 32.24 | 32.47 | 32.73 | 32.97 | 33.16 | 33.38 | 1.2%      |

| Table 2. Energy Consumption by Sector and Source<br>(Quadrillion Btu per Year, Unless Otherwise Noted) |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |      |
|--|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|------|
|  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |      |
|  | 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   | 1996-2020 |      |
| Deliver. Energy Cons. All Sectors  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |      |
| Distillate Fuel  | 6.98  | 7.32  | 7.42  | 7.50  | 7.60  | 7.73   | 7.85   | 7.93   | 8.03   | 7.97   | 8.01   | 7.99  | 8.02  | 8.07  | 8.14  | 8.23   | 8.31   | 8.36   | 8.40   | 8.40   | 8.40   | 8.40   | 8.39   | 8.38   | 8.39   | 0.8%      |      |
| Kerosene   | 0.14  | 0.15  | 0.12  | 0.13  | 0.13  | 0.13   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.11  | 0.11  | 0.11  | 0.11  | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | -1.0%     |      |
| Jet Fuel 9/  | 3.27  | 3.33  | 3.37  | 3.72  | 3.81  | 3.90   | 4.00   | 4.10   | 4.24   | 4.31   | 4.36   | 4.38  | 4.48  | 4.57  | 4.68  | 4.80   | 4.95   | 5.05   | 5.18   | 5.27   | 5.36   | 5.44   | 5.52   | 5.59   | 5.68   | 2.3%      |      |
| Liquefied Petroleum Gas  | 2.66  | 2.67  | 2.67  | 2.68  | 2.72  | 2.76   | 2.80   | 2.84   | 2.88   | 2.90   | 2.95   | 2.97  | 3.00  | 3.04  | 3.08  | 3.13   | 3.17   | 3.20   | 3.22   | 3.23   | 3.24   | 3.25   | 3.25   | 3.25   | 3.27   | 0.9%      |      |
| Motor Gasoline 2/  | 15.16 | 15.40 | 15.69 | 15.95 | 16.18 | 16.44  | 16.67  | 16.88  | 17.07  | 17.06  | 17.01  | 16.87 | 16.82 | 16.77 | 16.81 | 16.87  | 16.98  | 17.08  | 17.21  | 17.33  | 17.41  | 17.52  | 17.62  | 17.70  | 17.76  | 0.7%      |      |
| Petrochemical Feedstocks   | 1.28  | 1.29  | 1.28  | 1.29  | 1.31  | 1.33   | 1.35   | 1.36   | 1.37   | 1.36   | 1.38   | 1.38  | 1.39  | 1.40  | 1.41  | 1.43   | 1.44   | 1.44   | 1.45   | 1.44   | 1.44   | 1.44   | 1.44   | 1.43   | 1.44   | 0.5%      |      |
| Residual Fuel  | 1.39  | 1.36  | 1.34  | 1.35  | 1.38  | 1.43   | 1.45   | 1.50   | 1.51   | 1.55   | 1.59   | 1.61  | 1.65  | 1.69  | 1.73  | 1.78   | 1.83   | 1.87   | 1.91   | 2.04   | 2.07   | 2.10   | 2.13   | 2.16   | 2.18   | 1.9%      |      |
| Other Petroleum 13/  | 4.37  | 4.43  | 4.44  | 4.59  | 4.65  | 4.73   | 4.72   | 4.76   | 4.79   | 4.74   | 4.82   | 4.71  | 4.78  | 4.84  | 4.91  | 4.96   | 5.06   | 5.17   | 5.27   | 5.34   | 5.31   | 5.43   | 5.44   | 5.47   | 5.50   | 1.0%      |      |
| Petroleum Subtotal   | 35.26 | 35.93 | 36.32 | 37.20 | 37.77 | 38.44  | 38.98  | 39.48  | 40.02  | 40.01  | 40.23  | 40.04 | 40.24 | 40.50 | 40.88 | 41.32  | 41.84  | 42.26  | 42.75  | 43.17  | 43.33  | 43.70  | 43.91  | 44.08  | 44.32  | 1.0%      |      |
| Natural Gas 6/   | 19.39 | 19.32 | 19.98 | 20.45 | 20.45 | 20.47  | 20.66  | 20.69  | 20.92  | 20.77  | 20.79  | 20.81 | 20.83 | 20.85 | 20.96 | 21.09  | 21.21  | 21.24  | 21.29  | 21.14  | 21.18  | 21.07  | 21.11  | 21.07  | 21.09  | 0.4%      |      |
| Metallurgical Coal   | 0.85  | 0.86  | 0.86  | 0.85  | 0.83  | 0.82   | 0.80   | 0.78   | 0.77   | 0.75   | 0.72   | 0.69  | 0.66  | 0.63  | 0.61  | 0.58   | 0.56   | 0.53   | 0.51   | 0.49   | 0.47   | 0.45   | 0.43   | 0.42   | 0.40   | -3.1%     |      |
| Steam Coal   | 1.68  | 1.65  | 1.68  | 1.70  | 1.70  | 1.73   | 1.77   | 1.79   | 1.82   | 1.37   | 1.27   | 1.18  | 1.17  | 1.17  | 1.19  | 1.22   | 1.26   | 1.29   | 1.32   | 1.33   | 1.33   | 1.34   | 1.35   | 1.35   | 1.38   | -0.8%     |      |
| Net Coal Coke Imports  | 0.00  | 0.10  | 0.10  | 0.11  | 0.11  | 0.12   | 0.14   | 0.14   | 0.15   | 0.15   | 0.17   | 0.18  | 0.19  | 0.21  | 0.23  | 0.25   | 0.27   | 0.28   | 0.29   | 0.30   | 0.30   | 0.31   | 0.32   | 0.33   | 0.33   | N/A       |      |
| Coal Subtotal  | 2.53  | 2.60  | 2.64  | 2.65  | 2.64  | 2.67   | 2.71   | 2.72   | 2.74   | 2.26   | 2.15   | 2.04  | 2.02  | 2.02  | 2.03  | 2.05   | 2.09   | 2.10   | 2.13   | 2.12   | 2.11   | 2.10   | 2.10   | 2.09   | 2.11   | -0.8%     |      |
| Renewable Energy 14/   | 2.44  | 2.50  | 2.54  | 2.56  | 2.59  | 2.63   | 2.68   | 2.71   | 2.75   | 2.78   | 2.82   | 2.86  | 2.89  | 2.93  | 2.98  | 3.03   | 3.07   | 3.10   | 3.13   | 3.15   | 3.17   | 3.18   | 3.19   | 3.20   | 3.21   | 1.1%      |      |
| Methanol 12/   | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03   | 0.05   | 0.05   | 0.07   | 0.08   | 0.10   | 0.11  | 0.12  | 0.13  | 0.14  | 0.15   | 0.16   | 0.17   | 0.17   | 0.18   | 0.19   | 0.20   | 0.20   | 0.21   | 0.21   | 16.1%     |      |
| Liquid Hydrogen  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 80.2%     |      |
| Electricity  | 10.57 | 10.62 | 10.95 | 11.17 | 11.40 | 11.64  | 11.82  | 11.99  | 12.20  | 11.83  | 11.76  | 11.66 | 11.67 | 11.77 | 11.92 | 12.10  | 12.29  | 12.42  | 12.56  | 12.66  | 12.76  | 12.83  | 12.91  | 12.99  | 13.09  | 0.9%      |      |
| Delivered Energy   | 70.19 | 70.97 | 72.43 | 74.05 | 74.87 | 75.88  | 76.88  | 77.64  | 78.69  | 77.74  | 77.86  | 77.53 | 77.78 | 78.20 | 78.90 | 79.74  | 80.66  | 81.30  | 82.03  | 82.42  | 82.74  | 83.08  | 83.43  | 83.63  | 84.04  | 0.8%      |      |
| Electricity Related Losses   | 23.57 | 23.16 | 23.92 | 24.43 | 24.79 | 25.09  | 25.24  | 25.40  | 25.55  | 23.87  | 23.01  | 22.12 | 21.40 | 20.99 | 20.67 | 20.44  | 20.30  | 20.02  | 19.89  | 19.77  | 19.69  | 19.64  | 19.63  | 19.65  | 19.76  | -0.7%     |      |
| Total  | 93.77 | 94.14 | 96.35 | 98.48 | 99.66 | 100.97 | 102.13 | 103.05 | 104.24 | 101.61 | 100.87 | 99.65 | 99.18 | 99.18 | 99.57 | 100.17 | 100.96 | 101.32 | 101.92 | 102.19 | 102.43 | 102.72 | 103.06 | 103.27 | 103.79 | 0.4%      |      |
| Electric Generators 15/  |       |       |       |       |       |        |        |        |        |        |        |       |       |       |       |        |        |        |        |        |        |        |        |        |        |           |      |
| Distillate Fuel  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08   | 0.08   | 0.08   | 0.08   | 0.04   | 0.04   | 0.03  | 0.03  | 0.03  | 0.03  | 0.03   | 0.03   | 0.03   | 0.03   | 0.07   | 0.12   | 0.17   | 0.28   | 0.29   | 0.38   | 0.37      | 6.8% |
| Residual Fuel  | 0.67  | 0.75  | 0.54  | 0.57  | 0.50  | 0.58   | 0.50   | 0.46   | 0.42   | 0.31   | 0.31   | 0.25  | 0.22  | 0.24  | 0.21  | 0.19   | 0.16   | 0.13   | 0.11   | 0.11   | 0.11   | 0.11   | 0.10   | 0.10   | 0.09   | -7.9%     |      |
| Petroleum Subtotal   | 0.75  | 0.83  | 0.62  | 0.65  | 0.58  | 0.65   | 0.58   | 0.53   | 0.50   | 0.35   | 0.34   | 0.28  | 0.25  | 0.27  | 0.24  | 0.22   | 0.19   | 0.16   | 0.18   | 0.23   | 0.28   | 0.39   | 0.39   | 0.47   | 0.47   | -2.0%     |      |
| Natural Gas  | 3.04  | 2.72  | 3.37  | 3.77  | 3.75  | 4.07   | 4.37   | 4.73   | 5.11   | 6.41   | 7.53   | 8.85  | 9.60  | 10.24 | 10.86 | 11.38  | 12.09  | 12.80  | 13.32  | 13.77  | 14.08  | 14.32  | 14.63  | 14.81  | 14.93  | 6.9%      |      |
| Steam Coal   | 18.36 | 18.57 | 19.46 | 19.54 | 19.61 | 19.72  | 19.71  | 19.72  | 19.72  | 17.01  | 15.07  | 12.77 | 11.36 | 10.33 | 9.65  | 9.16   | 8.40   | 7.69   | 7.06   | 6.62   | 6.22   | 5.87   | 5.48   | 5.09   | 4.95   | -5.3%     |      |
| Nuclear Power  | 7.20  | 6.88  | 7.00  | 7.25  | 7.30  | 7.35   | 7.41   | 7.45   | 7.38   | 7.30   | 7.25   | 7.21  | 7.14  | 7.12  | 6.98  | 6.84   | 6.78   | 6.60   | 6.55   | 6.31   | 6.21   | 5.98   | 5.90   | 5.89   | 5.90   | -0.8%     |      |
| Renewable Energy 16/   | 4.40  | 4.43  | 4.09  | 4.14  | 4.18  | 4.20   | 4.24   | 4.25   | 4.28   | 4.42   | 4.46   | 4.55  | 4.60  | 4.69  | 4.74  | 4.83   | 5.06   | 5.13   | 5.28   | 5.45   | 5.62   | 5.86   | 6.11   | 6.33   | 6.56   | 1.7%      |      |
| Electricity Imports 17/  | 0.39  | 0.35  | 0.33  | 0.26  | 0.76  | 0.75   | 0.75   | 0.72   | 0.77   | 0.22   | 0.13   | 0.13  | 0.11  | 0.12  | 0.10  | 0.10   | 0.08   | 0.07   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -8.7%     |      |
| Total  | 34.14 | 33.78 | 34.87 | 35.61 | 36.19 | 36.73  | 37.07  | 37.39  | 37.75  | 35.70  | 34.77  | 33.78 | 33.07 | 32.75 | 32.58 | 32.53  | 32.59  | 32.44  | 32.45  | 32.43  | 32.45  | 32.47  | 32.54  | 32.63  | 32.85  | -0.2%     |      |

| Table 2. Energy Consumption by Sector and Source<br>(Quadrillion Btu per Year, Unless Otherwise Noted) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
|  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
|  | 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   | 1996-2020 |
| Total Energy Consumption   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Distillate Fuel  | 7.06   | 7.40   | 7.49   | 7.58   | 7.67   | 7.80   | 7.92   | 8.01   | 8.11   | 8.01   | 8.04   | 8.03   | 8.05   | 8.10   | 8.17   | 8.26   | 8.34   | 8.39   | 8.46   | 8.52   | 8.57   | 8.68   | 8.68   | 8.75   | 8.76   | 0.9%      |
| Kerosene   | 0.14   | 0.15   | 0.12   | 0.13   | 0.13   | 0.13   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | -1.0%     |
| Jet Fuel 9/  | 3.27   | 3.33   | 3.37   | 3.72   | 3.81   | 3.90   | 4.00   | 4.10   | 4.24   | 4.31   | 4.36   | 4.38   | 4.48   | 4.57   | 4.68   | 4.80   | 4.95   | 5.05   | 5.18   | 5.27   | 5.36   | 5.44   | 5.52   | 5.59   | 5.68   | 2.3%      |
| Liquefied Petroleum Gas  | 2.66   | 2.67   | 2.67   | 2.68   | 2.72   | 2.76   | 2.80   | 2.84   | 2.88   | 2.90   | 2.95   | 2.97   | 3.00   | 3.04   | 3.08   | 3.13   | 3.17   | 3.20   | 3.22   | 3.23   | 3.24   | 3.25   | 3.25   | 3.25   | 3.27   | 0.9%      |
| Motor Gasoline 2/  | 15.16  | 15.40  | 15.69  | 15.95  | 16.18  | 16.44  | 16.67  | 16.88  | 17.07  | 17.06  | 17.01  | 16.87  | 16.82  | 16.77  | 16.81  | 16.87  | 16.98  | 17.08  | 17.21  | 17.33  | 17.41  | 17.52  | 17.62  | 17.70  | 17.76  | 0.7%      |
| Petrochemical Feedstocks   | 1.28   | 1.29   | 1.28   | 1.29   | 1.31   | 1.33   | 1.35   | 1.36   | 1.37   | 1.36   | 1.38   | 1.38   | 1.39   | 1.40   | 1.41   | 1.43   | 1.44   | 1.44   | 1.45   | 1.44   | 1.44   | 1.44   | 1.44   | 1.43   | 1.44   | 0.5%      |
| Residual Fuel  | 2.06   | 2.10   | 1.88   | 1.92   | 1.88   | 2.01   | 1.95   | 1.96   | 1.94   | 1.86   | 1.90   | 1.86   | 1.87   | 1.93   | 1.94   | 1.97   | 1.98   | 2.00   | 2.02   | 2.16   | 2.18   | 2.22   | 2.23   | 2.25   | 2.27   | 0.4%      |
| Other Petroleum 13/  | 4.37   | 4.43   | 4.44   | 4.59   | 4.65   | 4.73   | 4.72   | 4.76   | 4.79   | 4.74   | 4.82   | 4.71   | 4.78   | 4.84   | 4.91   | 4.96   | 5.06   | 5.17   | 5.27   | 5.34   | 5.31   | 5.43   | 5.44   | 5.47   | 5.50   | 1.0%      |
| Petroleum Subtotal   | 36.01  | 36.76  | 36.94  | 37.85  | 38.35  | 39.09  | 39.55  | 40.01  | 40.52  | 40.36  | 40.58  | 40.32  | 40.50  | 40.76  | 41.12  | 41.54  | 42.03  | 42.43  | 42.93  | 43.40  | 43.61  | 44.09  | 44.30  | 44.56  | 44.78  | 0.9%      |
| Natural Gas  | 22.43  | 22.04  | 23.35  | 24.23  | 24.20  | 24.53  | 25.03  | 25.42  | 26.02  | 27.18  | 28.32  | 29.66  | 30.44  | 31.09  | 31.82  | 32.47  | 33.30  | 34.04  | 34.61  | 34.91  | 35.26  | 35.39  | 35.74  | 35.87  | 36.02  | 2.0%      |
| Metallurgical Coal   | 0.85   | 0.86   | 0.86   | 0.85   | 0.83   | 0.82   | 0.80   | 0.78   | 0.77   | 0.75   | 0.72   | 0.69   | 0.66   | 0.63   | 0.61   | 0.58   | 0.56   | 0.53   | 0.51   | 0.49   | 0.47   | 0.45   | 0.43   | 0.42   | 0.40   | -3.1%     |
| Steam Coal   | 20.05  | 20.22  | 21.14  | 21.23  | 21.31  | 21.45  | 21.48  | 21.51  | 21.54  | 21.88  | 16.33  | 13.95  | 12.53  | 11.50  | 10.85  | 10.39  | 9.66   | 8.98   | 8.39   | 7.95   | 7.55   | 7.21   | 6.83   | 6.43   | 6.33   | -4.7%     |
| Net Coal Coke Imports  | 0.00   | 0.10   | 0.10   | 0.11   | 0.11   | 0.12   | 0.14   | 0.14   | 0.15   | 0.15   | 0.17   | 0.18   | 0.19   | 0.21   | 0.23   | 0.25   | 0.27   | 0.28   | 0.29   | 0.30   | 0.30   | 0.31   | 0.32   | 0.33   | 0.33   | N/A       |
| Coal Subtotal  | 20.90  | 21.17  | 22.10  | 22.19  | 22.25  | 22.39  | 22.42  | 22.44  | 22.46  | 19.28  | 17.22  | 14.82  | 13.38  | 12.34  | 11.68  | 11.22  | 10.48  | 9.80   | 9.19   | 8.73   | 8.32   | 7.97   | 7.58   | 7.18   | 7.06   | -4.4%     |
| Nuclear Power  | 7.20   | 6.88   | 7.00   | 7.25   | 7.30   | 7.35   | 7.41   | 7.45   | 7.38   | 7.30   | 7.25   | 7.21   | 7.14   | 7.12   | 6.98   | 6.84   | 6.78   | 6.60   | 6.55   | 6.31   | 6.21   | 5.98   | 5.90   | 5.89   | 5.90   | -0.8%     |
| Renewable Energy 18/   | 6.84   | 6.93   | 6.63   | 6.70   | 6.77   | 6.83   | 6.91   | 6.95   | 7.03   | 7.20   | 7.28   | 7.40   | 7.50   | 7.62   | 7.72   | 7.86   | 8.13   | 8.23   | 8.42   | 8.61   | 8.78   | 9.04   | 9.30   | 9.52   | 9.77   | 1.5%      |
| Methanol 12/   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.03   | 0.05   | 0.05   | 0.07   | 0.08   | 0.10   | 0.11   | 0.12   | 0.13   | 0.14   | 0.15   | 0.16   | 0.17   | 0.17   | 0.18   | 0.19   | 0.20   | 0.20   | 0.21   | 0.21   | 16.1%     |
| Liquid Hydrogen  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 80.2%  |           |
| Electricity Imports 17/  | 0.39   | 0.35   | 0.33   | 0.26   | 0.76   | 0.75   | 0.75   | 0.72   | 0.77   | 0.22   | 0.13   | 0.13   | 0.11   | 0.12   | 0.10   | 0.10   | 0.08   | 0.07   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -8.7%     |
| Total  | 93.77  | 94.14  | 96.35  | 98.48  | 99.66  | 100.97 | 102.13 | 103.05 | 104.24 | 101.61 | 100.87 | 99.65  | 99.18  | 99.18  | 99.57  | 100.17 | 100.96 | 101.32 | 101.92 | 102.19 | 102.43 | 102.72 | 103.06 | 103.27 | 103.79 | 0.4%      |
| Energy Use & Related Statistics  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Delivered Energy Use   | 70.19  | 70.97  | 72.43  | 74.05  | 74.87  | 75.88  | 76.88  | 77.64  | 78.69  | 77.74  | 77.86  | 77.53  | 77.78  | 78.20  | 78.90  | 79.74  | 80.66  | 81.30  | 82.03  | 82.42  | 82.74  | 83.08  | 83.43  | 83.63  | 84.04  | 0.8%      |
| Total Energy Use   | 93.77  | 94.14  | 96.36  | 98.50  | 99.67  | 100.98 | 102.14 | 103.06 | 104.26 | 101.63 | 100.89 | 99.66  | 99.19  | 99.20  | 99.58  | 100.18 | 100.97 | 101.33 | 101.93 | 102.20 | 102.43 | 102.72 | 103.06 | 103.27 | 103.79 | 0.4%      |
| Tot. Carbon Emis.(mill m. ton)   | 1462.9 | 1490.3 | 1536.4 | 1567.9 | 1577.5 | 1599.2 | 1615.2 | 1628.8 | 1646.8 | 1579.5 | 1546.0 | 1497.8 | 1475.0 | 1462.2 | 1461.5 | 1466.6 | 1467.7 | 1466.3 | 1468.5 | 1468.8 | 1467.7 | 1469.5 | 1468.2 | 1464.7 | 1467.8 | 0.0%      |

1/ Includes wood used for residential heating. See Table 18 estimates of nonmarketed renewable energy consumption for geothermal heat pumps & solar thermal hot water heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table 18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; including for cogeneration, both for sale to the grid and for own use.

8/ Low sulfur diesel fuel.

9/ Includes naphtha and kerosene type.

10/ Includes aviation gas and lubricants.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ Only M85 (85 percent methanol and 15 percent motor gasoline).

13/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

14/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps and solar thermal hot water heaters.

15/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy.

16/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, E85, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

17/ In 1996 approximately two-thirds of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions.

Table 2. Energy Consumption by Sector and Source Notes (Continued)

18/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Figures for 1996 may differ from published data due to internal conversion factors. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1996 natural gas lease, plant, and pipeline fuel values: Energy Information Administration (EIA), Short-Term Energy Outlook, August 1997. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). 1996 electric utility fuel consumption: EIA, Electric Power Annual 1996, Volume I, DOE/EIA-0348(96)/1 (Washington, DC, August 1997). 1996 nonutility consumption estimates: EIA Form 867, "Annual Nonutility Power Producer Report." Other 1996 values: EIA, Short-Term EnergyOutlook August 1997. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 3. Energy Prices by Sector and Source<br>(1996 Dollars per Million Btu) |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   |       |       | 1996-2020 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | 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  |       |
| Residential   | 12.86 | 12.80 | 12.55     | 12.31 | 12.27 | 12.34 | 12.27 | 12.20 | 14.92 | 16.08 | 17.33 | 17.80 | 18.01 | 18.11 | 18.03 | 17.89 | 17.99 | 17.88 | 17.92 | 18.08 | 18.12 | 18.13 | 18.25 | 18.14 | 1.4%  |       |
| Primary Energy 1/   | 6.63  | 6.69  | 6.31      | 6.33  | 6.29  | 6.35  | 6.29  | 6.30  | 6.27  | 7.52  | 8.07  | 8.72  | 8.91  | 9.06  | 9.18  | 9.22  | 9.26  | 9.37  | 9.34  | 9.42  | 9.52  | 9.57  | 9.60  | 9.70  | 9.61  | 1.6%  |
| Petroleum Products 2/   | 8.51  | 8.33  | 8.10      | 8.58  | 8.68  | 8.81  | 8.85  | 9.00  | 9.11  | 10.51 | 11.07 | 11.83 | 11.96 | 11.95 | 11.94 | 11.88 | 11.81 | 11.89 | 11.75 | 11.79 | 11.88 | 11.89 | 11.90 | 11.97 | 11.83 | 1.4%  |
| Distillate Fuel   | 7.09  | 6.96  | 6.60      | 7.21  | 7.26  | 7.31  | 7.34  | 7.42  | 7.52  | 9.00  | 9.61  | 10.33 | 10.46 | 10.46 | 10.47 | 10.39 | 10.35 | 10.39 | 10.23 | 10.24 | 10.30 | 10.31 | 10.30 | 10.35 | 10.21 | 1.5%  |
| Liquefied Petroleum Gas   | 11.59 | 11.24 | 11.21     | 11.40 | 11.53 | 11.79 | 11.79 | 12.03 | 12.11 | 13.22 | 13.61 | 14.36 | 14.45 | 14.33 | 14.27 | 14.16 | 14.01 | 14.10 | 13.96 | 14.00 | 14.12 | 14.09 | 14.09 | 14.16 | 13.99 | 0.8%  |
| Natural Gas   | 6.19  | 6.29  | 5.89      | 5.81  | 5.74  | 5.79  | 5.71  | 5.70  | 5.66  | 6.85  | 7.40  | 8.03  | 8.24  | 8.43  | 8.58  | 8.64  | 8.71  | 8.83  | 8.83  | 8.92  | 9.03  | 9.09  | 9.13  | 9.23  | 9.16  | 1.6%  |
| Electricity   | 24.44 | 23.81 | 23.52     | 22.82 | 22.49 | 22.25 | 22.07 | 21.94 | 21.69 | 26.62 | 28.59 | 30.57 | 31.36 | 31.43 | 31.29 | 30.87 | 30.28 | 30.19 | 29.85 | 29.66 | 29.70 | 29.59 | 29.44 | 29.42 | 29.20 | 0.7%  |
| Commercial  | 12.85 | 12.67 | 12.35     | 12.19 | 12.03 | 12.02 | 11.90 | 11.85 | 11.71 | 14.68 | 15.97 | 17.31 | 17.76 | 17.94 | 17.99 | 17.84 | 17.60 | 17.62 | 17.39 | 17.38 | 17.44 | 17.42 | 17.35 | 17.35 | 17.16 | 1.2%  |
| Primary Energy 1/   | 5.26  | 5.23  | 4.94      | 4.91  | 4.86  | 4.92  | 4.87  | 4.87  | 4.84  | 6.07  | 6.62  | 7.27  | 7.46  | 7.60  | 7.71  | 7.73  | 7.76  | 7.85  | 7.81  | 7.86  | 7.94  | 7.94  | 7.94  | 8.00  | 7.88  | 1.7%  |
| Petroleum Products 2/   | 5.56  | 5.29  | 5.39      | 5.36  | 5.42  | 5.50  | 5.53  | 5.64  | 5.72  | 7.19  | 7.77  | 8.54  | 8.66  | 8.64  | 8.64  | 8.56  | 8.48  | 8.54  | 8.41  | 8.43  | 8.50  | 8.48  | 8.47  | 8.54  | 8.40  | 1.7%  |
| Distillate Fuel   | 5.27  | 5.00  | 4.97      | 4.99  | 5.04  | 5.09  | 5.12  | 5.21  | 5.31  | 6.79  | 7.38  | 8.12  | 8.24  | 8.26  | 8.26  | 8.18  | 8.12  | 8.17  | 8.02  | 8.03  | 8.09  | 8.09  | 8.08  | 8.12  | 7.98  | 1.7%  |
| Residual Fuel   | 3.24  | 3.15  | 3.15      | 2.98  | 2.99  | 3.07  | 3.05  | 3.13  | 3.10  | 4.67  | 5.30  | 6.16  | 6.29  | 6.22  | 6.26  | 6.18  | 6.09  | 6.14  | 6.12  | 6.10  | 6.19  | 6.08  | 6.05  | 6.19  | 6.06  | 2.6%  |
| Natural Gas 3/  | 5.28  | 5.31  | 4.93      | 4.91  | 4.84  | 4.89  | 4.83  | 4.81  | 4.77  | 5.93  | 6.47  | 7.10  | 7.30  | 7.46  | 7.60  | 7.64  | 7.70  | 7.80  | 7.77  | 7.83  | 7.91  | 7.92  | 7.92  | 7.98  | 7.87  | 1.7%  |
| Electricity   | 22.07 | 21.55 | 21.10     | 20.68 | 20.34 | 20.16 | 19.91 | 19.74 | 19.43 | 24.28 | 26.29 | 28.23 | 28.93 | 29.00 | 28.85 | 28.39 | 27.73 | 27.55 | 27.07 | 26.90 | 26.86 | 26.78 | 26.59 | 26.46 | 26.21 | 0.7%  |
| Industrial 4/   | 5.35  | 4.96  | 4.77      | 4.83  | 4.83  | 4.89  | 4.90  | 4.95  | 4.97  | 6.37  | 6.94  | 7.62  | 7.81  | 7.86  | 7.92  | 7.87  | 7.83  | 7.89  | 7.80  | 7.81  | 7.88  | 7.88  | 7.87  | 7.91  | 7.83  | 1.6%  |
| Primary Energy  | 3.99  | 3.58  | 3.40      | 3.50  | 3.53  | 3.60  | 3.63  | 3.70  | 3.74  | 4.88  | 5.34  | 5.96  | 6.12  | 6.18  | 6.26  | 6.26  | 6.28  | 6.36  | 6.30  | 6.35  | 6.44  | 6.44  | 6.45  | 6.51  | 6.44  | 2.0%  |
| Petroleum Products 2/   | 5.58  | 4.62  | 4.59      | 4.78  | 4.84  | 4.94  | 4.99  | 5.11  | 5.20  | 6.09  | 6.37  | 6.91  | 6.96  | 6.89  | 6.87  | 6.83  | 6.79  | 6.83  | 6.72  | 6.70  | 6.79  | 6.76  | 6.76  | 6.80  | 6.75  | 0.8%  |
| Distillate Fuel   | 5.50  | 5.09  | 5.05      | 5.03  | 5.07  | 5.12  | 5.17  | 5.27  | 5.38  | 6.87  | 7.43  | 8.20  | 8.32  | 8.35  | 8.35  | 8.28  | 8.20  | 8.26  | 8.13  | 8.14  | 8.20  | 8.20  | 8.19  | 8.23  | 8.10  | 1.6%  |
| Liquefied Petroleum Gas   | 7.80  | 5.64  | 5.63      | 6.09  | 6.19  | 6.44  | 6.44  | 6.67  | 6.73  | 7.80  | 8.13  | 8.87  | 8.95  | 8.81  | 8.76  | 8.65  | 8.48  | 8.59  | 8.42  | 8.45  | 8.60  | 8.55  | 8.57  | 8.64  | 8.47  | 0.3%  |
| Residual Fuel   | 2.99  | 2.68  | 2.69      | 2.52  | 2.56  | 2.62  | 2.63  | 2.70  | 2.72  | 4.34  | 4.94  | 5.79  | 5.93  | 5.94  | 5.96  | 5.91  | 5.83  | 5.86  | 5.75  | 5.73  | 5.81  | 5.76  | 5.74  | 5.82  | 5.74  | 2.8%  |
| Natural Gas 5/  | 2.96  | 3.03  | 2.70      | 2.73  | 2.72  | 2.76  | 2.78  | 2.80  | 2.80  | 3.93  | 4.49  | 5.14  | 5.38  | 5.57  | 5.74  | 5.80  | 5.90  | 6.04  | 6.05  | 6.16  | 6.26  | 6.31  | 6.34  | 6.42  | 6.35  | 3.2%  |
| Metallurgical Coal  | 1.77  | 1.75  | 1.74      | 1.71  | 1.69  | 1.69  | 1.67  | 1.66  | 1.64  | 3.60  | 4.41  | 5.33  | 5.54  | 5.66  | 5.69  | 5.58  | 5.45  | 5.43  | 5.24  | 5.26  | 5.29  | 5.26  | 5.27  | 5.05  | 4.5%  |       |
| Steam Coal  | 1.46  | 1.41  | 1.39      | 1.38  | 1.36  | 1.35  | 1.33  | 1.32  | 1.31  | 3.27  | 4.08  | 5.00  | 5.21  | 5.34  | 5.37  | 5.26  | 5.13  | 5.11  | 4.92  | 4.93  | 4.96  | 4.93  | 4.88  | 4.94  | 4.72  | 5.0%  |
| Electricity   | 13.38 | 13.03 | 12.74     | 12.52 | 12.31 | 12.16 | 12.03 | 11.90 | 11.72 | 14.61 | 15.78 | 16.86 | 17.24 | 17.24 | 17.12 | 16.75 | 16.36 | 16.26 | 15.99 | 15.84 | 15.79 | 15.76 | 15.64 | 15.53 | 15.38 | 0.6%  |
| Transportation  | 8.77  | 8.40  | 8.22      | 8.26  | 8.33  | 8.42  | 8.45  | 8.51  | 8.62  | 10.03 | 10.63 | 11.26 | 11.34 | 11.33 | 11.22 | 11.09 | 10.93 | 10.93 | 10.79 | 10.76 | 10.82 | 10.76 | 10.73 | 10.75 | 10.67 | 0.8%  |
| Primary Energy  | 8.76  | 8.38  | 8.21      | 8.24  | 8.32  | 8.41  | 8.44  | 8.50  | 8.61  | 10.02 | 10.62 | 11.25 | 11.33 | 11.31 | 11.21 | 11.07 | 10.92 | 10.92 | 10.78 | 10.75 | 10.81 | 10.75 | 10.72 | 10.74 | 10.66 | 0.8%  |
| Petroleum Products 2/   | 8.76  | 8.38  | 8.20      | 8.24  | 8.32  | 8.41  | 8.44  | 8.50  | 8.61  | 10.02 | 10.62 | 11.25 | 11.33 | 11.31 | 11.20 | 11.06 | 10.90 | 10.90 | 10.76 | 10.73 | 10.79 | 10.73 | 10.70 | 10.71 | 10.63 | 0.8%  |
| Distillate Fuel 6/  | 8.90  | 8.37  | 8.18      | 8.23  | 8.23  | 8.26  | 8.28  | 8.37  | 8.49  | 9.89  | 10.48 | 11.16 | 11.25 | 11.24 | 11.18 | 11.03 | 10.83 | 10.82 | 10.70 | 10.69 | 10.67 | 10.70 | 10.64 | 10.60 | 10.42 | 0.7%  |
| Jet Fuel 7/   | 5.52  | 4.81  | 4.78      | 4.89  | 4.99  | 5.08  | 5.14  | 5.22  | 5.34  | 6.79  | 7.38  | 8.05  | 8.18  | 8.19  | 8.15  | 8.08  | 8.01  | 8.04  | 7.92  | 7.94  | 8.02  | 8.00  | 8.08  | 8.11  | 8.01  | 1.6%  |
| Motor Gasoline 8/   | 9.89  | 9.59  | 9.37      | 9.46  | 9.57  | 9.69  | 9.73  | 9.79  | 9.91  | 11.35 | 11.98 | 12.59 | 12.68 | 12.68 | 12.55 | 12.42 | 12.26 | 12.27 | 12.13 | 12.10 | 12.18 | 12.10 | 12.05 | 12.08 | 12.05 | 0.8%  |
| Residual Fuel   | 2.55  | 2.56  | 2.56      | 2.40  | 2.46  | 2.53  | 2.53  | 2.59  | 2.68  | 4.30  | 4.93  | 5.74  | 5.90  | 5.95  | 5.96  | 5.92  | 5.84  | 5.84  | 5.72  | 5.70  | 5.77  | 5.74  | 5.71  | 5.79  | 5.70  | 3.4%  |
| Liquid Petroleum Gas 9/   | 12.63 | 12.65 | 12.62     | 12.50 | 12.60 | 12.82 | 12.79 | 12.99 | 13.03 | 14.07 | 14.43 | 15.12 | 15.16 | 15.01 | 14.89 | 14.75 | 14.56 | 14.62 | 14.44 | 14.45 | 14.53 | 14.46 | 14.43 | 14.47 | 14.27 | 0.5%  |
| Natural Gas 10/   | 5.42  | 6.47  | 5.91      | 5.68  | 5.55  | 5.58  | 5.57  | 5.63  | 5.70  | 6.98  | 7.68  | 8.49  | 8.85  | 9.15  | 9.39  | 9.51  | 9.61  | 9.76  | 9.78  | 9.87  | 9.99  | 10.03 | 10.08 | 10.19 | 10.15 | 2.7%  |
| E85 11/   | 15.85 | 15.86 | 15.85     | 15.49 | 15.74 | 15.84 | 16.02 | 16.13 | 16.25 | 16.69 | 16.78 | 16.80 | 16.67 | 16.51 | 16.39 | 16.34 | 16.20 | 16.33 | 16.23 | 16.25 | 16.36 | 16.43 | 16.52 | 16.63 | 16.54 | 0.2%  |
| Methanol 12/  | 12.24 | 12.24 | 12.24     | 11.93 | 12.08 | 12.28 | 12.28 | 12.81 | 12.42 | 13.78 | 14.27 | 14.81 | 14.84 | 14.81 | 14.71 | 14.63 | 14.53 | 14.54 | 14.44 | 14.43 | 14.47 | 14.46 | 14.44 | 14.50 | 14.42 | 0.7%  |
| Electricity   | 15.34 | 15.20 | 15.03     | 14.80 | 14.57 | 14.27 | 14.11 | 13.77 | 13.60 | 13.93 | 14.28 | 14.56 | 14.79 | 14.82 | 14.74 | 14.41 | 14.08 | 13.94 | 13.78 | 13.57 | 13.51 | 13.38 | 13.27 | 13.17 | 13.15 | -0.6% |
| Average End-Use Energy?????   | 8.65  | 8.30  | 8.11      | 8.09  | 8.10  | 8.16  | 8.16  | 8.20  | 8.23  | 9.97  | 10.68 | 11.48 | 11.69 | 11.74 | 11.73 | 11.63 | 11.51 | 11.54 | 11.42 | 11.43 | 11.51 | 11.49 | 11.47 | 11.51 | 11.43 | 1.2%  |
| Primary Energy  | 8.32  | 7.95  | 7.76      | 7.76  | 7.78  | 7.84  | 7.85  | 7.90  | 7.94  | 9.57  | 10.24 | 10.98 | 11.16 | 11.19 | 11.16 | 11.06 | 10.93 | 10.96 | 10.83 | 10.83 | 10.90 | 10.87 | 10.85 | 10.88 | 10.80 | 1.1%  |
| Electricity   | 20.01 | 19.45 | 19.17     | 18.71 | 18.45 | 18.26 | 18.07 | 17.92 | 17.67 | 21.82 | 23.50 | 25.17 | 25.79 | 25.84 | 25.70 | 25.28 | 24.76 | 24.65 | 24.31 | 24.17 | 24.20 | 24.14 | 24.01 | 23.96 | 23.77 | 0.7%  |

| Table 3. Energy Prices by Sector and Source<br>(1996 Dollars per Million Btu) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|   |        |        | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019  |
| Electric Generators 13/   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Fossil Fuel Average   | 1.54   | 1.49   | 1.45   | 1.48   | 1.47   | 1.48   | 1.48   | 1.49   | 1.50   | 3.32   | 4.08   | 4.94   | 5.18   | 5.36   | 5.49   | 5.51   | 5.54   | 5.65   | 5.63   | 5.73   | 5.83   | 5.87   | 5.90   | 6.01   | 5.90   | 5.7%  |
| Petroleum Products  | 3.25   | 2.92   | 2.96   | 2.94   | 3.03   | 3.03   | 3.10   | 3.21   | 3.28   | 4.91   | 5.53   | 6.46   | 6.66   | 6.64   | 6.71   | 6.66   | 6.68   | 6.88   | 7.04   | 7.16   | 7.27   | 7.35   | 7.38   | 7.49   | 7.36   | 3.5%  |
| Distillate Fuel   | 4.91   | 4.58   | 4.55   | 4.57   | 4.62   | 4.67   | 4.71   | 4.81   | 4.92   | 6.45   | 7.06   | 7.85   | 7.99   | 8.03   | 8.03   | 7.95   | 7.86   | 7.92   | 7.63   | 7.58   | 7.62   | 7.62   | 7.66   | 7.52   | 1.8%   |       |
| Residual Fuel   | 3.07   | 2.74   | 2.74   | 2.72   | 2.79   | 2.81   | 2.86   | 2.95   | 2.99   | 4.71   | 5.35   | 6.29   | 6.48   | 6.47   | 6.52   | 6.47   | 6.46   | 6.66   | 6.69   | 6.70   | 6.75   | 6.69   | 6.71   | 6.84   | 6.72   | 3.3%  |
| Natural Gas   | 2.64   | 2.68   | 2.39   | 2.60   | 2.54   | 2.54   | 2.55   | 2.61   | 2.60   | 3.74   | 4.32   | 5.01   | 5.28   | 5.51   | 5.70   | 5.81   | 5.92   | 6.06   | 6.08   | 6.17   | 6.27   | 6.29   | 6.32   | 6.39   | 6.31   | 3.7%  |
| Steam Coal  | 1.29   | 1.25   | 1.24   | 1.22   | 1.21   | 1.20   | 1.19   | 1.18   | 1.17   | 3.13   | 3.93   | 4.86   | 5.07   | 5.19   | 5.23   | 5.10   | 4.97   | 4.94   | 4.74   | 4.75   | 4.77   | 4.73   | 4.68   | 4.75   | 4.52   | 5.4%  |
| Average Price to All Users 14/  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Petroleum Products 2/   | 7.83   | 7.32   | 7.23   | 7.33   | 7.41   | 7.50   | 7.55   | 7.64   | 7.75   | 9.06   | 9.57   | 10.19  | 10.26  | 10.22  | 10.14  | 10.02  | 9.90   | 9.91   | 9.77   | 9.75   | 9.81   | 9.76   | 9.74   | 9.76   | 9.69   | 0.9%  |
| Distillate Fuel 6/  | 7.84   | 7.44   | 7.29   | 7.40   | 7.42   | 7.46   | 7.49   | 7.59   | 7.70   | 9.15   | 9.74   | 10.45  | 10.54  | 10.54  | 10.50  | 10.37  | 10.21  | 10.22  | 10.07  | 10.06  | 10.05  | 10.03  | 9.98   | 9.95   | 9.79   | 0.9%  |
| Jet Fuel  | 5.52   | 4.81   | 4.78   | 4.89   | 4.99   | 5.08   | 5.14   | 5.22   | 5.34   | 6.79   | 7.38   | 8.05   | 8.18   | 8.19   | 8.15   | 8.08   | 8.01   | 8.04   | 7.92   | 7.94   | 8.02   | 8.00   | 8.08   | 8.11   | 8.01   | 1.6%  |
| Liquefied Petroleum Gas   | 8.53   | 6.73   | 6.73   | 7.15   | 7.27   | 7.53   | 7.55   | 7.80   | 7.89   | 8.98   | 9.34   | 10.09  | 10.18  | 10.05  | 10.00  | 9.90   | 9.75   | 9.85   | 9.70   | 9.75   | 9.90   | 9.86   | 9.88   | 9.96   | 9.80   | 0.6%  |
| Motor Gasoline 8/   | 9.89   | 9.59   | 9.37   | 9.44   | 9.55   | 9.67   | 9.71   | 9.77   | 9.90   | 11.33  | 11.96  | 12.57  | 12.66  | 12.66  | 12.53  | 12.40  | 12.25  | 12.25  | 12.12  | 12.09  | 12.17  | 12.08  | 12.04  | 12.07  | 12.04  | 0.8%  |
| Residual Fuel   | 2.84   | 2.69   | 2.67   | 2.55   | 2.60   | 2.66   | 2.66   | 2.73   | 2.78   | 4.39   | 5.02   | 5.85   | 6.00   | 6.03   | 6.04   | 5.99   | 5.90   | 5.92   | 5.80   | 5.78   | 5.85   | 5.81   | 5.78   | 5.87   | 5.77   | 3.0%  |
| Natural Gas   | 4.14   | 4.19   | 3.80   | 3.80   | 3.77   | 3.80   | 3.76   | 3.76   | 3.74   | 4.79   | 5.30   | 5.90   | 6.11   | 6.29   | 6.45   | 6.51   | 6.59   | 6.71   | 6.72   | 6.81   | 6.90   | 6.93   | 6.95   | 7.03   | 6.95   | 2.2%  |
| Coal  | 1.32   | 1.27   | 1.25   | 1.24   | 1.23   | 1.22   | 1.21   | 1.19   | 1.18   | 3.14   | 3.95   | 4.88   | 5.09   | 5.21   | 5.24   | 5.12   | 4.99   | 4.97   | 4.78   | 4.78   | 4.81   | 4.77   | 4.72   | 4.80   | 4.57   | 5.3%  |
| E85 11/   | 15.85  | 15.86  | 15.85  | 15.49  | 15.74  | 15.84  | 16.02  | 16.13  | 16.25  | 16.69  | 16.78  | 16.80  | 16.67  | 16.51  | 16.39  | 16.34  | 16.20  | 16.33  | 16.23  | 16.25  | 16.36  | 16.43  | 16.52  | 16.63  | 16.54  | 0.2%  |
| Methanol 12/  | 12.24  | 12.24  | 12.24  | 11.93  | 12.08  | 12.28  | 12.28  | 12.81  | 12.42  | 13.78  | 14.27  | 14.81  | 14.84  | 14.81  | 14.71  | 14.63  | 14.53  | 14.54  | 14.44  | 14.43  | 14.47  | 14.46  | 14.44  | 14.50  | 14.42  | 0.7%  |
| Electricity   | 20.01  | 19.45  | 19.17  | 18.71  | 18.45  | 18.26  | 18.07  | 17.92  | 17.67  | 21.82  | 23.50  | 25.17  | 25.79  | 25.84  | 25.70  | 25.28  | 24.76  | 24.65  | 24.31  | 24.17  | 24.20  | 24.14  | 24.01  | 23.96  | 23.77  | 0.7%  |
| Non-Renewable Energy Expenditures by Sect. (billion 1996 dollars)             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residential   | 135.30 | 129.52 | 131.64 | 130.87 | 132.41 | 134.23 | 134.45 | 135.28 | 136.04 | 158.96 | 169.12 | 179.77 | 184.48 | 186.17 | 187.98 | 188.42 | 188.98 | 190.67 | 191.16 | 192.56 | 195.67 | 196.51 | 197.81 | 199.93 | 200.87 | 1.7%  |
| Commercial  | 95.90  | 94.89  | 94.48  | 94.79  | 94.64  | 95.31  | 95.37  | 95.87  | 95.93  | 114.83 | 122.74 | 130.45 | 133.21 | 134.84 | 136.02 | 135.97 | 135.43 | 136.33 | 135.82 | 136.34 | 137.11 | 137.30 | 137.08 | 137.15 | 136.19 | 1.5%  |
| Industrial  | 111.93 | 106.12 | 103.52 | 105.39 | 105.63 | 107.54 | 108.85 | 110.18 | 111.49 | 142.18 | 155.79 | 171.18 | 175.66 | 178.56 | 181.59 | 182.75 | 183.50 | 186.15 | 184.65 | 184.96 | 186.13 | 186.44 | 186.02 | 186.50 | 184.55 | 2.1%  |
| Transportation  | 210.43 | 206.44 | 206.23 | 213.42 | 219.30 | 226.18 | 231.31 | 236.85 | 244.15 | 286.57 | 305.18 | 323.09 | 327.05 | 328.42 | 328.53 | 328.05 | 327.47 | 330.74 | 330.24 | 332.46 | 336.36 | 337.27 | 338.72 | 341.02 | 340.63 | 2.0%  |
| Total Non-Renewable Expend.   | 553.56 | 536.97 | 535.87 | 544.47 | 551.98 | 563.26 | 569.97 | 578.18 | 587.61 | 702.54 | 752.83 | 804.48 | 820.40 | 827.98 | 834.12 | 835.18 | 835.38 | 843.89 | 841.88 | 846.33 | 855.28 | 857.51 | 859.64 | 864.59 | 862.23 | 1.9%  |
| Trans. Renew. Expenditures  | 0.08   | 0.12   | 0.17   | 0.22   | 0.30   | 0.45   | 0.63   | 0.79   | 0.96   | 1.19   | 1.40   | 1.62   | 1.78   | 1.93   | 2.07   | 2.16   | 2.26   | 2.36   | 2.44   | 2.53   | 2.64   | 2.71   | 2.79   | 2.88   | 2.93   | 16.0% |
| Total Expenditures  | 553.64 | 537.09 | 536.04 | 544.69 | 552.28 | 563.71 | 570.60 | 578.97 | 588.56 | 703.74 | 754.23 | 806.10 | 822.18 | 829.91 | 836.18 | 837.34 | 837.64 | 846.25 | 844.32 | 848.86 | 857.91 | 860.22 | 862.43 | 867.47 | 865.16 | 1.9%  |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and excludes county and local taxes.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ Only M85 (85 percent methanol and 15 percent motor gasoline).

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

Table 3. Energy Prices by Sector and Source Notes (Continued)

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

Btu = British thermal unit.

Note: 1996 figures may differ from published data due to internal rounding.

Sources: 1996 prices for gasoline, distillate, and jet fuel are based on prices in various issues of EIA, Petroleum Marketing Monthly, DOE/EIA-0380(96/13-97/4) (Washington, DC, 1996-97). 1996 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1994, DOE/EIA-0376(94) (Washington, DC, June 1997). 1996 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1991. 1996 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(97/6) (Washington, DC, June 1997). Other 1996 natural gas delivered prices: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B. Values for 1996 coal prices have been estimated from EIA, State Energy Price and Expenditure Report 1994, DOE/EIA-0376(94)(Washington, DC, June 1997) by use of consumption quantities aggregated from EIA, State Energy Data Report 1994. Online. <ftp://ftp.eia.doe.gov/pub/state.data/021494.pdf> (August 26, 1997) and the Coal Industry Annual 1996, DOE/EIA-0584(96) (Washington, DC, November 1997). 1996 electricity prices for commercial, industrial, and transportation: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 4. Residential Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1996-2020 |        |        |        |        |        |        |       |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|--------|-------|
|  | 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   |       |
| Key Indicators   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Households (millions)  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Single-Family  | 69.61  | 70.54  | 71.46  | 72.38  | 73.26  | 74.13  | 74.97  | 75.79  | 76.63  | 77.40  | 78.18  | 78.98  | 79.75  | 80.54  | 81.34  | 82.18  | 83.04  | 83.91  | 84.76     | 85.57  | 86.36  | 87.15  | 87.95  | 88.74  | 89.50  | 1.1%  |
| Multifamily  | 24.76  | 24.97  | 25.17  | 25.37  | 25.54  | 25.72  | 25.91  | 26.11  | 26.32  | 26.50  | 26.70  | 26.91  | 27.14  | 27.40  | 27.68  | 27.99  | 28.32  | 28.66  | 28.99     | 29.30  | 29.60  | 29.88  | 30.16  | 30.44  | 30.71  | 0.9%  |
| Mobile Homes   | 6.00   | 6.15   | 6.29   | 6.42   | 6.54   | 6.65   | 6.76   | 6.87   | 6.97   | 7.07   | 7.17   | 7.27   | 7.36   | 7.46   | 7.56   | 7.66   | 7.77   | 7.87   | 7.96      | 8.05   | 8.13   | 8.20   | 8.27   | 8.34   | 8.40   | 1.4%  |
| Total  | 100.37 | 101.66 | 102.92 | 104.17 | 105.34 | 106.50 | 107.63 | 108.77 | 109.92 | 110.97 | 112.05 | 113.16 | 114.25 | 115.39 | 116.58 | 117.83 | 119.13 | 120.44 | 121.71    | 122.91 | 124.08 | 125.24 | 126.38 | 127.51 | 128.60 | 1.0%  |
| Average House Square Footage   | 1649   | 1655   | 1660   | 1665   | 1670   | 1675   | 1679   | 1684   | 1688   | 1691   | 1695   | 1698   | 1701   | 1704   | 1707   | 1710   | 1713   | 1715   | 1718      | 1720   | 1723   | 1725   | 1727   | 1730   | 1732   | 0.2%  |
| Energy Intensity<br>(million Btu per household)  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Delivered Energy   | 110.92 | 105.43 | 107.97 | 107.86 | 108.19 | 107.84 | 107.48 | 106.96 | 106.95 | 101.50 | 99.30  | 97.04  | 96.09  | 94.95  | 94.35  | 93.96  | 93.95  | 93.21  | 93.01     | 92.56  | 92.35  | 91.68  | 91.35  | 90.94  | 91.07  | -0.8% |
| Electricity Related Losses   | 81.78  | 77.48  | 80.71  | 80.94  | 82.28  | 82.89  | 82.38  | 82.00  | 81.65  | 75.07  | 71.72  | 68.49  | 65.87  | 63.92  | 62.35  | 60.99  | 60.12  | 58.69  | 57.90     | 57.33  | 57.05  | 56.59  | 56.42  | 56.35  | 56.62  | -1.5% |
| Total Energy Consumption   | 192.70 | 182.91 | 188.68 | 188.79 | 190.47 | 190.73 | 189.87 | 188.96 | 188.60 | 176.57 | 171.02 | 165.53 | 161.96 | 158.86 | 156.70 | 154.95 | 154.07 | 151.90 | 150.90    | 149.89 | 149.41 | 148.28 | 147.77 | 147.28 | 147.68 | -1.1% |
| Delivered Energy Consum.<br>by Fuel  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Electricity  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Space Heating  | 0.47   | 0.44   | 0.46   | 0.46   | 0.46   | 0.47   | 0.47   | 0.47   | 0.48   | 0.45   | 0.44   | 0.43   | 0.43   | 0.42   | 0.42   | 0.42   | 0.43   | 0.43   | 0.43      | 0.43   | 0.44   | 0.44   | 0.44   | 0.45   | 0.45   | -0.2% |
| Space Cooling  | 0.46   | 0.44   | 0.47   | 0.47   | 0.48   | 0.48   | 0.49   | 0.50   | 0.50   | 0.48   | 0.47   | 0.46   | 0.46   | 0.46   | 0.46   | 0.46   | 0.47   | 0.47   | 0.48      | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.49   | 0.2%  |
| Water Heating  | 0.37   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | 0.37   | 0.37   | 0.37   | 0.35   | 0.35   | 0.34   | 0.34   | 0.34   | 0.34   | 0.34   | 0.35   | 0.35   | 0.35      | 0.35   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | -0.0% |
| Refrigeration  | 0.41   | 0.38   | 0.38   | 0.37   | 0.36   | 0.35   | 0.34   | 0.33   | 0.32   | 0.31   | 0.31   | 0.30   | 0.29   | 0.29   | 0.28   | 0.28   | 0.28   | 0.27   | 0.27      | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | -1.7% |
| Cooking  | 0.13   | 0.13   | 0.13   | 0.13   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.15   | 0.15   | 0.15   | 0.15   | 0.15   | 0.15   | 0.16   | 0.16      | 0.16   | 0.16   | 0.16   | 0.16   | 0.17   | 0.17   | 1.0%  |
| Clothes Dryers   | 0.19   | 0.19   | 0.20   | 0.20   | 0.20   | 0.20   | 0.21   | 0.21   | 0.21   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.21   | 0.21   | 0.21   | 0.22      | 0.22   | 0.22   | 0.23   | 0.23   | 0.23   | 0.23   | 0.8%  |
| Freezers   | 0.13   | 0.12   | 0.12   | 0.11   | 0.11   | 0.10   | 0.10   | 0.09   | 0.09   | 0.09   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.07   | 0.07   | 0.07   | 0.07      | 0.07   | 0.07   | 0.07   | 0.07   | 0.07   | -2.5%  |       |
| Lighting   | 0.32   | 0.32   | 0.33   | 0.33   | 0.34   | 0.35   | 0.35   | 0.36   | 0.36   | 0.35   | 0.35   | 0.34   | 0.35   | 0.35   | 0.35   | 0.36   | 0.37   | 0.37   | 0.38      | 0.38   | 0.39   | 0.39   | 0.40   | 0.40   | 0.41   | 0.9%  |
| Clothes Washers 1/   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03      | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.7%  |
| Dishwashers 1/   | 0.05   | 0.04   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05      | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.6%  |
| Color Televisions  | 0.21   | 0.22   | 0.23   | 0.24   | 0.26   | 0.26   | 0.27   | 0.28   | 0.29   | 0.28   | 0.27   | 0.27   | 0.27   | 0.27   | 0.28   | 0.28   | 0.28   | 0.28   | 0.29      | 0.29   | 0.29   | 0.29   | 0.30   | 0.30   | 0.31   | 1.6%  |
| Personal Computers   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04      | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 5.1%  |
| Furnace Fans   | 0.09   | 0.09   | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.11   | 0.11   | 0.11   | 0.11   | 0.12   | 0.12   | 0.12      | 0.12   | 0.12   | 0.12   | 0.13   | 0.13   | 0.13   | 1.5%  |
| Other Uses 2/  | 0.79   | 0.84   | 0.93   | 1.00   | 1.09   | 1.19   | 1.22   | 1.26   | 1.31   | 1.27   | 1.29   | 1.30   | 1.33   | 1.36   | 1.41   | 1.45   | 1.50   | 1.53   | 1.57      | 1.61   | 1.66   | 1.68   | 1.72   | 1.75   | 1.79   | 3.4%  |
| Delivered Energy   | 3.68   | 3.61   | 3.80   | 3.86   | 3.99   | 4.10   | 4.15   | 4.21   | 4.29   | 4.13   | 4.11   | 4.09   | 4.10   | 4.13   | 4.19   | 4.25   | 4.34   | 4.39   | 4.45      | 4.51   | 4.59   | 4.63   | 4.69   | 4.75   | 4.82   | 1.1%  |
| Natural Gas  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Space Heating  | 3.77   | 3.52   | 3.66   | 3.74   | 3.77   | 3.76   | 3.79   | 3.81   | 3.84   | 3.65   | 3.58   | 3.51   | 3.49   | 3.45   | 3.44   | 3.44   | 3.45   | 3.44   | 3.45      | 3.45   | 3.46   | 3.45   | 3.45   | 3.45   | 3.47   | -0.3% |
| Space Cooling  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01      | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 9.3%  |
| Water Heating  | 1.31   | 1.25   | 1.29   | 1.31   | 1.32   | 1.32   | 1.33   | 1.33   | 1.35   | 1.28   | 1.26   | 1.24   | 1.25   | 1.24   | 1.25   | 1.26   | 1.26   | 1.27   | 1.27      | 1.27   | 1.26   | 1.26   | 1.26   | 1.26   | 1.27   | -0.1% |
| Cooking  | 0.16   | 0.16   | 0.16   | 0.16   | 0.16   | 0.16   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18      | 0.18   | 0.18   | 0.18   | 0.18   | 0.19   | 0.19   | 0.6%  |
| Clothes Dryers   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05      | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.06   | 0.5%  |
| Other Uses 3/  | 0.09   | 0.09   | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 0.10   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10      | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.4%  |
| Delivered Energy   | 5.39   | 5.06   | 5.26   | 5.36   | 5.40   | 5.40   | 5.44   | 5.46   | 5.51   | 5.25   | 5.16   | 5.07   | 5.05   | 5.01   | 5.00   | 5.01   | 5.04   | 5.04   | 5.06      | 5.06   | 5.06   | 5.06   | 5.06   | 5.06   | 5.10   | -0.2% |

| Table 4. Residential Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|  | 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  | 1996-2020 |       |
| Distillate   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Space Heating  | 0.80  | 0.79  | 0.79  | 0.76  | 0.75  | 0.73  | 0.72  | 0.71  | 0.70  | 0.65  | 0.63  | 0.60  | 0.59  | 0.58  | 0.57  | 0.56  | 0.56  | 0.55  | 0.54  | 0.54  | 0.53  | 0.52  | 0.52  | 0.51  | 0.51  | -1.9%     |       |
| Water Heating  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | -0.5%     |       |
| Other Uses 4/  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.0%     |       |
| Delivered Energy   | 0.89  | 0.88  | 0.88  | 0.85  | 0.84  | 0.83  | 0.81  | 0.80  | 0.79  | 0.74  | 0.72  | 0.69  | 0.68  | 0.66  | 0.65  | 0.65  | 0.64  | 0.63  | 0.63  | 0.62  | 0.62  | 0.61  | 0.60  | 0.59  | 0.59  | -1.7%     |       |
| Liquefied Petroleum Gas  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Space Heating  | 0.32  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.30  | 0.30  | 0.30  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.1%      |       |
| Water Heating  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 1.2%      |       |
| Cooking  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.8%      |       |
| Other Uses 3/  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 1.2%      |       |
| Delivered Energy   | 0.42  | 0.42  | 0.42  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.42  | 0.43  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.46  | 0.46  | 0.46  | 0.4%      |       |
| Marketed Renewables<br>(wood) 5/   | 0.61  | 0.60  | 0.62  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.62  | 0.62  | 0.62  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.64  | 0.64  | 0.64  | 0.2%      |       |
| Other Fuels 6/   | 0.13  | 0.15  | 0.12  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.11  | 0.11  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | -1.3%     |       |
| Deliv. Energy Consum.<br>by End-Use  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Space Heating  | 6.10  | 5.80  | 5.97  | 6.01  | 6.03  | 6.01  | 6.03  | 6.04  | 6.07  | 5.78  | 5.68  | 5.56  | 5.53  | 5.47  | 5.45  | 5.45  | 5.48  | 5.46  | 5.47  | 5.47  | 5.48  | 5.46  | 5.47  | 5.46  | 5.49  | -0.4%     |       |
| Space Cooling  | 0.47  | 0.44  | 0.48  | 0.48  | 0.48  | 0.49  | 0.49  | 0.50  | 0.51  | 0.48  | 0.47  | 0.46  | 0.46  | 0.46  | 0.46  | 0.47  | 0.47  | 0.48  | 0.48  | 0.48  | 0.49  | 0.49  | 0.49  | 0.49  | 0.50  | 0.3%      |       |
| Water Heating  | 1.84  | 1.77  | 1.82  | 1.84  | 1.85  | 1.85  | 1.86  | 1.87  | 1.89  | 1.80  | 1.77  | 1.75  | 1.75  | 1.74  | 1.76  | 1.77  | 1.77  | 1.77  | 1.79  | 1.79  | 1.79  | 1.79  | 1.79  | 1.79  | 1.79  | 1.81      | -0.1% |
| Refrigeration  | 0.41  | 0.38  | 0.38  | 0.37  | 0.36  | 0.35  | 0.34  | 0.33  | 0.32  | 0.31  | 0.31  | 0.30  | 0.29  | 0.29  | 0.28  | 0.28  | 0.28  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | -1.7%     |       |
| Cooking  | 0.33  | 0.32  | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.36  | 0.36  | 0.36  | 0.37  | 0.37  | 0.37  | 0.38  | 0.38  | 0.38  | 0.39  | 0.39  | 0.39  | 0.40  | 0.8%      |       |
| Clothes Dryers   | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.26  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.7%      |       |
| Freezers   | 0.13  | 0.12  | 0.12  | 0.11  | 0.11  | 0.10  | 0.10  | 0.09  | 0.09  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | -2.5%     |       |
| Lighting   | 0.32  | 0.32  | 0.33  | 0.33  | 0.34  | 0.35  | 0.35  | 0.36  | 0.36  | 0.35  | 0.35  | 0.34  | 0.35  | 0.35  | 0.36  | 0.37  | 0.37  | 0.38  | 0.38  | 0.39  | 0.39  | 0.40  | 0.40  | 0.41  | 0.41  | 0.9%      |       |
| Clothes Washers  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.7%      |       |
| Dishwashers  | 0.05  | 0.04  | 0.05  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.6%      |       |
| Color Televisions  | 0.21  | 0.22  | 0.23  | 0.24  | 0.26  | 0.26  | 0.27  | 0.28  | 0.29  | 0.28  | 0.27  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 1.6%      |       |
| Personal Computers   | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 5.1%      |       |
| Furnace Fans   | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.13  | 0.13  | 0.13  | 1.5%      |       |
| Other Uses 7/  | 0.90  | 0.94  | 1.03  | 1.10  | 1.20  | 1.29  | 1.33  | 1.37  | 1.42  | 1.38  | 1.39  | 1.40  | 1.43  | 1.47  | 1.51  | 1.56  | 1.61  | 1.64  | 1.68  | 1.72  | 1.77  | 1.80  | 1.83  | 1.87  | 1.91  | 3.2%      |       |
| Delivered Energy   | 11.13 | 10.72 | 11.11 | 11.24 | 11.40 | 11.48 | 11.57 | 11.63 | 11.76 | 11.26 | 11.13 | 10.98 | 10.98 | 10.96 | 11.00 | 11.07 | 11.19 | 11.23 | 11.32 | 11.38 | 11.46 | 11.48 | 11.55 | 11.60 | 11.71 | 0.2%      |       |
| Electricity Related Losses   | 8.21  | 7.88  | 8.31  | 8.43  | 8.67  | 8.83  | 8.87  | 8.92  | 8.97  | 8.33  | 8.04  | 7.75  | 7.53  | 7.38  | 7.27  | 7.19  | 7.16  | 7.07  | 7.05  | 7.05  | 7.08  | 7.09  | 7.13  | 7.19  | 7.28  | -0.5%     |       |

| Table 4. Residential Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
|  | 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  | 1996-2020 |       |
| Total Energy Consum.<br>by End-Use   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Space Heating  | 7.15  | 6.77  | 6.97  | 7.01  | 7.04  | 7.01  | 7.03  | 7.04  | 7.07  | 6.69  | 6.54  | 6.38  | 6.31  | 6.23  | 6.18  | 6.17  | 6.18  | 6.15  | 6.16  | 6.15  | 6.16  | 6.14  | 6.14  | 6.13  | 6.17  | -0.6%     |       |
| Space Cooling  | 1.50  | 1.40  | 1.51  | 1.51  | 1.53  | 1.53  | 1.54  | 1.55  | 1.56  | 1.44  | 1.39  | 1.34  | 1.30  | 1.27  | 1.26  | 1.25  | 1.25  | 1.24  | 1.23  | 1.23  | 1.23  | 1.22  | 1.23  | 1.23  | 1.23  | 1.24      | -0.8% |
| Water Heating  | 2.66  | 2.55  | 2.62  | 2.63  | 2.64  | 2.64  | 2.65  | 2.65  | 2.67  | 2.51  | 2.45  | 2.40  | 2.37  | 2.35  | 2.34  | 2.34  | 2.33  | 2.34  | 2.34  | 2.34  | 2.34  | 2.34  | 2.33  | 2.34  | 2.34  | 2.36      | -0.5% |
| Refrigeration  | 1.32  | 1.22  | 1.21  | 1.17  | 1.14  | 1.11  | 1.07  | 1.03  | 1.00  | 0.95  | 0.91  | 0.87  | 0.84  | 0.80  | 0.78  | 0.75  | 0.74  | 0.72  | 0.70  | 0.69  | 0.69  | 0.68  | 0.68  | 0.68  | 0.68  | -2.7%     |       |
| Cooking  | 0.62  | 0.60  | 0.62  | 0.62  | 0.63  | 0.63  | 0.63  | 0.64  | 0.64  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.62  | 0.62  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.64  | 0.64  | 0.65  | 0.65  | 0.2%      |       |
| Clothes Dryers   | 0.68  | 0.65  | 0.67  | 0.68  | 0.68  | 0.69  | 0.69  | 0.70  | 0.71  | 0.66  | 0.64  | 0.63  | 0.62  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.62  | 0.62  | 0.62  | 0.63  | 0.64  | 0.64  | -0.2%     |       |
| Freezers   | 0.42  | 0.38  | 0.37  | 0.35  | 0.34  | 0.32  | 0.30  | 0.29  | 0.27  | 0.26  | 0.24  | 0.23  | 0.22  | 0.21  | 0.21  | 0.20  | 0.20  | 0.19  | 0.19  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | -3.5%     |       |
| Lighting   | 1.05  | 1.01  | 1.05  | 1.06  | 1.08  | 1.09  | 1.10  | 1.12  | 1.13  | 1.05  | 1.03  | 1.00  | 0.98  | 0.97  | 0.97  | 0.97  | 0.98  | 0.97  | 0.98  | 0.98  | 0.98  | 0.98  | 0.99  | 0.99  | 1.00  | 1.01      | -0.1% |
| Clothes Washers  | 0.09  | 0.08  | 0.09  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | -0.4%     |       |
| Dishwashers  | 0.15  | 0.14  | 0.15  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.14  | -0.4%     |       |
| Color Televisions  | 0.68  | 0.69  | 0.74  | 0.77  | 0.81  | 0.83  | 0.85  | 0.87  | 0.88  | 0.84  | 0.81  | 0.79  | 0.77  | 0.76  | 0.75  | 0.74  | 0.74  | 0.74  | 0.73  | 0.73  | 0.74  | 0.74  | 0.75  | 0.76  | 0.77  | 0.5%      |       |
| Personal Computers   | 0.05  | 0.05  | 0.06  | 0.07  | 0.07  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.13  | 0.13  | 0.14  | 4.0%      |       |
| Furnace Fans   | 0.29  | 0.28  | 0.30  | 0.30  | 0.31  | 0.31  | 0.31  | 0.32  | 0.32  | 0.30  | 0.30  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.30  | 0.30  | 0.30  | 0.30  | 0.31  | 0.31  | 0.31  | 0.32  | 0.32  | 0.4%      |       |
| Other Uses 7/  | 2.67  | 2.76  | 3.06  | 3.28  | 3.57  | 3.85  | 3.95  | 4.05  | 4.15  | 3.95  | 3.91  | 3.87  | 3.87  | 3.90  | 3.95  | 4.00  | 4.08  | 4.11  | 4.17  | 4.24  | 4.32  | 4.37  | 4.44  | 4.51  | 4.61  | 2.3%      |       |
| Total  | 19.34 | 18.60 | 19.42 | 19.67 | 20.07 | 20.31 | 20.44 | 20.55 | 20.73 | 19.59 | 19.16 | 18.73 | 18.50 | 18.33 | 18.27 | 18.26 | 18.35 | 18.29 | 18.37 | 18.42 | 18.54 | 18.57 | 18.68 | 18.78 | 18.99 | -0.1%     |       |
| Non-Marketed Renewables  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Geothermal 8/  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 6.8%      |       |
| Solar 9/   | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | -0.3%     |       |
| Total  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 4.3%  |           |       |

1/ Does not include water heating of load.

2/ Includes small electric devices, heating elements and motors.

3/ Includes such appliances as swimming pool heaters, outdoor grills, and outdoor lighting (natural gas).

4/ Includes such appliances as swimming pool and hot tub heaters.

5/ Includes wood used for primary and secondary heating in wood stoves or fireplaces as reported in the Residential Energy Consumption Survey 1993.

6/ Includes kerosene and coal.

7/ Includes all other uses listed above.

8/ Includes primary energy displaced by geothermal heat pumps in space heating and cooling applications.

9/ Includes primary energy displaced by solar thermal water heaters.

Btu = British thermal unit.

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

Sources: 1996: Energy Information Administration (EIA), Short-Term Energy Outlook , August 1997, Online.<http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.



| Table 5. Commercial Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
|   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 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  | 1996-2020 |
| Marketed Renewable Fuels  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Biomass   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.1%  |           |
| Delivered Energy  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.1%  |           |
| Deliv. Energy Consump.<br>by End-Use  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Space Heating   | 1.65  | 1.61  | 1.64  | 1.64  | 1.64  | 1.64  | 1.64  | 1.64  | 1.65  | 1.55  | 1.51  | 1.46  | 1.45  | 1.43  | 1.43  | 1.43  | 1.43  | 1.42  | 1.42  | 1.42  | 1.41  | 1.41  | 1.40  | 1.40  | 1.39  | -0.7%     |
| Space Cooling   | 0.53  | 0.52  | 0.56  | 0.56  | 0.56  | 0.56  | 0.57  | 0.57  | 0.54  | 0.52  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.52  | 0.52  | 0.52  | 0.52  | 0.51  | 0.51  | -0.1%     |
| Water Heating   | 0.68  | 0.69  | 0.70  | 0.70  | 0.70  | 0.71  | 0.71  | 0.71  | 0.68  | 0.66  | 0.64  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | 0.63  | -0.3%     |
| Ventilation   | 0.17  | 0.17  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.18  | 0.17  | 0.17  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.16  | -0.1%     |
| Cooking   | 0.21  | 0.22  | 0.22  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.23  | 0.22  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | -0.0%     |
| Lighting  | 1.16  | 1.18  | 1.20  | 1.21  | 1.22  | 1.23  | 1.23  | 1.24  | 1.17  | 1.14  | 1.11  | 1.09  | 1.08  | 1.08  | 1.09  | 1.10  | 1.10  | 1.11  | 1.11  | 1.11  | 1.11  | 1.10  | 1.10  | 1.10  | 1.09  | -0.3%     |
| Refrigeration   | 0.14  | 0.14  | 0.14  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.7%      |
| Office Equipment (PC)   | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 1.4%      |
| Office Equipment (non-PC)   | 0.20  | 0.20  | 0.21  | 0.21  | 0.22  | 0.23  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 0.31  | 0.31  | 2.0%      |
| Other Uses 6/   | 2.65  | 2.69  | 2.75  | 2.84  | 2.90  | 2.95  | 3.01  | 3.06  | 3.12  | 3.02  | 3.00  | 2.97  | 2.99  | 3.01  | 3.05  | 3.10  | 3.15  | 3.18  | 3.23  | 3.26  | 3.28  | 3.30  | 3.32  | 3.33  | 3.36  | 1.0%      |
| Delivered Energy  | 7.47  | 7.49  | 7.65  | 7.78  | 7.87  | 7.93  | 8.02  | 8.10  | 8.19  | 7.82  | 7.69  | 7.54  | 7.51  | 7.52  | 7.56  | 7.63  | 7.70  | 7.74  | 7.81  | 7.85  | 7.87  | 7.88  | 7.91  | 7.91  | 7.94  | 0.3%      |
| Electricity Related Losses  | 7.52  | 7.45  | 7.66  | 7.85  | 7.93  | 7.96  | 8.00  | 8.05  | 8.08  | 7.46  | 7.15  | 6.84  | 6.60  | 6.48  | 6.38  | 6.30  | 6.26  | 6.18  | 6.15  | 6.12  | 6.09  | 6.07  | 6.06  | 6.06  | 6.06  | -0.9%     |
| Total Energy Consump.<br>by End-Use   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Space Heating   | 1.91  | 1.85  | 1.89  | 1.89  | 1.88  | 1.88  | 1.88  | 1.88  | 1.88  | 1.76  | 1.71  | 1.65  | 1.62  | 1.60  | 1.59  | 1.58  | 1.58  | 1.57  | 1.57  | 1.56  | 1.55  | 1.54  | 1.53  | 1.52  | 1.52  | -0.9%     |
| Space Cooling   | 1.67  | 1.60  | 1.71  | 1.72  | 1.72  | 1.71  | 1.70  | 1.70  | 1.70  | 1.56  | 1.49  | 1.43  | 1.38  | 1.36  | 1.34  | 1.32  | 1.31  | 1.30  | 1.29  | 1.28  | 1.27  | 1.26  | 1.25  | 1.25  | 1.24  | -1.2%     |
| Water Heating   | 1.07  | 1.07  | 1.08  | 1.08  | 1.08  | 1.08  | 1.08  | 1.08  | 1.08  | 1.01  | 0.97  | 0.93  | 0.91  | 0.90  | 0.89  | 0.88  | 0.88  | 0.87  | 0.87  | 0.86  | 0.86  | 0.85  | 0.85  | 0.85  | 0.85  | -1.0%     |
| Ventilation   | 0.55  | 0.54  | 0.55  | 0.55  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.52  | 0.50  | 0.48  | 0.46  | 0.45  | 0.45  | 0.44  | 0.44  | 0.43  | 0.43  | 0.43  | 0.42  | 0.42  | 0.42  | 0.41  | 0.41  | -1.2%     |
| Cooking   | 0.28  | 0.28  | 0.29  | 0.29  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.28  | 0.27  | 0.26  | 0.26  | 0.26  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.24  | 0.24  | -0.6%     |
| Lighting  | 3.75  | 3.76  | 3.81  | 3.87  | 3.88  | 3.87  | 3.86  | 3.85  | 3.84  | 3.53  | 3.37  | 3.21  | 3.08  | 3.01  | 2.96  | 2.93  | 2.91  | 2.88  | 2.86  | 2.84  | 2.82  | 2.80  | 2.78  | 2.76  | 2.74  | -1.3%     |
| Refrigeration   | 0.45  | 0.45  | 0.46  | 0.46  | 0.47  | 0.47  | 0.47  | 0.47  | 0.47  | 0.46  | 0.45  | 0.45  | 0.44  | 0.43  | 0.43  | 0.43  | 0.42  | 0.42  | 0.42  | 0.42  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | -0.4%     |
| Office Equipment (PC)   | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.24  | 0.24  | 0.25  | 0.25  | 0.23  | 0.23  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.4%      |
| Office Equipment (non-PC)   | 0.63  | 0.64  | 0.66  | 0.68  | 0.70  | 0.71  | 0.72  | 0.74  | 0.75  | 0.71  | 0.70  | 0.69  | 0.68  | 0.69  | 0.69  | 0.70  | 0.71  | 0.72  | 0.73  | 0.74  | 0.75  | 0.75  | 0.77  | 0.78  | 0.79  | 0.9%      |
| Other Uses 6/   | 4.43  | 4.51  | 4.64  | 4.85  | 4.98  | 5.09  | 5.21  | 5.33  | 5.45  | 5.22  | 5.15  | 5.07  | 5.05  | 5.08  | 5.12  | 5.17  | 5.23  | 5.27  | 5.33  | 5.37  | 5.41  | 5.44  | 5.48  | 5.51  | 5.56  | 0.9%      |
| Total   | 14.98 | 14.94 | 15.32 | 15.63 | 15.80 | 15.89 | 16.02 | 16.14 | 16.27 | 15.29 | 14.84 | 14.38 | 14.10 | 14.00 | 13.94 | 13.93 | 13.96 | 13.92 | 13.96 | 13.97 | 13.96 | 13.95 | 13.97 | 13.96 | 14.00 | -0.3%     |
| Non-Marketed Renewable Fuels  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Solar 7/  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 4.2%      |
| Total   | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 4.2%      |

1/ Includes miscellaneous uses, such as service station equipment, district services, automated teller machines, telecommunications equipment, and medical equipment.

2/ Excludes estimated consumption from independent power producers.

3/ Includes miscellaneous uses, such as district services, pumps, lighting, emergency electric generators, and manufacturing performed in commercial buildings.

4/ Includes miscellaneous uses, such as cooking, district services, and emergency electric generators.

5/ Includes residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

6/ Includes miscellaneous uses, such as service station equipment, district services, automated teller machines, telecommunications equipment, medical equipment, pumps, lighting, emergency electric generators, manufacturing performed in commercial buildings, and cooking (distillate), plus residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

Table 5. Commercial Sector Key Indicators and Consumption Notes (Continued)

7/ Includes primary energy displaced by solar thermal water heaters.

Btu = British thermal unit.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1996: Energy Information Administration (EIA), Short-Term Energy Outlook , August 1997, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 6. Industrial Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |       |       |       |       |       |       |       |       |       |       |       | 1996-2020 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | 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  |       |
| Key Indicators  |       |       |       |       |       |       |       |       |       |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Value of Gross Output(bill.87\$)  |       |       |       |       |       |       |       |       |       |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Manufacturing   | 3030  | 3162  | 3194  | 3248  | 3324  | 3410  | 3493  | 3579  | 3686  | 3756  | 3851  | 3927      | 3999  | 4087  | 4188  | 4297  | 4389  | 4462  | 4521  | 4563  | 4604  | 4658  | 4700  | 4736  | 4797  | 1.9%  |
| Nonmanufacturing  | 774   | 794   | 812   | 824   | 834   | 846   | 858   | 866   | 878   | 883   | 894   | 901       | 910   | 921   | 937   | 957   | 975   | 991   | 1002  | 1008  | 1013  | 1020  | 1026  | 1031  | 1035  | 1.2%  |
| Total   | 3805  | 3956  | 4006  | 4072  | 4157  | 4256  | 4351  | 4445  | 4564  | 4639  | 4745  | 4828      | 4908  | 5008  | 5126  | 5254  | 5363  | 5453  | 5523  | 5571  | 5617  | 5678  | 5725  | 5767  | 5832  | 1.8%  |
| Energy Prices (1996\$/mmBtu)  |       |       |       |       |       |       |       |       |       |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Electricity   | 13.38 | 13.03 | 12.74 | 12.52 | 12.31 | 12.16 | 12.03 | 11.90 | 11.72 | 14.61 | 15.78 | 16.86     | 17.24 | 17.24 | 17.12 | 16.75 | 16.36 | 16.26 | 15.99 | 15.84 | 15.79 | 15.76 | 15.64 | 15.53 | 15.38 | 0.6%  |
| Natural Gas   | 2.96  | 3.03  | 2.70  | 2.73  | 2.72  | 2.76  | 2.78  | 2.80  | 2.80  | 3.93  | 4.49  | 5.14      | 5.38  | 5.57  | 5.74  | 5.80  | 5.90  | 6.04  | 6.05  | 6.16  | 6.26  | 6.31  | 6.34  | 6.42  | 6.35  | 3.2%  |
| Steam Coal  | 1.46  | 1.41  | 1.39  | 1.38  | 1.36  | 1.35  | 1.33  | 1.32  | 1.31  | 3.27  | 4.08  | 5.00      | 5.21  | 5.34  | 5.37  | 5.26  | 5.13  | 5.11  | 4.92  | 4.93  | 4.96  | 4.93  | 4.88  | 4.94  | 4.72  | 5.0%  |
| Residual Oil  | 2.99  | 2.68  | 2.69  | 2.52  | 2.56  | 2.62  | 2.63  | 2.70  | 2.72  | 4.34  | 4.94  | 5.79      | 5.93  | 5.94  | 5.96  | 5.91  | 5.83  | 5.86  | 5.75  | 5.73  | 5.81  | 5.76  | 5.74  | 5.82  | 5.74  | 2.8%  |
| Distillate Oil  | 5.50  | 5.09  | 5.05  | 5.03  | 5.07  | 5.12  | 5.17  | 5.27  | 5.38  | 6.87  | 7.43  | 8.20      | 8.32  | 8.35  | 8.35  | 8.28  | 8.20  | 8.26  | 8.13  | 8.14  | 8.20  | 8.20  | 8.19  | 8.23  | 8.10  | 1.6%  |
| Liquefied Petroleum Gas   | 7.80  | 5.64  | 5.63  | 6.09  | 6.19  | 6.44  | 6.44  | 6.67  | 6.73  | 7.80  | 8.13  | 8.87      | 8.95  | 8.81  | 8.76  | 8.65  | 8.48  | 8.59  | 8.42  | 8.45  | 8.60  | 8.55  | 8.57  | 8.64  | 8.47  | 0.3%  |
| Motor Gasoline  | 9.86  | 9.54  | 9.32  | 8.10  | 8.24  | 8.40  | 8.47  | 8.57  | 8.72  | 10.21 | 10.87 | 11.51     | 11.64 | 11.67 | 11.57 | 11.47 | 11.34 | 11.38 | 11.27 | 11.27 | 11.38 | 11.32 | 11.31 | 11.35 | 11.36 | 0.6%  |
| Metallurgical Coal  | 1.77  | 1.75  | 1.74  | 1.71  | 1.69  | 1.69  | 1.67  | 1.66  | 1.64  | 3.60  | 4.41  | 5.33      | 5.54  | 5.66  | 5.69  | 5.58  | 5.45  | 5.43  | 5.24  | 5.26  | 5.29  | 5.26  | 5.20  | 5.27  | 5.05  | 4.5%  |
| Energy Consumption  |       |       |       |       |       |       |       |       |       |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Consumption<br>(quad. Btu/ year)1/  |       |       |       |       |       |       |       |       |       |       |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Purchased Electricity   | 3.46  | 3.54  | 3.58  | 3.67  | 3.70  | 3.79  | 3.86  | 3.91  | 3.98  | 3.92  | 3.91  | 3.88      | 3.88  | 3.91  | 3.95  | 4.01  | 4.06  | 4.09  | 4.12  | 4.11  | 4.11  | 4.12  | 4.12  | 4.11  | 4.13  | 0.7%  |
| Natural Gas 2/  | 9.96  | 10.21 | 10.51 | 10.80 | 10.75 | 10.73 | 10.80 | 10.78 | 10.86 | 11.11 | 11.25 | 11.41     | 11.43 | 11.48 | 11.54 | 11.63 | 11.67 | 11.67 | 11.64 | 11.47 | 11.49 | 11.38 | 11.40 | 11.35 | 11.31 | 0.5%  |
| Steam Coal  | 1.55  | 1.51  | 1.54  | 1.55  | 1.56  | 1.59  | 1.62  | 1.65  | 1.67  | 1.24  | 1.14  | 1.06      | 1.05  | 1.05  | 1.07  | 1.10  | 1.14  | 1.17  | 1.20  | 1.21  | 1.21  | 1.22  | 1.23  | 1.22  | 1.26  | -0.9% |
| Metallurgical Coal & Coke 3/  | 0.85  | 0.95  | 0.96  | 0.95  | 0.94  | 0.94  | 0.94  | 0.93  | 0.92  | 0.89  | 0.88  | 0.86      | 0.85  | 0.84  | 0.83  | 0.83  | 0.82  | 0.81  | 0.80  | 0.79  | 0.77  | 0.76  | 0.75  | 0.74  | 0.73  | -0.6% |
| Residual Fuel   | 0.34  | 0.35  | 0.34  | 0.33  | 0.33  | 0.35  | 0.34  | 0.35  | 0.33  | 0.34  | 0.35  | 0.34      | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.38  | 0.40  | 0.50  | 0.50  | 0.51  | 0.51  | 0.51  | 0.50  | 1.6%  |
| Distillate  | 1.17  | 1.18  | 1.17  | 1.19  | 1.20  | 1.23  | 1.26  | 1.28  | 1.31  | 1.33  | 1.35  | 1.37      | 1.38  | 1.40  | 1.43  | 1.46  | 1.48  | 1.50  | 1.52  | 1.52  | 1.53  | 1.54  | 1.55  | 1.55  | 1.55  | 1.2%  |
| Liquefied Petroleum Gas   | 2.12  | 2.14  | 2.13  | 2.12  | 2.15  | 2.18  | 2.21  | 2.23  | 2.25  | 2.25  | 2.29  | 2.31      | 2.32  | 2.35  | 2.38  | 2.41  | 2.43  | 2.45  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 2.46  | 0.6%  |
| Petrochemical Feedstocks  | 1.28  | 1.29  | 1.28  | 1.29  | 1.31  | 1.33  | 1.35  | 1.36  | 1.37  | 1.36  | 1.38  | 1.38      | 1.39  | 1.40  | 1.41  | 1.43  | 1.44  | 1.44  | 1.45  | 1.44  | 1.44  | 1.44  | 1.44  | 1.44  | 1.43  | 0.5%  |
| Other Petroleum 4/  | 4.31  | 4.36  | 4.37  | 4.51  | 4.58  | 4.65  | 4.65  | 4.68  | 4.72  | 4.67  | 4.76  | 4.64      | 4.71  | 4.77  | 4.84  | 4.89  | 4.98  | 5.09  | 5.19  | 5.26  | 5.22  | 5.35  | 5.36  | 5.39  | 5.41  | 1.0%  |
| Renewables 5/   | 1.82  | 1.89  | 1.90  | 1.93  | 1.96  | 1.99  | 2.02  | 2.05  | 2.08  | 2.10  | 2.13  | 2.15      | 2.17  | 2.20  | 2.23  | 2.27  | 2.30  | 2.33  | 2.35  | 2.36  | 2.37  | 2.38  | 2.38  | 2.38  | 2.39  | 1.1%  |
| Delivered Energy  | 26.87 | 27.40 | 27.78 | 28.35 | 28.48 | 28.79 | 29.06 | 29.21 | 29.49 | 29.21 | 29.43 | 29.39     | 29.51 | 29.75 | 30.04 | 30.40 | 30.71 | 30.94 | 31.13 | 31.13 | 31.12 | 31.16 | 31.19 | 31.15 | 31.19 | 0.6%  |
| Electricity Related Losses  | 7.72  | 7.71  | 7.82  | 8.02  | 8.06  | 8.16  | 8.24  | 8.28  | 8.34  | 7.91  | 7.66  | 7.35      | 7.11  | 6.97  | 6.85  | 6.78  | 6.71  | 6.60  | 6.52  | 6.42  | 6.34  | 6.31  | 6.26  | 6.22  | 6.23  | -0.9% |
| Total   | 34.59 | 35.11 | 35.60 | 36.37 | 36.53 | 36.95 | 37.29 | 37.50 | 37.83 | 37.12 | 37.09 | 36.75     | 36.61 | 36.72 | 36.89 | 37.18 | 37.42 | 37.54 | 37.64 | 37.55 | 37.46 | 37.45 | 37.37 | 37.42 | 0.3%  |       |

| Table 6. Industrial Sector Key Indicators and Consumption<br>(Quadrillion Btu per year, Unless otherwise noted) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
|   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
|   | 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 | 1996-2020 |
| Consumption / Unit of Output <sup>1/</sup><br>(thousand Btu / 1987 dollar)                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Purchased Electricity   | 0.91 | 0.89 | 0.89 | 0.90 | 0.89 | 0.89 | 0.89 | 0.88 | 0.87 | 0.84 | 0.82 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.76 | 0.75 | 0.75 | 0.74 | 0.73 | 0.73 | 0.72 | 0.71 | 0.71 | -1.0%     |
| Natural Gas <sup>2/</sup>   | 2.62 | 2.58 | 2.62 | 2.65 | 2.58 | 2.52 | 2.48 | 2.42 | 2.38 | 2.39 | 2.37 | 2.36 | 2.33 | 2.29 | 2.25 | 2.21 | 2.18 | 2.14 | 2.11 | 2.06 | 2.05 | 2.00 | 1.99 | 1.97 | 1.94 | -1.2%     |
| Steam Coal  | 0.41 | 0.38 | 0.38 | 0.38 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.27 | 0.24 | 0.22 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.21 | 0.21 | 0.22 | -2.6%     |
| Metallurgical Coal & Coke <sup>3/</sup>   | 0.22 | 0.24 | 0.24 | 0.23 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 | 0.19 | 0.19 | 0.18 | 0.17 | 0.17 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 | 0.13 | 0.13 | 0.13 | 0.13 | -2.4%     |
| Residual Fuel   | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | -0.2%     |
| Distillate  | 0.31 | 0.30 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | -0.6%     |
| Liquefied Petroleum Gas   | 0.56 | 0.54 | 0.53 | 0.52 | 0.52 | 0.51 | 0.51 | 0.50 | 0.49 | 0.49 | 0.48 | 0.48 | 0.47 | 0.47 | 0.46 | 0.46 | 0.45 | 0.45 | 0.45 | 0.44 | 0.44 | 0.43 | 0.43 | 0.43 | 0.42 | -1.2%     |
| Petrochemical Feedstocks  | 0.34 | 0.33 | 0.32 | 0.32 | 0.31 | 0.31 | 0.31 | 0.31 | 0.30 | 0.29 | 0.29 | 0.29 | 0.28 | 0.28 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | -1.3%     |
| Other Petroleum <sup>4/</sup>   | 1.13 | 1.10 | 1.09 | 1.11 | 1.10 | 1.09 | 1.07 | 1.05 | 1.03 | 1.01 | 1.00 | 0.96 | 0.96 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.93 | 0.94 | 0.94 | 0.93 | 0.93 | -0.8%     |
| Renewables <sup>5/</sup>  | 0.48 | 0.48 | 0.48 | 0.47 | 0.47 | 0.47 | 0.46 | 0.46 | 0.45 | 0.45 | 0.44 | 0.44 | 0.44 | 0.44 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 | 0.41 | -0.6%     |
| Delivered Energy  | 7.06 | 6.93 | 6.93 | 6.96 | 6.85 | 6.76 | 6.68 | 6.57 | 6.46 | 6.30 | 6.20 | 6.09 | 6.01 | 5.94 | 5.86 | 5.79 | 5.73 | 5.67 | 5.64 | 5.59 | 5.54 | 5.49 | 5.45 | 5.40 | 5.35 | -1.2%     |
| Electricity Related Losses  | 2.03 | 1.95 | 1.95 | 1.97 | 1.94 | 1.92 | 1.89 | 1.86 | 1.83 | 1.71 | 1.61 | 1.52 | 1.45 | 1.39 | 1.34 | 1.29 | 1.25 | 1.21 | 1.18 | 1.15 | 1.13 | 1.11 | 1.09 | 1.08 | 1.07 | -2.6%     |
| Total   | 9.09 | 8.88 | 8.89 | 8.93 | 8.79 | 8.68 | 8.57 | 8.44 | 8.29 | 8.00 | 7.82 | 7.61 | 7.46 | 7.33 | 7.20 | 7.08 | 6.98 | 6.88 | 6.82 | 6.74 | 6.67 | 6.60 | 6.54 | 6.48 | 6.42 | -1.4%     |

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

3/ Includes net coke coal imports.

4/ Includes petroleum coke, asphalt, road oil, lubricants, motor gasoline, still gas, and miscellaneous petroleum products.

5/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

Btu = British thermal unit.

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

Sources: 1996 prices for gasoline and distillate are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380(96/03-97/04) (Washington, DC, 1996-97). 1996 coal prices: EIA, Monthly Energy Review, DOE/EIA-0035(97/08) (Washington, DC, August 1997). 1996 electricity prices:EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B. Other 1996 prices derived from EIA, State Energy Data Report 1994. Online. [ftp://ftp.eia.doe.gov/pub/state.data/021494.pdf](http://ftp.eia.doe.gov/pub/state.data/021494.pdf) (August 26, 1997). Other 1996 values: EIA, Short-Term Energy Outlook, August 1997. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

Table 7. Transportation Sector Key Indicators and Delivered Energy Consumption

|   | 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  | 1996-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Key Indicators</b>                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Level of Travel (billions)                                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Light-Duty Veh.<8500 lbs.(VMT)                            | 2276  | 2330  | 2384  | 2425  | 2458  | 2498  | 2539  | 2579  | 2621  | 2639  | 2653  | 2660  | 2685  | 2712  | 2752  | 2796  | 2845  | 2888  | 2935  | 2977  | 3010  | 3047  | 3082  | 3115  | 3147  | 1.4%      |
| Commercial Light Trucks(VMT) 1/                           | 67    | 69    | 70    | 71    | 73    | 74    | 75    | 77    | 78    | 79    | 80    | 81    | 81    | 83    | 84    | 86    | 87    | 89    | 90    | 91    | 92    | 93    | 94    | 95    | 96    | 1.5%      |
| Freight Trucks >10000 lbs.(VMT)                           | 162   | 174   | 179   | 183   | 188   | 193   | 198   | 202   | 207   | 210   | 213   | 216   | 219   | 222   | 226   | 231   | 234   | 237   | 239   | 241   | 242   | 243   | 244   | 244   | 245   | 1.7%      |
| Air (seat miles demanded)                                 | 999   | 1074  | 1124  | 1175  | 1221  | 1265  | 1316  | 1361  | 1418  | 1453  | 1480  | 1491  | 1540  | 1586  | 1638  | 1701  | 1774  | 1829  | 1899  | 1949  | 2000  | 2050  | 2100  | 2144  | 2197  | 3.3%      |
| Rail (ton miles traveled)                                 | 1218  | 1312  | 1349  | 1368  | 1384  | 1420  | 1438  | 1450  | 1469  | 1379  | 1352  | 1301  | 1273  | 1262  | 1266  | 1280  | 1276  | 1272  | 1265  | 1257  | 1254  | 1247  | 1244  | 1237  | 1242  | 0.1%      |
| Marine (ton miles traveled)                               | 779   | 785   | 793   | 807   | 810   | 816   | 827   | 834   | 844   | 841   | 847   | 850   | 850   | 855   | 863   | 872   | 879   | 886   | 888   | 887   | 886   | 887   | 887   | 885   | 884   | 0.5%      |
| <b>Energy Efficiency Indicators</b>                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| New Car (MPG) 2/  | 28.2  | 27.8  | 27.4  | 27.9  | 28.1  | 28.5  | 28.8  | 29.2  | 29.7  | 30.7  | 31.4  | 32.1  | 33.1  | 33.6  | 33.6  | 33.5  | 33.1  | 33.0  | 32.8  | 32.7  | 32.9  | 32.8  | 32.9  | 33.0  | 33.6  | 0.7%      |
| New Light Truck (MPG) 2/                                  | 20.9  | 19.5  | 19.1  | 19.2  | 19.3  | 19.5  | 19.6  | 19.8  | 20.0  | 20.6  | 21.0  | 21.4  | 21.8  | 22.1  | 22.1  | 22.1  | 22.0  | 22.0  | 21.9  | 22.0  | 22.1  | 22.2  | 22.3  | 22.6  | 23.0  | 0.4%      |
| Light-Duty Fleet (MPG) 3/                                 | 20.2  | 20.3  | 20.4  | 20.4  | 20.3  | 20.3  | 20.3  | 20.3  | 20.4  | 20.5  | 20.5  | 20.7  | 20.9  | 21.2  | 21.4  | 21.6  | 21.8  | 21.9  | 22.1  | 22.2  | 22.3  | 22.4  | 22.5  | 22.6  | 0.5%  |           |
| New Comm. Light Truck (MPG) 1/                            | 20.2  | 19.0  | 18.6  | 18.7  | 18.8  | 18.9  | 19.0  | 19.1  | 19.3  | 19.9  | 20.2  | 20.6  | 21.0  | 21.2  | 21.3  | 21.2  | 21.1  | 21.1  | 21.0  | 21.0  | 21.2  | 21.2  | 21.4  | 21.6  | 21.7  | 0.3%      |
| Stock Comm. Light Truck(MPG) 1/                           | 14.5  | 14.6  | 14.6  | 14.6  | 14.7  | 14.7  | 14.7  | 14.8  | 14.8  | 14.9  | 15.0  | 15.0  | 15.1  | 15.2  | 15.3  | 15.4  | 15.5  | 15.6  | 15.6  | 15.7  | 15.8  | 15.8  | 15.9  | 16.0  | 16.0  | 0.4%      |
| Aircraft Stock (seat miles/gal)                           | 50.6  | 51.1  | 51.4  | 51.8  | 52.1  | 52.5  | 52.8  | 53.2  | 53.5  | 53.9  | 54.2  | 54.4  | 54.8  | 55.2  | 55.6  | 56.1  | 56.6  | 57.1  | 57.5  | 57.9  | 58.3  | 58.7  | 59.1  | 59.5  | 59.8  | 0.7%      |
| Freight Truck Efficiency (MPG)                            | 5.6   | 5.6   | 5.7   | 5.7   | 5.8   | 5.8   | 5.8   | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 6.1   | 6.1   | 6.2   | 6.2   | 6.2   | 6.2   | 6.3   | 6.3   | 6.3   | 6.4   | 6.4   | 6.5   | 6.6   | 0.6%      |
| Rail Eff. (ton miles/thous. Btu)                          | 2.7   | 2.7   | 2.7   | 2.7   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 0.5%      |
| Domestic Shipping Efficiency (ton miles per thousand Btu) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 0.5%      |
| <b>Energy Use by Mode (quad. Btu/yr)</b>                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Light-Duty Vehicles                                       | 13.95 | 14.20 | 14.52 | 14.82 | 15.09 | 15.40 | 15.70 | 15.97 | 16.23 | 16.29 | 16.29 | 16.21 | 16.20 | 16.19 | 16.27 | 16.35 | 16.49 | 16.61 | 16.78 | 16.92 | 17.03 | 17.16 | 17.28 | 17.38 | 17.49 | 0.9%      |
| Commercial Light Trucks 1/                                | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 0.64  | 0.65  | 0.66  | 0.66  | 0.67  | 0.67  | 0.67  | 0.68  | 0.69  | 0.70  | 0.71  | 0.71  | 0.72  | 0.73  | 0.73  | 0.73  | 0.74  | 0.74  | 0.75  | 1.1%      |
| Freight Trucks 4/   | 4.04  | 4.32  | 4.43  | 4.47  | 4.52  | 4.62  | 4.70  | 4.77  | 4.85  | 4.89  | 4.91  | 4.93  | 4.97  | 5.00  | 5.07  | 5.13  | 5.19  | 5.22  | 5.24  | 5.23  | 5.21  | 5.21  | 5.20  | 5.18  | 5.17  | 1.0%      |
| Air   | 3.32  | 3.37  | 3.41  | 3.76  | 3.85  | 3.94  | 4.04  | 4.14  | 4.28  | 4.35  | 4.41  | 4.42  | 4.53  | 4.62  | 4.73  | 4.85  | 5.00  | 5.10  | 5.24  | 5.33  | 5.42  | 5.50  | 5.59  | 5.66  | 5.74  | 2.3%      |
| Rail  | 0.53  | 0.56  | 0.58  | 0.58  | 0.59  | 0.60  | 0.60  | 0.60  | 0.61  | 0.58  | 0.56  | 0.54  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.52  | 0.52  | 0.52  | 0.52  | 0.52  | 0.51  | 0.51  | 0.51  | -0.2%     |
| Marine  | 1.43  | 1.41  | 1.43  | 1.47  | 1.51  | 1.54  | 1.58  | 1.62  | 1.66  | 1.70  | 1.73  | 1.77  | 1.80  | 1.84  | 1.89  | 1.93  | 1.97  | 2.01  | 2.04  | 2.08  | 2.11  | 2.14  | 2.17  | 2.20  | 2.23  | 1.9%      |
| Pipeline Fuel   | 0.73  | 0.76  | 0.78  | 0.81  | 0.77  | 0.76  | 0.78  | 0.76  | 0.79  | 0.82  | 0.85  | 0.88  | 0.90  | 0.91  | 0.96  | 0.97  | 1.00  | 1.04  | 1.05  | 1.07  | 1.08  | 1.08  | 1.09  | 1.10  | 1.10  | 1.7%      |
| Other 5/  | 0.24  | 0.25  | 0.26  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.30  | 0.31  | 0.31  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 0.32  | 1.2%      |
| Total   | 24.73 | 25.36 | 25.88 | 26.68 | 27.13 | 27.68 | 28.24 | 28.70 | 29.25 | 29.45 | 29.61 | 29.61 | 29.79 | 29.97 | 30.30 | 30.64 | 31.06 | 31.40 | 31.77 | 32.07 | 32.29 | 32.55 | 32.79 | 32.97 | 33.19 | 1.2%      |

1/ Commercial trucks 8,500 to 10,000 pounds.

2/ Environmental Protection Agency rated miles per gallon.

3/ Combined car and light truck "on-the-road" estimate.

4/ Includes energy use by buses.

5/ Includes lubricants and aviation gasoline.

Btu = British thermal unit.

VMT=Vehicle miles traveled.

MPG = Miles per gallon.

Lbs. = Pounds.

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

Sources: 1996: Federal Aviation Administration (FAA), FAA Aviation Forecasts Fiscal Years 1996-2007, (Washington, DC, February 1995); Energy Information Administration (EIA), Short-Term Energy Outlook, August 1997, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997); EIA, Fuel Oil and Kerosene Sales 1996, DOE/EIA-0535(96) (Washington, DC, September 1997); and United States Department of Defense, Defense Fuel Supply Center. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 8. Electricity Supply, Disposition, and Prices<br>(Billion Kilowatthours, Unless Otherwise Noted) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1996-2020 |      |      |      |      |      |      |       |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|------|------|------|------|------|------|-------|
|   | 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 |       |
| Generation by Fuel Type   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |       |
| Electric Generators 1/  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |       |
| Coal  | 1758 | 1811 | 1898 | 1906 | 1912 | 1921 | 1920 | 1921 | 1920 | 1681 | 1498 | 1281 | 1144 | 1043 | 977  | 929  | 852  | 781  | 718       | 674  | 634  | 600  | 561  | 522  | 508  | -5.0% |
| Petroleum   | 80   | 81   | 62   | 65   | 58   | 65   | 58   | 54   | 50   | 36   | 36   | 29   | 27   | 28   | 25   | 24   | 20   | 17   | 21        | 29   | 35   | 53   | 52   | 66   | 64   | -0.9% |
| Natural Gas   | 288  | 265  | 323  | 360  | 369  | 426  | 477  | 529  | 593  | 777  | 943  | 1133 | 1272 | 1398 | 1518 | 1627 | 1757 | 1879 | 1971      | 2045 | 2098 | 2141 | 2191 | 2221 | 2243 | 8.9%  |
| Nuclear Power   | 675  | 644  | 656  | 679  | 684  | 689  | 694  | 698  | 691  | 683  | 679  | 675  | 669  | 667  | 654  | 640  | 635  | 618  | 613       | 591  | 582  | 560  | 553  | 552  | 552  | -0.8% |
| Pumped Storage  | -2   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3   | -3        | -3   | -3   | -3   | -3   | -3   | -3   | 1.3%  |
| Renewable Sources 2/  | 392  | 391  | 358  | 362  | 366  | 367  | 369  | 370  | 373  | 385  | 389  | 394  | 398  | 403  | 409  | 418  | 431  | 442  | 455       | 469  | 485  | 506  | 529  | 549  | 571  | 1.6%  |
| Total   | 3191 | 3189 | 3294 | 3368 | 3385 | 3464 | 3516 | 3569 | 3625 | 3559 | 3543 | 3510 | 3507 | 3536 | 3581 | 3634 | 3691 | 3733 | 3775      | 3804 | 3831 | 3858 | 3883 | 3906 | 3935 | 0.9%  |
| Non-Utility Gen. for Own Use  | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 5    | 5    | 5    | 5    | 5    | 5         | 5    | 5    | 5    | 5    | 5    | 5    | -0.7% |
| Cogenerators 3/   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |       |
| Coal  | 51   | 51   | 51   | 51   | 51   | 51   | 51   | 51   | 51   | 50   | 50   | 50   | 50   | 50   | 50   | 50   | 50   | 50   | 50        | 50   | 50   | 50   | 49   | 49   | 49   | -0.1% |
| Petroleum   | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 7    | 7         | 7    | 7    | 7    | 7    | 7    | 7    | 0.5%  |
| Natural Gas   | 196  | 199  | 200  | 206  | 208  | 209  | 210  | 211  | 212  | 222  | 225  | 228  | 231  | 232  | 233  | 234  | 236  | 236  | 235       | 233  | 232  | 231  | 230  | 228  | 228  | 0.6%  |
| Other Gaseous Fuels 4/  | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7         | 7    | 7    | 7    | 7    | 7    | 7    | 0.0%  |
| Renewable 2/  | 42   | 42   | 42   | 43   | 43   | 44   | 45   | 45   | 46   | 46   | 47   | 47   | 48   | 49   | 49   | 50   | 51   | 51   | 52        | 52   | 52   | 52   | 52   | 52   | 53   | 1.0%  |
| Other 5/  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3         | 3    | 3    | 3    | 3    | 3    | 3    | -0.0% |
| Total   | 305  | 309  | 310  | 317  | 319  | 321  | 323  | 325  | 327  | 335  | 339  | 342  | 345  | 347  | 349  | 351  | 353  | 354  | 354       | 352  | 351  | 350  | 349  | 348  | 348  | 0.5%  |
| Sales to Utilities  | 156  | 159  | 159  | 159  | 159  | 160  | 160  | 160  | 161  | 162  | 162  | 163  | 163  | 164  | 164  | 164  | 165  | 165  | 164       | 164  | 164  | 164  | 164  | 164  | 164  | 0.2%  |
| Generation for Own Use  | 149  | 150  | 151  | 158  | 160  | 162  | 163  | 164  | 166  | 174  | 177  | 180  | 182  | 183  | 185  | 187  | 189  | 190  | 189       | 188  | 187  | 186  | 185  | 184  | 184  | 0.9%  |
| Net Imports 6/  | 38   | 34   | 32   | 25   | 74   | 72   | 73   | 69   | 75   | 21   | 13   | 12   | 10   | 11   | 10   | 10   | 8    | 7    | 5         | 4    | 4    | 4    | 4    | 4    | 4    | -8.7% |
| Electricity Sales by Sector   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |       |
| Residential   | 1079 | 1058 | 1115 | 1130 | 1168 | 1201 | 1217 | 1233 | 1256 | 1210 | 1203 | 1198 | 1203 | 1212 | 1228 | 1247 | 1271 | 1286 | 1304      | 1323 | 1345 | 1357 | 1374 | 1392 | 1414 | 1.1%  |
| Commercial  | 988  | 1001 | 1028 | 1052 | 1069 | 1083 | 1098 | 1113 | 1131 | 1084 | 1071 | 1058 | 1055 | 1064 | 1078 | 1093 | 1111 | 1124 | 1138      | 1149 | 1157 | 1162 | 1168 | 1173 | 1177 | 0.7%  |
| Industrial  | 1014 | 1036 | 1049 | 1075 | 1086 | 1110 | 1130 | 1146 | 1167 | 1149 | 1147 | 1137 | 1136 | 1145 | 1157 | 1176 | 1190 | 1200 | 1206      | 1206 | 1204 | 1207 | 1207 | 1206 | 1210 | 0.7%  |
| Transportation  | 17   | 17   | 18   | 18   | 18   | 19   | 19   | 21   | 23   | 24   | 25   | 26   | 27   | 28   | 29   | 30   | 31   | 31   | 32        | 33   | 33   | 34   | 35   | 35   | 36   | 3.1%  |
| Total   | 3098 | 3112 | 3210 | 3275 | 3341 | 3413 | 3464 | 3513 | 3577 | 3467 | 3446 | 3418 | 3420 | 3448 | 3492 | 3545 | 3603 | 3641 | 3681      | 3711 | 3739 | 3761 | 3784 | 3806 | 3837 | 0.9%  |
| End-Use Prices<br>(1996 cents/kwh)7/  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |       |
| Residential   | 8.3  | 8.1  | 8.0  | 7.8  | 7.7  | 7.6  | 7.5  | 7.5  | 7.4  | 9.1  | 9.8  | 10.4 | 10.7 | 10.7 | 10.7 | 10.5 | 10.3 | 10.3 | 10.2      | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0 | 0.7%  |
| Commercial  | 7.5  | 7.4  | 7.2  | 7.1  | 6.9  | 6.9  | 6.8  | 6.7  | 6.6  | 8.3  | 9.0  | 9.6  | 9.9  | 9.9  | 9.8  | 9.7  | 9.5  | 9.4  | 9.2       | 9.2  | 9.2  | 9.1  | 9.1  | 9.0  | 8.9  | 0.7%  |
| Industrial  | 4.6  | 4.4  | 4.3  | 4.3  | 4.2  | 4.1  | 4.1  | 4.1  | 4.0  | 5.0  | 5.4  | 5.8  | 5.9  | 5.9  | 5.8  | 5.7  | 5.6  | 5.5  | 5.5       | 5.4  | 5.4  | 5.4  | 5.3  | 5.3  | 5.2  | 0.6%  |
| Transportation  | 5.2  | 5.2  | 5.1  | 5.1  | 5.0  | 4.9  | 4.8  | 4.7  | 4.6  | 4.8  | 4.9  | 5.0  | 5.0  | 5.1  | 5.0  | 4.9  | 4.8  | 4.8  | 4.7       | 4.6  | 4.6  | 4.6  | 4.5  | 4.5  | 4.5  | -0.6% |
| All Sectors Average   | 6.8  | 6.6  | 6.5  | 6.4  | 6.3  | 6.2  | 6.2  | 6.1  | 6.0  | 7.4  | 8.0  | 8.6  | 8.8  | 8.8  | 8.6  | 8.4  | 8.4  | 8.3  | 8.2       | 8.2  | 8.2  | 8.2  | 8.2  | 8.1  | 0.7% |       |

1/ Includes grid-connected generation at all utilities and nonutilities except for cogenerators. Includes small power producers, exempt wholesale generators, and generators at industrial and commercial facilities which provide electricity for on-site use and for sales to utilities.

2/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, landfill gas, other biomass, solar, and wind power.

3/ Cogenerators produce electricity and other useful thermal energy. Includes sales to utilities and generation for own use.

4/ Other gaseous fuels include refinery and still gas.

5/ Others includes hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

6/ In 1996 approximately two-thirds of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions.

7/ Prices represent average revenue per kilowatthour.

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

Sources: 1996 commercial and transportation sales derived from: Total transportation plus commercial sales come from Energy Information Administration (EIA), State Energy Data Report 1994. Online.

<ftp://ftp.eia.doe.gov/pub/state.data/021494.pdf> (August 26, 1997), but individual sectors do not match because sales taken from commercial and placed in transportation, according to Oak Ridge National Laboratories, Transportation Energy Data Book 16 (July 1996) which indicates the transportation value should be higher. 1996 generation by electric utilities, nonutilities, and cogenerators, net electricity imports, residential sales, and industrial sales: EIA, Annual Energy Review 1996, DOE/EIA-0384(96) (Washington,DC, July 1997). 1996 residential electricity prices derived from EIA, Short Term Energy Outlook, August 1997, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). 1996 electricity prices for commercial, industrial, and transportation; price components; and projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 9. Electricity Generating Capability<br>(Thousand Megawatts) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----------|
|  |       |       | 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 | 1996-2020 |
| Net Summer Capability 1/   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Electric Generators 2/   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Capability   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Coal Steam   | 303.7 | 301.9 | 301.7 | 301.7 | 302.4 | 302.4 | 302.3 | 302.3 | 302.4 | 302.1 | 301.9 | 301.8 | 301.5 | 293.4 | 275.8 | 259.7 | 239.6 | 226.0 | 213.7 | 210.9 | 205.8 | 204.3 | 201.2 | 199.4 | 197.5 | -1.8% |      |           |
| Other Fossil Steam 3/  | 136.6 | 136.0 | 135.8 | 135.7 | 135.5 | 135.2 | 134.9 | 132.9 | 129.7 | 125.4 | 120.7 | 114.9 | 109.9 | 97.5  | 92.7  | 89.1  | 82.9  | 74.2  | 69.5  | 65.0  | 62.6  | 58.2  | 55.0  | 51.7  | 49.7  | -4.1% |      |           |
| Combined Cycle   | 15.2  | 15.8  | 16.5  | 16.5  | 21.7  | 30.9  | 40.5  | 48.8  | 59.3  | 74.7  | 95.6  | 118.4 | 142.0 | 165.1 | 186.7 | 207.9 | 228.9 | 248.5 | 264.0 | 276.2 | 286.0 | 296.6 | 304.8 | 311.5 | 318.0 | 13.5% |      |           |
| Combustion Turbine/Diesel  | 61.7  | 67.3  | 76.3  | 80.1  | 86.2  | 91.0  | 94.3  | 96.5  | 100.0 | 99.0  | 98.5  | 98.5  | 98.9  | 99.4  | 100.1 | 101.4 | 102.4 | 102.6 | 103.3 | 103.7 | 104.1 | 105.1 | 106.0 | 107.3 | 109.3 | 2.4%  |      |           |
| Nuclear Power  | 100.8 | 99.1  | 96.1  | 96.1  | 96.1  | 96.1  | 95.7  | 94.1  | 94.1  | 92.6  | 91.8  | 91.8  | 90.7  | 88.8  | 88.0  | 86.9  | 84.4  | 82.0  | 79.1  | 76.0  | 74.9  | 74.9  | 74.9  | 73.8  | -1.3% |       |      |           |
| Pumped Storage   | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.9  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | 19.5  | -0.1% |       |      |           |
| Fuel Cells   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Renewable Sources 4/   | 87.8  | 88.0  | 88.5  | 90.2  | 90.4  | 90.5  | 91.0  | 91.4  | 92.0  | 93.1  | 94.2  | 95.4  | 96.8  | 98.3  | 100.1 | 102.4 | 105.6 | 108.5 | 111.9 | 115.5 | 119.8 | 125.1 | 130.7 | 135.4 | 140.3 | 2.0%  |      |           |
| Total  | 725.6 | 727.9 | 734.9 | 740.2 | 752.1 | 766.1 | 779.1 | 787.5 | 797.5 | 808.2 | 823.1 | 840.4 | 860.4 | 863.9 | 863.7 | 867.9 | 865.8 | 863.7 | 864.1 | 869.9 | 873.6 | 883.8 | 892.2 | 899.8 | 908.2 | 0.9%  |      |           |
| Cumulative Planned Additions 5/                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Coal Steam   | 2.1   | 2.1   | 2.1   | 2.1   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 1.3%  |      |           |
| Other Fossil Steam 3/  | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 2.4%  |      |           |
| Combined Cycle   | 2.0   | 2.2   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.5%  |      |           |
| Combustion Turbine/Diesel  | 3.8   | 4.9   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 1.3%  |      |           |
| Nuclear Power  | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | N/A   |      |           |
| Pumped Storage   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | N/A   |      |           |
| Fuel Cells   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Renewable Sources 4/   | 0.7   | 0.8   | 1.2   | 2.8   | 2.8   | 2.9   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 6.3%  |      |           |
| Total  | 11.1  | 12.4  | 13.5  | 15.2  | 16.1  | 16.2  | 16.3  | 16.3  | 16.3  | 16.3  | 16.6  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 16.7  | 1.7%  |       |      |           |
| Cumulative Unplanned Additions 5/                                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Coal Steam   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Other Fossil Steam 3/  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Combined Cycle   | 0.0   | 0.0   | 0.0   | 0.0   | 5.2   | 14.4  | 24.0  | 32.3  | 42.8  | 58.2  | 79.1  | 101.6 | 125.3 | 148.3 | 169.9 | 191.1 | 212.2 | 232.0 | 247.5 | 259.6 | 269.4 | 280.0 | 288.2 | 294.9 | 301.5 | N/A   |      |           |
| Combustion Turbine/Diesel  | 5.8   | 10.3  | 19.1  | 23.0  | 29.0  | 33.9  | 37.2  | 39.7  | 43.2  | 43.3  | 43.3  | 43.6  | 44.0  | 44.6  | 45.6  | 47.0  | 48.0  | 48.4  | 49.1  | 49.5  | 49.9  | 51.0  | 51.8  | 53.1  | 55.2  | 9.8%  |      |           |
| Nuclear Power  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Pumped Storage   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Fuel Cells   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |      |           |
| Renewable Sources 4/   | 0.8   | 0.9   | 0.9   | 0.9   | 1.0   | 1.0   | 1.4   | 1.8   | 2.4   | 3.4   | 4.6   | 5.8   | 7.0   | 8.6   | 10.5  | 12.9  | 16.1  | 19.1  | 22.6  | 26.1  | 30.5  | 35.8  | 41.4  | 46.3  | 51.1  | 18.8% |      |           |
| Total  | 6.7   | 11.1  | 20.0  | 23.9  | 35.1  | 49.3  | 62.6  | 73.8  | 88.4  | 104.9 | 127.0 | 151.0 | 176.3 | 201.5 | 226.0 | 250.9 | 276.2 | 299.4 | 319.2 | 335.3 | 349.8 | 366.8 | 381.5 | 394.3 | 407.8 | 187%  |      |           |
| Cumulative Total Additions   | 17.7  | 23.6  | 33.5  | 39.1  | 51.2  | 65.4  | 79.0  | 90.1  | 104.7 | 121.2 | 143.3 | 167.6 | 193.0 | 218.1 | 242.7 | 267.6 | 292.9 | 316.1 | 335.9 | 352.0 | 366.5 | 383.5 | 398.2 | 411.0 | 424.5 | 14.1% |      |           |
| Cumulative Retirements 6/  | 15.2  | 20.4  | 23.7  | 23.9  | 24.3  | 24.5  | 25.1  | 27.9  | 32.7  | 38.5  | 45.8  | 52.8  | 58.2  | 79.8  | 104.5 | 125.3 | 152.6 | 178.0 | 197.4 | 207.6 | 218.4 | 225.3 | 231.6 | 236.8 | 241.8 | 12.2% |      |           |

| Table 9. Electricity Generating Capability<br>(Thousand Megawatts) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
|  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Net Summer Capability 1/   | 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 | 1996-2020 |
| Cogenerators 7/  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Capability   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Coal   | 9.2  | 9.2  | 9.7  | 9.8  | 9.8  | 9.9  | 9.9  | 9.9  | 9.9  | 9.9  | 9.9  | 9.8  | 9.9  | 9.9  | 9.9  | 9.9  | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 0.3% |           |
| Petroleum  | 1.2  | 1.2  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 0.5%      |
| Natural Gas  | 31.4 | 31.7 | 32.3 | 33.9 | 34.1 | 34.3 | 34.4 | 34.5 | 34.7 | 36.0 | 36.4 | 36.8 | 37.2 | 37.3 | 37.5 | 37.7 | 37.9 | 38.0 | 37.9 | 37.6 | 37.5 | 37.4 | 37.2 | 37.1 | 37.0 | 0.7%      |
| Other Gaseous Fuels  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | -0.1%     |
| Renewables 4/  | 5.9  | 5.9  | 6.4  | 6.5  | 6.5  | 6.6  | 6.7  | 6.7  | 6.8  | 6.8  | 6.8  | 6.9  | 6.9  | 7.0  | 7.1  | 7.1  | 7.2  | 7.3  | 7.3  | 7.3  | 7.3  | 7.4  | 7.4  | 7.4  | 7.4  | 1.0%      |
| Other  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Total  | 48.8 | 49.1 | 50.8 | 52.6 | 52.8 | 53.1 | 53.4 | 53.6 | 53.9 | 55.0 | 55.6 | 56.0 | 56.4 | 56.6 | 56.9 | 57.2 | 57.5 | 57.7 | 57.6 | 57.4 | 57.3 | 57.2 | 57.0 | 56.9 | 56.9 | 0.6%      |
| Cumulative Additions 5/  | 18.2 | 18.5 | 20.1 | 21.9 | 22.2 | 22.5 | 22.8 | 23.0 | 23.2 | 24.4 | 24.9 | 25.4 | 25.8 | 26.0 | 26.3 | 26.6 | 26.8 | 27.0 | 27.0 | 26.8 | 26.6 | 26.5 | 26.4 | 26.2 | 26.2 | 1.5%      |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand.

2/ Includes grid-connected utilities and nonutilities except for cogenerators. Includes small power producers, exempt wholesale generators, and generators at industrial and commercial facilities which produce electricity for on-site use and sales to utilities.

3/ Includes oil-, gas-, and dual-fired capability.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, landfill gas, other biomass, solar and wind power.

5/ Cumulative additions after December 31, 1995. Non-zero utility planned additions in 1995 indicate units operational in 1995 but not supplying power to the grid.

6/ Cumulative total retirements from 1990.

7/ Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Power Producer Report." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to the net summer capability based on historic relationships.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO98. Net summer capacity is used to be consistent with electric utility capacity estimates. Data for electric utility capacity are the most recent data available as of August 25, 1997. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1996 net summer capability at electric utilities and planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report." Net summer capability for nonutilities and cogeneration in 1996 and planned additions estimated based on EIA, Form EIA-867, "Annual Nonutility Power Producer Report." Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

|   |        |        |        |        | 1996-2020 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
|---|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|   | 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   |       |
| <b>Interregional Electricity Trade</b>                    |        |        |        |        |           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Gross Domestic Firm Power Sales.                          | 173.4  | 167.9  | 161.7  | 159.9  | 149.3     | 143.4  | 142.7  | 141.4  | 141.6  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | 139.2  | -0.9%  |        |       |
| Gross Domestic Economy Sales                              | 54.4   | 72.7   | 70.9   | 73.2   | 86.3      | 74.9   | 72.6   | 71.9   | 72.6   | 49.8   | 42.8   | 38.1   | 29.2   | 25.3   | 27.2   | 32.8   | 34.8   | 36.7   | 41.3   | 45.7   | 38.8   | 38.9   | 39.2   | 40.1   | 44.2   | -0.9% |
| Gross Domestic Trade                                      | 227.8  | 240.6  | 232.6  | 233.1  | 235.6     | 218.3  | 215.3  | 213.2  | 214.2  | 189.0  | 182.0  | 177.3  | 168.4  | 164.5  | 166.4  | 172.0  | 174.0  | 175.9  | 180.5  | 184.9  | 178.0  | 178.1  | 178.4  | 179.3  | 183.4  | -0.9% |
| Gross Domestic Firm Power Sales<br>(million 1996 dollars) | 8050.2 | 7794.6 | 7506.7 | 7425.0 | 6932.3    | 6655.6 | 6623.3 | 6563.1 | 6575.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | 6462.9 | -0.9%  |       |
| Gross Domestic Economy Sales<br>(million 1996 dollars)    | 1272.2 | 1627.5 | 1485.5 | 1562.1 | 1898.3    | 1661.8 | 1614.7 | 1577.0 | 1582.6 | 1914.1 | 1906.2 | 1987.0 | 1555.6 | 1362.9 | 1467.6 | 1712.8 | 1735.6 | 1791.6 | 1930.5 | 2121.2 | 1842.4 | 1828.2 | 1832.7 | 1902.8 | 2013.1 | 1.9%  |
| Gross Domestic Sales<br>(million 1996 dollars)            | 9322.5 | 9422.0 | 8992.2 | 8987.0 | 8830.5    | 8317.4 | 8238.0 | 8140.1 | 8158.5 | 8377.0 | 8369.0 | 8449.9 | 8018.5 | 7825.8 | 7930.5 | 8175.6 | 8198.4 | 8254.4 | 8393.4 | 8584.0 | 8305.3 | 8291.1 | 8295.6 | 8365.7 | 8475.9 | -0.4% |
| <b>International Electricity Trade</b>                    |        |        |        |        |           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Firm Power Imp. From Can.&Mex.1/                          | 26.1   | 22.1   | 21.5   | 19.8   | 66.1      | 58.0   | 57.8   | 57.8   | 61.6   | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | -6.2% |
| Economy Imp. From Can. & Mex. 1/                          | 20.7   | 20.9   | 20.3   | 20.4   | 22.2      | 29.3   | 29.8   | 31.6   | 33.1   | 35.9   | 27.6   | 27.2   | 25.3   | 26.5   | 25.5   | 25.1   | 23.3   | 21.9   | 20.4   | 19.6   | 19.6   | 19.6   | 19.6   | 19.6   | 19.6   | -0.2% |
| Gross Imp. From Canada &Mex. 1/                           | 46.8   | 43.0   | 41.7   | 40.2   | 88.3      | 87.3   | 87.7   | 89.4   | 94.8   | 41.5   | 33.2   | 32.9   | 30.9   | 32.1   | 31.1   | 30.8   | 28.9   | 27.5   | 26.0   | 25.2   | 25.2   | 25.2   | 25.2   | 25.2   | 25.2   | -2.5% |
| Firm Power Exports To Can. & Mex.                         | 2.8    | 2.7    | 3.7    | 8.8    | 8.3       | 8.3    | 8.3    | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 6.7%   |       |
| Economy Exports To Can. & Mex.                            | 6.4    | 6.1    | 6.2    | 6.3    | 6.4       | 6.5    | 6.6    | 6.7    | 6.9    | 7.0    | 7.1    | 7.2    | 7.4    | 7.5    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 7.7    | 0.7%  |
| Gross Exports To Canada & Mex.                            | 9.3    | 8.8    | 9.9    | 15.1   | 14.7      | 14.8   | 15.0   | 20.1   | 20.2   | 20.3   | 20.5   | 20.6   | 20.7   | 20.9   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 21.0   | 3.5%   |       |

1/ Historically electric imports were primarily from renewable resources, principally hydroelectric.

Note: Totals may not equal sum of components due to independent rounding. Firm Power Sales are capacity sales, meaning the delivery of the power is scheduled as part of the normal operating conditions of the affected electric systems. Economy Sales are subject to curtailment or cessation of delivery by the supplier in accordance with prior agreements or under specified conditions.

Sources: 1996 interregional electricity trade data: Energy Information Administration (EIA), Bulk Power Data System. 1996 international electricity trade data: DOE Form FE-718R, "Annual Report of International Electrical Export/Import Data." Firm/economy share: National Energy Board, Annual Report 1993. Planned interregional and international firm power sales: DOE Form IE-411, "Coordinated Bulk Power Supply Program Report," April 1995. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

Table 11. Petroleum Supply and Disposition Balance  
(Million Barrels per Day, Unless Otherwise Noted)

| Table 11. Petroleum Supply and Disposition Balance<br>(Million Barrels per Day, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |           |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-----------|
|   | 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   | 1996-2020 |
| World Oil Price (1996 \$/bbl)14/  | 20.48 | 18.16 | 17.98 | 18.49 | 19.00 | 19.28 | 19.41 | 19.72 | 19.92 | 19.96 | 19.76 | 19.54 | 19.28 | 18.99 | 18.72 | 18.81 | 18.87 | 18.99 | 19.10 | 19.15 | 19.18 | 19.33 | 19.44 | 19.57  | 19.73  | -0.2%     |
| Imp. Share of Product   | 0.46  | 0.48  | 0.49  | 0.52  | 0.53  | 0.54  | 0.55  | 0.55  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.57  | 0.58  | 0.58  | 0.59  | 0.60  | 0.60  | 0.61  | 0.61  | 0.62   | 0.62   | 1.3%      |
| Net Expenditures for Imp.<br>Crude & Petr.Prod.<br>(billion 96\$ /year)                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |           |
|   | 62.27 | 58.72 | 61.82 | 68.00 | 71.99 | 76.02 | 79.17 | 82.43 | 85.48 | 85.69 | 84.54 | 83.27 | 82.32 | 81.69 | 81.85 | 84.18 | 86.11 | 88.21 | 91.16 | 93.25 | 95.03 | 97.77 | 99.58 | 101.42 | 103.12 | 2.1%      |
| Domestic Refinery Distill. Cap.   | 15.4  | 15.5  | 15.6  | 16.1  | 16.3  | 16.4  | 16.5  | 16.5  | 16.5  | 16.6  | 16.6  | 16.6  | 16.6  | 16.6  | 16.6  | 16.7  | 16.7  | 16.8  | 16.9  | 16.9  | 17.0  | 17.0  | 17.0  | 17.1   | 17.2   | 0.4%      |
| Capacity Utilization Rate (%)   | 94.0  | 94.0  | 95.0  | 93.7  | 92.5  | 93.9  | 94.3  | 94.8  | 95.2  | 95.3  | 95.3  | 95.3  | 95.3  | 95.0  | 95.0  | 95.1  | 95.1  | 95.0  | 95.2  | 95.2  | 95.1  | 95.1  | 95.1  | 94.7   | 95.1   | 0.0%      |

1/ Includes lease condensate.

2/ Strategic petroleum reserve stock additions plus unaccounted for crude oil and crude stock withdrawals minus crude products supplied.

3/ Includes alcohols, ethers, petroleum product stock withdrawals, domestic sources of blending components, and other hydrocarbons.

4/ Represents volumetric gain in refinery distillation and cracking processes.

5/ Includes net imports of finished petroleum products, unfinished oils, other hydrocarbons, alcohols, ethers, and blending components.

6/ Total crude supply plus natural gas plant liquids, other inputs, refinery processing gain, and net petroleum imports.

7/ Includes ethanol and ethers blended into gasoline.

8/ Includes naphtha and kerosene types.

9/ Includes distillate and kerosene.

10/ Includes aviation gasoline, liquefied petroleum gas, petrochemical feedstocks, lubricants, waxes, asphalt, road oil, still gas, special naphthas, petroleum coke, crude oil product supplied, and miscellaneous petroleum products.

11/ Includes consumption by cogenerators.

12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

13/ Balancing item. Includes unaccounted for supply, losses and gains.

14/ Average refiner acquisition cost for imported crude oil.

N/A = Not applicable.

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

Sources: 1996 expenditures for imported crude oil and petroleum products based on internal calculations. 1996 product supplied data from Table 2. Other 1996 data: Energy Information Administration (EIA), Petroleum Supply Annual 1996, DOE/EIA-0340(96) (Washington, DC, June 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 12. Petroleum Product Prices<br>(1996 Cents Per Gallon, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1996-2020 |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|   | 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      |       |
| World Oil Price (\$/bbl)  | 20.48 | 18.16 | 17.98 | 18.49 | 19.00 | 19.28 | 19.41 | 19.72 | 19.92 | 19.96 | 19.76 | 19.54 | 19.28 | 18.99 | 18.72 | 18.81 | 18.87 | 18.99 | 19.10 | 19.15 | 19.18 | 19.33 | 19.44 | 19.57 | 19.73     | -0.2% |
| Delivered Sector Product  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Residential   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel   | 98.4  | 96.5  | 91.5  | 99.9  | 100.7 | 101.3 | 101.8 | 102.9 | 104.3 | 124.8 | 133.3 | 143.2 | 145.0 | 145.1 | 145.2 | 144.2 | 143.5 | 144.1 | 141.9 | 142.1 | 142.9 | 142.9 | 142.9 | 143.5 | 141.6     | 1.5%  |
| Liquefied Petroleum Gas   | 100.0 | 97.0  | 96.8  | 98.4  | 99.5  | 101.8 | 101.8 | 103.8 | 104.5 | 114.1 | 117.4 | 123.9 | 124.7 | 123.7 | 123.1 | 122.2 | 120.9 | 121.7 | 120.5 | 120.8 | 121.9 | 121.6 | 121.6 | 122.2 | 120.7     | 0.8%  |
| Commercial  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel   | 73.1  | 69.4  | 68.9  | 69.3  | 70.0  | 70.6  | 71.0  | 72.2  | 73.6  | 94.2  | 102.4 | 112.6 | 114.3 | 114.5 | 114.5 | 113.5 | 112.7 | 113.3 | 111.2 | 111.4 | 112.1 | 112.2 | 112.0 | 112.6 | 110.7     | 1.7%  |
| Residual Fuel   | 48.4  | 47.1  | 47.2  | 44.7  | 44.7  | 45.9  | 45.6  | 46.9  | 46.4  | 70.0  | 79.4  | 92.2  | 94.1  | 93.1  | 93.8  | 92.4  | 91.1  | 92.0  | 91.6  | 91.3  | 92.6  | 91.0  | 90.6  | 92.6  | 90.7      | 2.6%  |
| Residual Fuel (\$/bbl)  | 20.35 | 19.80 | 19.80 | 18.76 | 18.79 | 19.29 | 19.16 | 19.70 | 19.48 | 29.39 | 33.33 | 38.74 | 39.52 | 39.12 | 39.38 | 38.83 | 38.26 | 38.63 | 38.45 | 38.36 | 38.89 | 38.24 | 38.05 | 38.91 | 38.08     | 2.6%  |
| Industrial 1/   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel   | 76.3  | 70.5  | 70.1  | 69.8  | 70.4  | 71.0  | 71.7  | 73.1  | 74.6  | 95.2  | 103.1 | 113.7 | 115.4 | 115.8 | 115.8 | 114.8 | 113.8 | 114.6 | 112.7 | 112.9 | 113.7 | 113.7 | 113.5 | 114.2 | 112.3     | 1.6%  |
| Liquefied Petroleum Gas   | 67.3  | 48.7  | 48.6  | 52.5  | 53.4  | 55.6  | 55.6  | 57.5  | 58.1  | 67.3  | 70.2  | 76.6  | 77.3  | 76.1  | 75.6  | 74.7  | 73.2  | 74.1  | 72.7  | 73.0  | 74.2  | 73.8  | 74.0  | 74.6  | 73.1      | 0.3%  |
| Residual Fuel   | 44.8  | 40.2  | 40.3  | 37.8  | 38.3  | 39.2  | 39.4  | 40.4  | 40.8  | 64.9  | 74.0  | 86.7  | 88.8  | 88.9  | 89.2  | 88.4  | 87.3  | 87.7  | 86.0  | 85.7  | 86.9  | 86.2  | 85.9  | 87.1  | 85.9      | 2.8%  |
| Residual Fuel (\$/bbl)  | 18.81 | 16.88 | 16.93 | 15.86 | 16.07 | 16.47 | 16.54 | 16.98 | 17.13 | 27.27 | 31.07 | 36.42 | 37.29 | 37.33 | 37.47 | 37.14 | 36.66 | 36.85 | 36.12 | 36.00 | 36.51 | 36.19 | 36.07 | 36.58 | 36.10     | 2.8%  |
| Transportation  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Diesel Fuel (Distillate) 2/   | 123.5 | 116.1 | 113.4 | 114.1 | 114.1 | 114.5 | 114.8 | 116.1 | 117.7 | 137.2 | 145.3 | 154.8 | 156.0 | 155.9 | 155.1 | 153.0 | 150.2 | 150.1 | 148.3 | 148.3 | 148.0 | 148.4 | 147.5 | 147.1 | 144.6     | 0.7%  |
| Jet Fuel 3/   | 74.6  | 64.9  | 64.5  | 66.0  | 67.3  | 68.6  | 69.4  | 70.5  | 72.1  | 91.6  | 99.6  | 108.7 | 110.4 | 110.5 | 110.1 | 109.1 | 108.2 | 108.6 | 107.0 | 107.2 | 108.3 | 108.0 | 109.1 | 109.5 | 108.2     | 1.6%  |
| Motor Gasoline 4/   | 122.5 | 118.6 | 116.2 | 117.3 | 118.6 | 120.1 | 120.6 | 121.3 | 122.8 | 140.6 | 148.4 | 155.9 | 157.1 | 157.1 | 155.5 | 153.9 | 151.9 | 152.0 | 150.4 | 150.0 | 151.0 | 149.9 | 149.4 | 149.8 | 149.3     | 0.8%  |
| Liquid Petroleum Gas  | 109.0 | 109.2 | 108.9 | 107.9 | 108.7 | 110.7 | 110.4 | 112.1 | 112.4 | 121.5 | 124.5 | 130.5 | 130.8 | 129.5 | 128.6 | 127.3 | 125.6 | 126.2 | 124.6 | 124.7 | 125.4 | 124.8 | 124.5 | 124.9 | 123.2     | 0.5%  |
| Residual Fuel   | 38.2  | 38.3  | 38.3  | 35.9  | 36.9  | 37.8  | 37.9  | 38.8  | 40.1  | 64.3  | 73.8  | 86.0  | 88.3  | 89.0  | 89.2  | 88.6  | 87.4  | 87.4  | 85.6  | 85.4  | 86.4  | 86.0  | 85.4  | 86.7  | 85.3      | 3.4%  |
| Residual Fuel (\$/bbl)  | 16.04 | 16.09 | 16.09 | 15.08 | 15.49 | 15.89 | 15.92 | 16.29 | 16.84 | 27.00 | 30.98 | 36.11 | 37.08 | 37.40 | 37.45 | 37.23 | 36.70 | 36.72 | 35.94 | 35.85 | 36.29 | 36.10 | 35.87 | 36.43 | 35.83     | 3.4%  |
| E85   | 141.7 | 141.8 | 141.8 | 138.5 | 140.7 | 141.7 | 143.2 | 144.2 | 145.3 | 149.2 | 150.1 | 150.2 | 149.0 | 147.7 | 146.5 | 146.1 | 144.9 | 146.0 | 145.2 | 145.3 | 146.3 | 147.0 | 147.7 | 148.8 | 147.9     | 0.2%  |
| M85   | 89.6  | 89.6  | 89.7  | 87.4  | 88.4  | 89.9  | 90.0  | 93.8  | 90.9  | 100.9 | 104.5 | 108.4 | 108.7 | 108.5 | 107.7 | 107.1 | 106.4 | 106.5 | 105.7 | 106.0 | 105.9 | 105.8 | 106.2 | 105.6 | 0.7%      |       |
| Electric Generators 5/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel   | 68.1  | 63.5  | 63.1  | 63.4  | 64.0  | 64.8  | 65.3  | 66.8  | 68.3  | 89.5  | 98.0  | 108.8 | 110.8 | 111.4 | 111.4 | 110.2 | 109.0 | 109.9 | 105.8 | 105.2 | 105.7 | 105.7 | 105.7 | 106.3 | 104.3     | 1.8%  |
| Residual Fuel   | 45.9  | 41.0  | 41.0  | 40.7  | 41.7  | 42.1  | 42.8  | 44.1  | 44.8  | 70.4  | 80.2  | 94.2  | 97.1  | 96.8  | 97.6  | 96.9  | 96.6  | 99.6  | 100.2 | 100.3 | 101.1 | 100.2 | 100.4 | 102.4 | 100.6     | 3.3%  |
| Residual Fuel (\$/bbl)  | 19.27 | 17.23 | 17.21 | 17.10 | 17.51 | 17.66 | 17.96 | 18.52 | 18.80 | 29.58 | 33.66 | 39.55 | 40.77 | 40.68 | 41.00 | 40.68 | 40.59 | 41.85 | 42.07 | 42.14 | 42.44 | 42.07 | 42.16 | 43.00 | 42.25     | 3.3%  |
| Refined Petroleum   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Distillate Fuel 2/  | 108.7 | 103.2 | 101.1 | 102.6 | 102.9 | 103.5 | 103.9 | 105.3 | 106.9 | 126.9 | 135.1 | 144.9 | 146.2 | 146.2 | 145.6 | 143.9 | 141.6 | 141.7 | 139.7 | 139.5 | 139.3 | 139.1 | 138.5 | 138.0 | 135.7     | 0.9%  |
| Jet Fuel 3/   | 74.6  | 64.9  | 64.5  | 66.0  | 67.3  | 68.6  | 69.4  | 70.5  | 72.1  | 91.6  | 99.6  | 108.7 | 110.4 | 110.5 | 110.1 | 109.1 | 108.2 | 108.6 | 107.0 | 107.2 | 108.3 | 108.0 | 109.1 | 109.5 | 108.2     | 1.6%  |
| Liquefied Petroleum Gas   | 73.6  | 58.1  | 58.1  | 61.7  | 62.7  | 64.9  | 65.1  | 67.3  | 68.1  | 77.5  | 80.6  | 87.1  | 87.9  | 86.8  | 86.3  | 85.4  | 84.1  | 85.0  | 83.7  | 84.1  | 85.4  | 85.1  | 85.3  | 85.9  | 84.6      | 0.6%  |
| Motor Gasoline 4/   | 122.5 | 118.6 | 116.2 | 117.1 | 118.4 | 119.9 | 120.3 | 121.1 | 122.6 | 140.4 | 148.2 | 155.7 | 156.9 | 156.9 | 155.3 | 153.7 | 151.7 | 151.8 | 150.2 | 149.9 | 149.8 | 149.3 | 149.6 | 149.2 | 0.8%      |       |
| Residual Fuel   | 42.5  | 40.2  | 40.0  | 38.2  | 38.9  | 39.8  | 39.9  | 40.8  | 41.6  | 65.8  | 75.2  | 87.6  | 89.8  | 90.2  | 90.4  | 89.6  | 88.3  | 88.6  | 86.8  | 86.6  | 87.6  | 87.0  | 86.5  | 87.8  | 86.4      | 3.0%  |
| Residual Fuel(\$/bbl)   | 17.87 | 16.89 | 16.79 | 16.04 | 16.33 | 16.70 | 16.74 | 17.14 | 17.48 | 27.63 | 31.58 | 36.79 | 37.71 | 37.89 | 37.95 | 37.64 | 37.09 | 37.20 | 36.46 | 36.35 | 36.79 | 36.54 | 36.32 | 36.88 | 36.27     | 3.0%  |
| Average   | 102.8 | 96.6  | 95.4  | 96.5  | 97.6  | 98.7  | 99.3  | 100.3 | 101.8 | 119.0 | 125.9 | 133.9 | 135.0 | 134.5 | 133.4 | 131.9 | 130.2 | 130.4 | 128.7 | 128.5 | 129.3 | 128.6 | 128.4 | 128.6 | 127.5     | 0.9%  |

1/ Includes cogenerators. Includes Federal and State taxes while excluding county and state taxes.

2/ Low sulfur diesel fuel. Includes Federal and State taxes while excluding county and local taxes.

3/ Kerosene-type jet fuel.

4/ Sales weighted-average price for all grades. Includes Federal and State taxes while excluding county and local taxes.

5/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

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

Sources: 1996 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380(96/03-97/04) (Washington, DC, 1996-97).

1996 prices for all other petroleum products are derived from EIA, State Energy Price and Expenditures Report: 1994, DOE/EIA-0376(94) (Washington, DC, June 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 13. Natural Gas Supply and Disposition<br>(Trillion Cubic Feet per Year) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----------|
|  |       |       | 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 | 1996-2020 |
| Production   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Dry Gas Production 1/  | 19.02 | 18.38 | 18.81 | 20.03 | 19.79 | 19.64 | 20.09 | 20.41 | 20.92 | 21.91 | 22.89 | 24.03 | 24.71 | 25.26 | 25.94 | 26.47 | 27.16 | 27.77 | 28.24 | 28.47 | 28.75 | 28.86 | 29.19 | 29.31 | 29.44 | 1.8%  |      |           |
| Supplemental Natural Gas 2/  | 0.12  | 0.12  | 0.12  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.08  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | -2.9% |      |           |
| Net Imports  | 2.72  | 3.03  | 3.21  | 3.67  | 3.88  | 4.36  | 4.39  | 4.45  | 4.53  | 4.68  | 4.82  | 4.98  | 5.05  | 5.18  | 5.23  | 5.35  | 5.46  | 5.57  | 5.66  | 5.73  | 5.79  | 5.80  | 5.81  | 5.82  | 5.83  | 3.2%  |      |           |
| Canada   | 2.76  | 3.03  | 3.17  | 3.59  | 3.79  | 4.22  | 4.23  | 4.25  | 4.27  | 4.37  | 4.49  | 4.64  | 4.71  | 4.83  | 4.89  | 4.95  | 5.07  | 5.17  | 5.25  | 5.32  | 5.38  | 5.39  | 5.40  | 5.41  | 5.41  | 2.8%  |      |           |
| Mexico   | -0.02 | -0.01 | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | 0.00  | 0.02  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | N/A   |      |           |
| Liquefied Natural Gas  | -0.03 | 0.01  | 0.05  | 0.10  | 0.12  | 0.14  | 0.16  | 0.20  | 0.23  | 0.27  | 0.29  | 0.29  | 0.29  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | N/A   |      |           |
| Total Supply   | 21.86 | 21.54 | 22.14 | 23.80 | 23.78 | 24.10 | 24.59 | 24.97 | 25.56 | 26.70 | 27.83 | 29.12 | 29.88 | 30.52 | 31.23 | 31.87 | 32.68 | 33.40 | 33.96 | 34.25 | 34.60 | 34.73 | 35.07 | 35.20 | 35.33 | 2.0%  |      |           |
| Consumption by Sector  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |           |
| Residential  | 5.23  | 4.92  | 5.11  | 5.21  | 5.25  | 5.24  | 5.28  | 5.31  | 5.36  | 5.10  | 5.02  | 4.92  | 4.91  | 4.87  | 4.86  | 4.87  | 4.90  | 4.89  | 4.92  | 4.92  | 4.92  | 4.91  | 4.92  | 4.92  | 4.95  | -0.2% |      |           |
| Commercial   | 3.20  | 3.18  | 3.31  | 3.35  | 3.38  | 3.40  | 3.43  | 3.46  | 3.50  | 3.33  | 3.26  | 3.17  | 3.15  | 3.14  | 3.13  | 3.14  | 3.15  | 3.17  | 3.17  | 3.17  | 3.17  | 3.17  | 3.17  | 3.16  | 3.18  | -0.0% |      |           |
| Industrial 3/  | 8.43  | 8.66  | 8.92  | 9.14  | 9.11  | 9.10  | 9.15  | 9.11  | 9.16  | 9.35  | 9.43  | 9.54  | 9.52  | 9.54  | 9.56  | 9.62  | 9.61  | 9.57  | 9.52  | 9.34  | 9.34  | 9.22  | 9.22  | 9.16  | 9.11  | 0.3%  |      |           |
| Electric Generators 4/   | 2.98  | 2.66  | 3.30  | 3.69  | 3.67  | 3.98  | 4.28  | 4.62  | 5.00  | 6.27  | 7.37  | 8.66  | 9.40  | 10.02 | 10.63 | 11.13 | 11.83 | 12.52 | 13.04 | 13.47 | 13.78 | 14.02 | 14.31 | 14.49 | 14.61 | 6.9%  |      |           |
| Lease and Plant Fuel 5/  | 1.25  | 1.27  | 1.29  | 1.36  | 1.34  | 1.33  | 1.35  | 1.37  | 1.40  | 1.45  | 1.50  | 1.55  | 1.59  | 1.62  | 1.66  | 1.69  | 1.73  | 1.77  | 1.80  | 1.81  | 1.83  | 1.84  | 1.86  | 1.87  | 1.88  | 1.7%  |      |           |
| Pipeline Fuel  | 0.71  | 0.74  | 0.75  | 0.78  | 0.75  | 0.74  | 0.75  | 0.74  | 0.77  | 0.80  | 0.82  | 0.85  | 0.87  | 0.89  | 0.93  | 0.94  | 0.97  | 1.01  | 1.02  | 1.04  | 1.05  | 1.05  | 1.06  | 1.07  | 1.07  | 1.7%  |      |           |
| Transportation 6/  | 0.01  | 0.02  | 0.02  | 0.04  | 0.06  | 0.08  | 0.11  | 0.13  | 0.15  | 0.17  | 0.18  | 0.19  | 0.20  | 0.21  | 0.22  | 0.23  | 0.24  | 0.25  | 0.26  | 0.27  | 0.28  | 0.28  | 0.29  | 0.29  | 0.30  | 14.3% |      |           |
| Total  | 21.82 | 21.44 | 22.71 | 23.57 | 23.55 | 23.87 | 24.35 | 24.74 | 25.32 | 26.46 | 27.58 | 28.89 | 29.65 | 30.29 | 31.00 | 31.63 | 32.44 | 33.17 | 33.73 | 34.02 | 34.37 | 34.49 | 34.83 | 34.96 | 35.11 | 2.0%  |      |           |
| Discrepancy 7/   | 0.04  | 0.10  | -0.58 | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.24  | 0.25  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.22  | N/A   |      |           |

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption by cogenerators.

4/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

5/ Represents natural gas used in the field gathering and processing plant machinery.

6/ Compressed natural gas used as vehicle fuel.

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 1996 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Figures for 1996 may differ from published data due to internal conversion factors.

Sources: 1996 supplemental natural gas: Energy Information Administration (EIA), Natural Gas Monthly, DOE/EIA-0130(97/6) (Washington, DC, June 1997). 1996 imports and dry gas production derived from: EIA, Natural Gas Annual 1996, DOE/EIA-0131(96) (Washington, DC, November 1997). 1996 transportation sector consumption: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B. Other 1996 consumption: EIA, Short-Term Energy Outlook August 1997. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997) with adjustments to end-use sector consumption levels for consumption of natural gas by electric wholesale generators based on EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 14. Natural Gas Prices, Margins and Revenues<br>(1996 Dollars per Thousand Cubic Feet, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|-------|
|  |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        | 1996-2020 |        |       |
|  | 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   |       |
| Source Price   |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Aver. Lower 48 Well. Price <sup>1/</sup>   | 2.24  | 2.25  | 2.10  | 2.14  | 2.14  | 2.13  | 2.14  | 2.15  | 2.16  | 2.21  | 2.29  | 2.41  | 2.52   | 2.64   | 2.78   | 2.92   | 3.07   | 3.20   | 3.32   | 3.42   | 3.50   | 3.56   | 3.62   | 3.66      | 3.71   | 2.1%  |
| Average Import Price   | 1.98  | 2.05  | 1.86  | 2.02  | 1.84  | 2.09  | 2.07  | 2.11  | 2.14  | 2.12  | 2.32  | 2.42  | 2.55   | 2.67   | 2.82   | 2.92   | 3.11   | 3.26   | 3.39   | 3.48   | 3.57   | 3.63   | 3.72   | 3.77      | 3.82   | 2.8%  |
| Average 2/ <sup>2/</sup>   | 2.21  | 2.22  | 2.07  | 2.12  | 2.09  | 2.12  | 2.13  | 2.14  | 2.16  | 2.20  | 2.30  | 2.42  | 2.53   | 2.64   | 2.79   | 2.92   | 3.08   | 3.21   | 3.33   | 3.43   | 3.51   | 3.57   | 3.63   | 3.68      | 3.73   | 2.2%  |
| Delivered Prices   |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Residential  | 6.37  | 6.48  | 6.06  | 5.98  | 5.91  | 5.96  | 5.88  | 5.87  | 5.82  | 7.05  | 7.61  | 8.26  | 8.47   | 8.67   | 8.83   | 8.89   | 8.96   | 9.09   | 9.09   | 9.18   | 9.29   | 9.35   | 9.40   | 9.50      | 9.42   | 1.6%  |
| Commercial   | 5.43  | 5.47  | 5.08  | 5.05  | 4.98  | 5.04  | 4.97  | 4.95  | 4.91  | 6.11  | 6.66  | 7.30  | 7.51   | 7.68   | 7.82   | 7.86   | 7.92   | 8.02   | 8.00   | 8.06   | 8.14   | 8.15   | 8.21   | 8.10      | 1.7%   |       |
| Industrial 3/  | 3.05  | 3.12  | 2.78  | 2.81  | 2.80  | 2.84  | 2.86  | 2.88  | 2.88  | 4.04  | 4.62  | 5.29  | 5.54   | 5.73   | 5.91   | 5.97   | 6.07   | 6.21   | 6.23   | 6.34   | 6.44   | 6.49   | 6.52   | 6.61      | 6.53   | 3.2%  |
| Electric Generators 4/   | 2.70  | 2.74  | 2.44  | 2.65  | 2.60  | 2.60  | 2.66  | 2.66  | 3.82  | 4.41  | 5.12  | 5.39  | 5.63   | 5.83   | 5.94   | 6.05   | 6.19   | 6.21   | 6.31   | 6.40   | 6.43   | 6.45   | 6.53   | 6.44      | 3.7%   |       |
| Transportation 5/  | 5.57  | 6.66  | 6.08  | 5.85  | 5.71  | 5.75  | 5.73  | 5.79  | 5.87  | 7.18  | 7.90  | 8.73  | 9.11   | 9.42   | 9.66   | 9.78   | 9.89   | 10.04  | 10.06  | 10.16  | 10.28  | 10.32  | 10.37  | 10.48     | 10.44  | 2.7%  |
| Average 6/ <sup>6/</sup>   | 4.26  | 4.30  | 3.91  | 3.91  | 3.88  | 3.90  | 3.87  | 3.87  | 3.84  | 4.93  | 5.45  | 6.06  | 6.28   | 6.47   | 6.63   | 6.70   | 6.78   | 6.90   | 6.91   | 7.00   | 7.09   | 7.12   | 7.15   | 7.23      | 7.14   | 2.2%  |
| Trans. & Distr. Margins by Sect. 7/  |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Residential  | 4.17  | 4.26  | 3.99  | 3.86  | 3.82  | 3.84  | 3.75  | 3.73  | 3.66  | 4.85  | 5.31  | 5.85  | 5.95   | 6.03   | 6.04   | 5.97   | 5.89   | 5.88   | 5.76   | 5.75   | 5.78   | 5.78   | 5.76   | 5.82      | 5.69   | 1.3%  |
| Commercial   | 3.23  | 3.25  | 3.01  | 2.93  | 2.89  | 2.91  | 2.84  | 2.81  | 2.75  | 3.91  | 4.36  | 4.89  | 4.98   | 5.03   | 5.03   | 4.94   | 4.85   | 4.81   | 4.67   | 4.63   | 4.62   | 4.58   | 4.52   | 4.53      | 4.37   | 1.3%  |
| Industrial 3/  | 0.84  | 0.90  | 0.71  | 0.69  | 0.71  | 0.72  | 0.73  | 0.74  | 0.73  | 1.85  | 2.32  | 2.88  | 3.01   | 3.08   | 3.12   | 3.05   | 3.00   | 3.00   | 2.90   | 2.91   | 2.93   | 2.92   | 2.89   | 2.93      | 2.81   | 5.1%  |
| Electric Generators 4/   | 0.49  | 0.52  | 0.38  | 0.53  | 0.51  | 0.47  | 0.48  | 0.52  | 0.50  | 1.62  | 2.12  | 2.70  | 2.86   | 2.98   | 3.04   | 3.02   | 2.97   | 2.98   | 2.88   | 2.89   | 2.86   | 2.82   | 2.85   | 2.72      | 7.4%   |       |
| Transportation 5/  | 3.37  | 4.45  | 4.01  | 3.73  | 3.63  | 3.62  | 3.60  | 3.65  | 3.71  | 4.98  | 5.61  | 6.32  | 6.58   | 6.77   | 6.87   | 6.86   | 6.81   | 6.83   | 6.73   | 6.73   | 6.77   | 6.75   | 6.74   | 6.80      | 6.72   | 2.9%  |
| Average 6/ <sup>6/</sup>   | 2.05  | 2.09  | 1.84  | 1.79  | 1.79  | 1.78  | 1.74  | 1.73  | 1.68  | 2.73  | 3.15  | 3.65  | 3.75   | 3.82   | 3.84   | 3.78   | 3.70   | 3.69   | 3.57   | 3.57   | 3.58   | 3.55   | 3.51   | 3.55      | 3.42   | 2.1%  |
| Transmission & Distr. Revenue (billion 1996 dollars)   |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Residential  | 21.81 | 20.94 | 20.41 | 20.10 | 20.05 | 20.12 | 19.83 | 19.77 | 19.63 | 24.76 | 26.64 | 28.78 | 29.19  | 29.34  | 29.37  | 29.09  | 28.85  | 28.75  | 28.32  | 28.25  | 28.46  | 28.40  | 28.35  | 28.61     | 28.20  | 1.1%  |
| Commercial   | 10.34 | 10.34 | 9.97  | 9.82  | 9.77  | 9.90  | 9.75  | 9.73  | 9.62  | 13.00 | 14.20 | 15.49 | 15.69  | 15.79  | 15.77  | 15.54  | 15.28  | 15.15  | 14.80  | 14.67  | 14.64  | 14.50  | 14.33  | 14.32     | 13.89  | 1.2%  |
| Industrial 3/  | 7.10  | 7.80  | 6.34  | 6.33  | 6.50  | 6.56  | 6.70  | 6.71  | 6.65  | 17.26 | 21.89 | 27.44 | 28.61  | 29.40  | 29.83  | 29.32  | 28.80  | 28.71  | 27.56  | 27.19  | 27.38  | 26.91  | 26.61  | 26.87     | 25.59  | 5.5%  |
| Electric Generators 4/   | 1.47  | 1.38  | 1.25  | 1.96  | 1.88  | 1.88  | 2.04  | 2.42  | 2.50  | 10.18 | 15.60 | 23.40 | 26.91  | 29.87  | 32.35  | 33.60  | 35.16  | 37.28  | 37.54  | 38.79  | 39.84  | 40.11  | 40.36  | 41.29     | 39.69  | 14.7% |
| Transportation 5/  | 0.04  | 0.07  | 0.09  | 0.13  | 0.20  | 0.29  | 0.38  | 0.47  | 0.56  | 0.84  | 1.02  | 1.22  | 1.34   | 1.45   | 1.54   | 1.61   | 1.66   | 1.73   | 1.77   | 1.82   | 1.88   | 1.92   | 1.95   | 2.00      | 2.00   | 17.6% |
| Total  | 40.76 | 40.52 | 38.06 | 38.34 | 38.41 | 38.75 | 38.71 | 39.09 | 38.96 | 66.04 | 79.36 | 96.33 | 101.74 | 105.86 | 108.86 | 109.16 | 109.75 | 111.62 | 109.99 | 110.72 | 112.19 | 111.84 | 111.59 | 113.08    | 109.38 | 4.2%  |

1/ Represents lower 48 onshore and offshore supplies.

2/ Quantity-weighted average of the average lower 48 wellhead price and the average price of imports at the U.S. border.

3/ Includes consumption by cogenerators.

4/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

5/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

6/ Weighted average prices and margins. Weights used are the sectoral consumption values excluding lease, plant, and pipeline fuel.

7/ Within the table, "transmission and distribution" margins equal the difference between the delivered price and the source price (average of the wellhead price and the price of imports at the U.S. border) of natural gas and, thus, reflect the total cost of bringing natural gas to market. When the term "transmission and distribution" margins is used in today's natural gas market, it generally does not include the cost of independent natural gas marketers or costs associated with aggregation of supplies, provisions of storage, and other services. As used here, the term includes the cost of all services and the cost of pipeline fuel used in compressor stations.

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

Sources: 1996 industrial delivered prices based on Energy Information Administration (EIA), Manufacturing Energy Consumption Survey 1991. 1996 residential and commercial delivered prices, average lower 48 wellhead price, and average import price: EIA, Natural Gas Monthly, DOE/EIA-0130(97/06) (Washington, DC, June 1997). Other 1996 values, and projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 15. Oil and Gas Supply                                      |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1996-2020 |        |        |        |        |       |
|---|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|-------|
|   |  | 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   |       |
| Crude Oil   |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |       |
| Lower 48 Aver. Wellhead Price 1/ (1996\$ per barrel)              |  | 19.41  | 17.23  | 17.10  | 17.65  | 18.19  | 18.55  | 18.79  | 19.17  | 19.31  | 19.44  | 19.30  | 18.96  | 18.70  | 18.45  | 18.09  | 18.04  | 17.96  | 18.10  | 18.27  | 18.38  | 18.41     | 18.43  | 18.55  | 18.63  | 18.67  | -0.2% |
| Production(mill. barrels/day) 2/                                  |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |       |
| U.S. Total  |  | 6.48   | 6.41   | 6.39   | 6.33   | 6.27   | 6.19   | 6.12   | 6.08   | 6.04   | 6.00   | 5.96   | 5.92   | 5.87   | 5.81   | 5.74   | 5.67   | 5.59   | 5.52   | 5.43   | 5.34   | 5.26      | 5.17   | 5.09   | 5.01   | 4.93   | -1.1% |
| Lower 48 Onshore  |  | 3.76   | 3.72   | 3.66   | 3.58   | 3.52   | 3.45   | 3.40   | 3.38   | 3.38   | 3.38   | 3.38   | 3.40   | 3.40   | 3.41   | 3.40   | 3.40   | 3.39   | 3.38   | 3.35   | 3.31   | 3.28      | 3.24   | 3.21   | 3.18   | 3.16   | -0.7% |
| Conventional  |  | 3.15   | 3.12   | 3.08   | 3.01   | 2.94   | 2.87   | 2.82   | 2.79   | 2.77   | 2.75   | 2.74   | 2.73   | 2.72   | 2.71   | 2.70   | 2.69   | 2.67   | 2.66   | 2.65   | 2.64   | 2.64      | 2.63   | 2.62   | 2.62   | 2.61   | -0.8% |
| Enhanced Oil Recovery   |  | 0.61   | 0.59   | 0.58   | 0.57   | 0.57   | 0.58   | 0.58   | 0.59   | 0.61   | 0.63   | 0.64   | 0.66   | 0.68   | 0.69   | 0.70   | 0.71   | 0.72   | 0.72   | 0.70   | 0.67   | 0.64      | 0.61   | 0.59   | 0.57   | 0.55   | -0.4% |
| Lower 48 Offshore   |  | 1.32   | 1.40   | 1.53   | 1.58   | 1.62   | 1.65   | 1.67   | 1.68   | 1.69   | 1.69   | 1.68   | 1.66   | 1.64   | 1.62   | 1.59   | 1.56   | 1.53   | 1.50   | 1.47   | 1.45   | 1.42      | 1.39   | 1.36   | 1.34   | 1.31   | -0.0% |
| Alaska  |  | 1.40   | 1.30   | 1.21   | 1.17   | 1.13   | 1.09   | 1.05   | 1.02   | 0.97   | 0.93   | 0.89   | 0.86   | 0.82   | 0.78   | 0.74   | 0.71   | 0.68   | 0.64   | 0.61   | 0.59   | 0.56      | 0.54   | 0.51   | 0.49   | 0.47   | -4.4% |
| L48 End of Yr.Reserve(bill.bbl.)                                  |  | 16.82  | 16.49  | 16.15  | 15.85  | 15.58  | 15.41  | 15.30  | 15.23  | 15.21  | 15.23  | 15.24  | 15.26  | 15.26  | 15.25  | 15.20  | 15.14  | 15.08  | 15.01  | 14.86  | 14.70  | 14.55     | 14.39  | 14.25  | 14.11  | 13.97  | -0.8% |
| Natural Gas   |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |       |
| Lower 48 Aver. Wellhead Price 1/ (1996\$ per thousand cubic feet) |  | 2.24   | 2.25   | 2.10   | 2.14   | 2.14   | 2.13   | 2.14   | 2.15   | 2.16   | 2.21   | 2.29   | 2.41   | 2.52   | 2.64   | 2.78   | 2.92   | 3.07   | 3.20   | 3.32   | 3.42   | 3.50      | 3.56   | 3.62   | 3.66   | 3.71   | 2.1%  |
| Production (trill. cubic ft.) 3/                                  |  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |        |        |       |
| U.S. Total  |  | 19.01  | 18.38  | 18.81  | 20.03  | 19.79  | 19.64  | 20.09  | 20.41  | 20.92  | 21.91  | 22.89  | 24.03  | 24.71  | 25.26  | 25.94  | 26.47  | 27.16  | 27.77  | 28.24  | 28.47  | 28.75     | 28.86  | 29.19  | 29.31  | 29.44  | 1.8%  |
| Lower 48 Onshore  |  | 13.07  | 12.87  | 12.83  | 13.61  | 13.34  | 13.26  | 13.53  | 13.80  | 14.19  | 14.87  | 15.75  | 16.54  | 17.11  | 17.60  | 18.14  | 18.54  | 19.17  | 19.73  | 20.16  | 20.32  | 20.56     | 20.58  | 20.69  | 20.63  | 20.55  | 1.9%  |
| Associated-Dissolved 4/   |  | 1.84   | 1.84   | 1.82   | 1.80   | 1.74   | 1.68   | 1.62   | 1.58   | 1.55   | 1.52   | 1.50   | 1.48   | 1.47   | 1.46   | 1.44   | 1.43   | 1.41   | 1.40   | 1.39   | 1.37   | 1.36      | 1.35   | 1.33   | 1.32   | 1.30   | -1.4% |
| Non-Associated  |  | 11.23  | 11.04  | 11.01  | 11.80  | 11.60  | 11.58  | 11.91  | 12.22  | 12.64  | 13.35  | 14.24  | 15.05  | 15.64  | 16.14  | 16.70  | 17.12  | 17.75  | 18.33  | 18.77  | 18.95  | 19.20     | 19.23  | 19.36  | 19.32  | 19.24  | 2.3%  |
| Conventional  |  | 7.96   | 7.57   | 7.81   | 8.30   | 8.20   | 8.12   | 8.42   | 8.56   | 8.81   | 9.34   | 9.75   | 10.21  | 10.50  | 10.71  | 11.05  | 11.33  | 11.78  | 12.24  | 12.62  | 12.81  | 13.07     | 13.10  | 13.21  | 13.24  | 13.19  | 2.1%  |
| Unconventional  |  | 3.27   | 3.46   | 3.20   | 3.50   | 3.40   | 3.46   | 3.50   | 3.67   | 3.83   | 4.02   | 4.49   | 4.84   | 5.14   | 5.43   | 5.65   | 5.79   | 5.97   | 6.09   | 6.15   | 6.14   | 6.14      | 6.13   | 6.14   | 6.08   | 6.05   | 2.6%  |
| Lower 48 Offshore   |  | 5.50   | 5.05   | 5.50   | 5.94   | 5.95   | 5.87   | 6.05   | 6.09   | 6.21   | 6.51   | 6.61   | 6.96   | 7.06   | 7.11   | 7.25   | 7.36   | 7.43   | 7.47   | 7.50   | 7.56   | 7.60      | 7.69   | 7.91   | 8.08   | 8.29   | 1.7%  |
| Associated-Dissolved 4/   |  | 0.80   | 0.82   | 0.84   | 0.88   | 0.89   | 0.90   | 0.91   | 0.92   | 0.92   | 0.92   | 0.92   | 0.92   | 0.91   | 0.91   | 0.90   | 0.89   | 0.89   | 0.88   | 0.87   | 0.87   | 0.86      | 0.85   | 0.85   | 0.84   | 0.2%   |       |
| Non-Associated  |  | 4.70   | 4.23   | 4.66   | 5.06   | 5.06   | 4.97   | 5.14   | 5.18   | 5.29   | 5.59   | 5.69   | 6.04   | 6.14   | 6.20   | 6.34   | 6.46   | 6.53   | 6.59   | 6.62   | 6.69   | 6.73      | 6.83   | 7.05   | 7.23   | 7.45   | 1.9%  |
| Alaska  |  | 0.43   | 0.45   | 0.47   | 0.48   | 0.49   | 0.50   | 0.51   | 0.52   | 0.52   | 0.53   | 0.53   | 0.54   | 0.54   | 0.55   | 0.56   | 0.56   | 0.57   | 0.57   | 0.58   | 0.58   | 0.59      | 0.59   | 0.60   | 0.60   | 0.61   | 1.4%  |
| Lower 48 End of Yr. Reserves (tcf)                                |  | 157.23 | 159.76 | 161.51 | 162.59 | 163.74 | 165.27 | 166.56 | 168.16 | 169.98 | 171.58 | 173.11 | 174.24 | 175.52 | 177.02 | 178.60 | 180.42 | 182.31 | 184.18 | 186.00 | 187.84 | 189.36    | 190.44 | 190.77 | 190.40 | 189.12 | 0.8%  |
| Supplemental Gas Supplies (tcf) 5/                                |  | 0.12   | 0.12   | 0.12   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.08   | 0.05   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06      | 0.06   | 0.06   | 0.06   | 0.06   | -2.9% |
| Lower 48 Wells (thousands).....                                   |  | 22.07  | 23.51  | 23.76  | 24.07  | 24.12  | 24.96  | 25.82  | 26.31  | 27.08  | 28.04  | 28.89  | 29.60  | 30.16  | 30.76  | 31.46  | 32.14  | 33.01  | 33.89  | 34.84  | 35.64  | 36.20     | 36.69  | 37.07  | 37.51  | 37.85  | 2.3%  |

Ft. = feet.

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Market production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Note: Totals may not equal sum of components due to independent rounding. Figures for 1996 may differ from published data due to internal conversion factors.

Sources: 1996 crude oil lower 48 average wellhead price: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting. 1996 total wells completed: EIA, Office of Integrated Analysis and Forecasting. 1996 lower 48 onshore, lower 48 offshore, Alaska crude oil production: EIA, Petroleum Supply Annual 1996, DOE/EIA-0340(96) (Washington, DC, June 1997). 1996 natural gas lower 48 average wellhead price, Alaska and total natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(97/06) (Washington, DC, June 1997). Other 1996 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 16. Coal Supply, Disposition, and Prices<br>(Million Short Tons per Year, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        | 1996-2020 |        |        |        |        |        |        |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|--------|-------|
|   | 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   |       |
| Production 1/   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Appalachia  | 452   | 466   | 472   | 471   | 468   | 464   | 465   | 463   | 460   | 415   | 391    | 358    | 335    | 317    | 306    | 288    | 275    | 262    | 254       | 252    | 249    | 251    | 247    | 241    | 238    | -2.6% |
| Interior  | 173   | 168   | 167   | 166   | 168   | 163   | 154   | 151   | 149   | 142   | 126    | 112    | 99     | 91     | 89     | 93     | 91     | 87     | 82        | 74     | 68     | 59     | 53     | 47     | 45     | -5.5% |
| West  | 439   | 454   | 491   | 508   | 513   | 536   | 545   | 548   | 556   | 432   | 372    | 302    | 264    | 240    | 229    | 221    | 202    | 185    | 170       | 156    | 142    | 126    | 124    | 117    | 123    | -5.2% |
| East of the Mississippi   | 564   | 572   | 574   | 572   | 567   | 558   | 557   | 553   | 548   | 516   | 488    | 451    | 418    | 392    | 378    | 362    | 344    | 327    | 316       | 309    | 302    | 299    | 291    | 280    | 274    | -3.0% |
| West of the Mississippi   | 500   | 517   | 555   | 573   | 582   | 605   | 610   | 618   | 473   | 402   | 320    | 281    | 256    | 246    | 240    | 223    | 207    | 190    | 174       | 157    | 138    | 133    | 125    | 131    | 131    | -5.4% |
| Total   | 1064  | 1089  | 1130  | 1145  | 1149  | 1163  | 1164  | 1166  | 989   | 890   | 772    | 698    | 648    | 624    | 601    | 567    | 534    | 506    | 483       | 459    | 437    | 423    | 405    | 405    | -3.9%  |       |
| Net Imports   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Imports   | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 6     | 6     | 6     | 5      | 5      | 5      | 4      | 4      | 4      | 4      | 4      | 4         | 4      | 4      | 4      | 4      | 4      | -2.1%  |       |
| Exports   | 90    | 87    | 88    | 88    | 89    | 90    | 91    | 90    | 90    | 89    | 89     | 89     | 89     | 89     | 89     | 89     | 90     | 90     | 90        | 91     | 91     | 92     | 92     | 93     | 93     | 0.1%  |
| Total   | -83   | -80   | -81   | -81   | -81   | -83   | -84   | -83   | -83   | -83   | -83    | -83    | -84    | -85    | -85    | -85    | -85    | -86    | -86       | -87    | -87    | -88    | -88    | -89    | -89    | 0.3%  |
| Total Supply 2/   | 981   | 1008  | 1049  | 1064  | 1068  | 1080  | 1080  | 1079  | 1082  | 906   | 807    | 688    | 614    | 563    | 539    | 517    | 482    | 449    | 420       | 396    | 372    | 350    | 336    | 316    | 316    | -4.6% |
| Consumption by Sector   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Residential and Commercial...   | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5         | 5      | 5      | 5      | 5      | 5      | 5      | -0.4% |
| Industrial 3/   | 70    | 69    | 70    | 71    | 71    | 72    | 74    | 75    | 76    | 56    | 51     | 47     | 47     | 47     | 48     | 50     | 51     | 53     | 54        | 55     | 55     | 55     | 56     | 55     | 57     | -0.9% |
| Coke Plants   | 32    | 32    | 32    | 32    | 31    | 30    | 30    | 29    | 29    | 28    | 27     | 26     | 25     | 24     | 23     | 22     | 21     | 20     | 19        | 18     | 18     | 17     | 16     | 15     | 15     | -3.1% |
| Electric Generators 4/  | 896   | 903   | 950   | 955   | 961   | 972   | 971   | 970   | 972   | 829   | 729    | 609    | 541    | 492    | 460    | 441    | 406    | 371    | 342       | 318    | 297    | 277    | 258    | 240    | 235    | -5.4% |
| Total   | 1003  | 1009  | 1058  | 1064  | 1069  | 1081  | 1081  | 1081  | 1083  | 918   | 812    | 687    | 618    | 568    | 537    | 518    | 483    | 449    | 420       | 396    | 374    | 355    | 335    | 316    | 312    | -4.8% |
| Discrepancy and Stock Change 5/   | -23   | -1    | -8    | 0     | -2    | -1    | -1    | -2    | -0    | -12   | -6     | 1      | -3     | -5     | 3      | -1     | -2     | -0     | 0         | 1      | -2     | -5     | 0      | 1      | 4      | N/A   |
| Average Minemouth Price   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| (1996 dollars per short ton)  | 18.50 | 18.18 | 17.58 | 17.17 | 16.86 | 16.38 | 16.09 | 15.91 | 15.68 | 16.10 | 16.17  | 16.52  | 16.53  | 16.49  | 16.42  | 16.17  | 16.10  | 16.11  | 16.14     | 16.25  | 16.33  | 16.51  | 16.41  | 16.51  | 16.24  | -0.5% |
| (1996\$ per million Btu)  | 0.87  | 0.86  | 0.83  | 0.81  | 0.80  | 0.78  | 0.77  | 0.76  | 0.75  | 0.76  | 0.75   | 0.76   | 0.75   | 0.75   | 0.74   | 0.74   | 0.74   | 0.74   | 0.74      | 0.73   | 0.74   | 0.73   | 0.73   | 0.72   | -0.8%  |       |
| Deliv. Price(1996\$/short ton) 6/   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| Industrial  | 32.28 | 31.10 | 30.71 | 30.29 | 30.00 | 29.66 | 29.36 | 29.10 | 28.86 | 72.61 | 90.60  | 111.42 | 116.10 | 118.81 | 119.45 | 116.95 | 113.93 | 113.47 | 109.19    | 109.41 | 110.01 | 109.29 | 108.00 | 109.56 | 104.28 | 5.0%  |
| Coke Plants   | 47.33 | 47.02 | 46.50 | 45.87 | 45.41 | 45.20 | 44.71 | 44.37 | 44.05 | 96.41 | 118.10 | 142.81 | 148.40 | 151.62 | 152.49 | 149.63 | 146.00 | 145.50 | 140.56    | 140.91 | 141.79 | 140.97 | 139.45 | 141.27 | 135.28 | 4.5%  |
| Electric Generators   |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |        |        |        |        |        |        |       |
| (1996 dollars / short ton)  | 26.45 | 25.74 | 25.32 | 24.99 | 24.74 | 24.43 | 24.23 | 23.98 | 23.74 | 64.24 | 81.32  | 101.97 | 106.50 | 109.09 | 109.56 | 105.95 | 102.73 | 102.43 | 98.13     | 98.98  | 100.02 | 100.12 | 99.13  | 101.00 | 95.33  | 5.5%  |
| (1996 dollars /million Btu)   | 1.29  | 1.25  | 1.24  | 1.22  | 1.21  | 1.20  | 1.19  | 1.18  | 1.17  | 3.13  | 3.93   | 4.86   | 5.07   | 5.19   | 5.23   | 5.10   | 4.97   | 4.94   | 4.74      | 4.75   | 4.77   | 4.73   | 4.68   | 4.75   | 4.52   | 5.4%  |
| Average   | 27.52 | 26.78 | 26.33 | 25.96 | 25.69 | 25.37 | 25.15 | 24.89 | 24.64 | 65.73 | 83.13  | 104.17 | 108.92 | 111.69 | 112.28 | 108.86 | 105.81 | 105.67 | 101.53    | 102.41 | 103.49 | 103.54 | 102.60 | 104.54 | 98.93  | 5.5%  |
| Exports 7/  | 40.77 | 40.26 | 39.71 | 39.06 | 38.54 | 38.14 | 37.59 | 37.42 | 37.20 | 36.96 | 36.69  | 36.36  | 36.00  | 35.74  | 35.51  | 35.22  | 34.82  | 34.51  | 34.30     | 34.07  | 33.85  | 33.58  | 33.34  | 33.03  | 32.82  | -0.9% |

1/ Includes anthracite, bituminous coal, and lignite.

2/ Production plus net imports and net storage withdrawals.

3/ Includes consumption by cogenerators.

4/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

5/ Balancing item: the sum of production, net imports, and net storage minus total consumption.

6/ Sectoral prices weighted by consumption tonnage; weighted average excludes residential/ commercial prices and export free-alongside-ship (f.a.s.) prices.

7/ F.a.s. price at U.S. port of exit.

N/A = Not applicable.

Btu = British thermal unit.

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

Sources: 1996 data derived from: Energy Information Administration (EIA), Coal Industry Annual 1996, DOE/EIA-0584(96) (Washington, DC, November 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

|                                     |        | Table 17. Renewable Energy Generating Capability and Generation<br>(Thousand Megawatts, Unless Otherwise Noted) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1996-<br>2020 |        |        |        |       |
|-------------------------------------|--------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|--------|--------|--------|-------|
|                                     |        | 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  |
| Electricity                         |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Elect.Generators (excl.cogen)1/     |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Net Summer Capability<br>(gigawatt) |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Conventional Hydropower             | 77.66  | 77.86   | 78.07  | 79.34  | 79.39  | 79.41  | 79.49  | 79.62  | 79.67  | 79.74  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80  | 79.80         | 79.80  | 79.80  | 0.1%   |       |
| Geothermal 2/                       | 3.02   | 3.02  | 3.02   | 3.02   | 3.02   | 3.03   | 3.09   | 2.98   | 3.00   | 3.11   | 3.03   | 3.30   | 3.41   | 3.61   | 3.51   | 3.47   | 3.94   | 3.83   | 3.96   | 4.19   | 4.15   | 4.47          | 4.69   | 4.77   | 4.95   | 2.1%  |
| Municipal Solid Waste 3/            | 3.26   | 3.29  | 3.33   | 3.37   | 3.40   | 3.45   | 3.49   | 3.54   | 3.58   | 3.66   | 3.72   | 3.79   | 3.85   | 3.92   | 3.99   | 4.06   | 4.13   | 4.20   | 4.26   | 4.31   | 4.36   | 4.38          | 4.40   | 4.41   | 4.41   | 1.3%  |
| Wood and Other Biomass              | 1.64   | 1.64  | 1.64   | 1.64   | 1.71   | 1.76   | 1.76   | 1.93   | 2.25   | 2.28   | 2.31   | 2.34   | 2.70   | 3.35   | 3.98   | 4.61   | 5.24   | 5.97   | 6.81   | 7.82   | 9.07   | 10.36         | 11.95  | 13.4%  |        |       |
| Solar Thermal                       | 0.36   | 0.36  | 0.36   | 0.36   | 0.37   | 0.37   | 0.37   | 0.38   | 0.38   | 0.39   | 0.43   | 0.43   | 0.44   | 0.45   | 0.46   | 0.47   | 0.48   | 0.48   | 0.49   | 0.51   | 0.52   | 0.53          | 0.54   | 1.7%   |        |       |
| Solar Photovoltaic                  | 0.01   | 0.01  | 0.01   | 0.01   | 0.02   | 0.02   | 0.03   | 0.05   | 0.06   | 0.08   | 0.10   | 0.12   | 0.17   | 0.20   | 0.22   | 0.25   | 0.28   | 0.31   | 0.35   | 0.38   | 0.42   | 0.45          | 0.49   | 0.52   | 0.56   | 18.0% |
| Wind                                | 1.85   | 1.86  | 2.09   | 2.48   | 2.55   | 2.55   | 2.81   | 3.12   | 3.55   | 4.22   | 4.91   | 5.78   | 6.79   | 8.03   | 9.44   | 11.00  | 12.99  | 15.25  | 17.85  | 20.35  | 23.74  | 27.67         | 31.73  | 35.01  | 38.08  | 13.4% |
| Total                               | 87.81  | 88.04   | 88.52  | 90.22  | 90.39  | 90.54  | 91.04  | 91.44  | 91.99  | 93.12  | 94.18  | 95.45  | 96.76  | 98.32  | 100.10 | 102.37 | 105.58 | 108.46 | 111.93 | 115.47 | 119.76 | 125.10        | 130.70 | 135.40 | 140.29 | 2.0%  |
| Generation                          |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Conventional Hydropower             | 346.28 | 338.33  | 304.09 | 307.35 | 310.33 | 310.32 | 310.79 | 311.67 | 312.07 | 312.53 | 312.95 | 312.94 | 312.94 | 312.95 | 312.96 | 312.98 | 313.01 | 313.03 | 313.04 | 313.05 | 313.07 | 313.09        | 313.10 | 313.11 | 313.12 | -0.4% |
| Geothermal 2/                       | 15.70  | 17.23   | 17.23  | 17.24  | 17.25  | 17.32  | 17.97  | 17.45  | 17.81  | 18.61  | 18.21  | 20.13  | 20.83  | 22.23  | 21.72  | 21.66  | 25.00  | 24.45  | 25.55  | 27.11  | 27.23  | 29.48         | 31.05  | 32.08  | 33.35  | 3.2%  |
| Municipal Solid Waste 3/            | 18.85  | 21.98   | 22.24  | 22.51  | 22.78  | 23.07  | 23.38  | 23.71  | 24.02  | 24.53  | 24.97  | 25.43  | 25.86  | 26.30  | 26.78  | 27.29  | 27.79  | 28.26  | 28.67  | 29.04  | 29.34  | 29.50         | 29.62  | 29.71  | 29.75  | 1.9%  |
| Wood and Other Biomass              | 7.27   | 8.74  | 8.85   | 8.85   | 8.85   | 9.16   | 9.37   | 9.37   | 9.37   | 18.30  | 19.88  | 19.70  | 19.23  | 18.83  | 21.01  | 25.10  | 29.13  | 33.07  | 37.20  | 42.07  | 47.82  | 54.80         | 63.23  | 72.10  | 83.07  | 10.7% |
| Solar Thermal                       | 0.82   | 0.92  | 0.92   | 0.92   | 0.92   | 0.92   | 0.93   | 0.94   | 0.95   | 0.96   | 0.97   | 0.99   | 1.11   | 1.13   | 1.15   | 1.18   | 1.21   | 1.24   | 1.27   | 1.30   | 1.33   | 1.37          | 1.40   | 1.44   | 1.47   | 2.5%  |
| Solar Photovoltaic                  | 0.00   | 0.03  | 0.04   | 0.04   | 0.05   | 0.07   | 0.09   | 0.13   | 0.16   | 0.20   | 0.25   | 0.30   | 0.48   | 0.54   | 0.60   | 0.68   | 0.75   | 0.83   | 0.92   | 1.00   | 1.09   | 1.18          | 1.27   | 1.36   | 1.45   | 29.4% |
| Wind                                | 3.17   | 3.92  | 4.51   | 5.50   | 5.67   | 5.67   | 6.33   | 7.13   | 8.24   | 10.14  | 12.09  | 14.50  | 17.33  | 20.73  | 24.73  | 28.90  | 34.23  | 40.74  | 47.99  | 55.10  | 65.20  | 77.04         | 89.27  | 99.09  | 108.33 | 15.9% |
| Total                               | 392.09 | 391.15  | 357.87 | 362.40 | 365.85 | 366.54 | 368.87 | 370.39 | 372.62 | 385.27 | 389.31 | 393.99 | 397.78 | 402.70 | 408.95 | 417.79 | 431.12 | 441.62 | 454.64 | 468.68 | 485.08 | 506.46        | 528.94 | 548.88 | 570.54 | 1.6%  |
| Cogenerators 5/                     |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Net Summer Capability<br>(gigawatt) |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Municipal Solid Waste               | 0.43   | 0.43  | 0.44   | 0.44   | 0.44   | 0.44   | 0.44   | 0.44   | 0.44   | 0.44   | 0.44   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45   | 0.45          | 0.45   | 0.45   | 0.45   | 0.2%  |
| Wood and Other Biomass.....         | 5.44   | 5.45  | 5.94   | 6.02   | 6.08   | 6.15   | 6.23   | 6.28   | 6.34   | 6.35   | 6.40   | 6.43   | 6.47   | 6.53   | 6.60   | 6.69   | 6.76   | 6.81   | 6.86   | 6.88   | 6.89   | 6.90          | 6.91   | 6.91   | 6.93   | 1.0%  |
| Total                               | 5.87   | 5.87  | 6.38   | 6.46   | 6.52   | 6.59   | 6.67   | 6.72   | 6.79   | 6.80   | 6.84   | 6.87   | 6.92   | 6.98   | 7.05   | 7.14   | 7.21   | 7.26   | 7.31   | 7.33   | 7.34   | 7.35          | 7.36   | 7.36   | 7.38   | 1.0%  |
| Generation                          |        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |        |        |        |       |
| Municipal Solid Waste               | 2.21   | 2.22  | 2.23   | 2.23   | 2.24   | 2.25   | 2.25   | 2.26   | 2.27   | 2.27   | 2.28   | 2.28   | 2.29   | 2.29   | 2.29   | 2.30   | 2.30   | 2.31   | 2.31   | 2.31   | 2.32   | 2.32          | 2.32   | 2.32   | 2.32   | 0.2%  |
| Wood and Other Biomass.....         | 39.40  | 39.50   | 39.89  | 40.62  | 41.24  | 41.90  | 42.62  | 43.14  | 43.77  | 44.21  | 44.81  | 45.20  | 45.62  | 46.22  | 46.94  | 47.75  | 48.42  | 48.97  | 49.43  | 49.66  | 49.77  | 49.91         | 49.96  | 50.01  | 50.20  | 1.0%  |
| Total                               | 41.61  | 41.72   | 42.12  | 42.85  | 43.48  | 44.15  | 44.87  | 45.40  | 46.03  | 46.48  | 47.09  | 47.48  | 47.91  | 48.51  | 49.23  | 50.05  | 50.73  | 51.28  | 51.74  | 51.98  | 52.08  | 52.23         | 52.28  | 52.33  | 52.51  | 1.0%  |

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Cogenerators produce electricity and other useful thermal energy.

Notes: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO98. Net summer capability is used to be consistent with electric utility capacity estimates.

Data for electric utility capacity are the most recently available as of August 25, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1996 electric utility capability: Energy Information Administration (EIA), Form EIA-860 "Annual Electric Utility Report," 1996 nonutility and cogenerator capability: Form EIA-867, "Annual Nonutility Power Producer Report."

1996 generation: EIA, Annual Energy Review 1996, DOE/EIA-0384(96) (Washington, DC, July 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 18. Renewable Energy, Consumption by Sector and Source 1/<br>(Quadrillion Btu per Year) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |               |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|---------------|
|   | 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  | 1996-<br>2020 |
| Marketed Renewable Energy 2/  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |               |
| Residential   | 0.61 | 0.60 | 0.62 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.62 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.64 | 0.64 | 0.2%  |               |
| Wood  | 0.61 | 0.60 | 0.62 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.62 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.64 | 0.64 | 0.2%  |               |
| Commercial 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.1%  |               |
| Biomass   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.1%  |               |
| Industrial 4/   | 1.82 | 1.89 | 1.90 | 1.93 | 1.96 | 1.99 | 2.02 | 2.05 | 2.08 | 2.10 | 2.13 | 2.15 | 2.17 | 2.20 | 2.23 | 2.27 | 2.30 | 2.33 | 2.35 | 2.36 | 2.37 | 2.38 | 2.38 | 2.38 | 2.39  | 1.1%          |
| Conventional Hydroelectric  | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | N/A   |               |
| Municipal Solid Waste   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |               |
| Biomass   | 1.78 | 1.85 | 1.87 | 1.90 | 1.92 | 1.96 | 1.99 | 2.01 | 2.04 | 2.06 | 2.09 | 2.11 | 2.13 | 2.16 | 2.20 | 2.23 | 2.27 | 2.29 | 2.31 | 2.33 | 2.33 | 2.34 | 2.34 | 2.35 | 2.35  | 1.2%          |
| Transportation  | 0.10 | 0.11 | 0.12 | 0.12 | 0.14 | 0.15 | 0.15 | 0.18 | 0.17 | 0.13 | 0.14 | 0.17 | 0.19 | 0.21 | 0.22 | 0.19 | 0.22 | 0.29 | 0.27 | 0.35 | 0.35 | 0.35 | 0.36 | 0.38 | 0.40  | 5.9%          |
| Ethanol used in E85 5/  | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.08 | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14  | N/A           |
| Ethanol used in Gas.  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |               |
| Blending  | 0.10 | 0.11 | 0.12 | 0.11 | 0.13 | 0.12 | 0.12 | 0.14 | 0.12 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.09 | 0.11 | 0.18 | 0.15 | 0.23 | 0.22 | 0.22 | 0.23 | 0.25 | 0.26  | 4.0%          |
| Electric Generators 6/  | 4.40 | 4.43 | 4.09 | 4.14 | 4.18 | 4.20 | 4.24 | 4.25 | 4.28 | 4.42 | 4.46 | 4.55 | 4.61 | 4.69 | 4.75 | 4.84 | 5.07 | 5.14 | 5.29 | 5.47 | 5.63 | 5.87 | 6.12 | 6.34 | 6.58  | 1.7%          |
| Conventional Hydroelectric  | 3.56 | 3.48 | 3.13 | 3.16 | 3.19 | 3.19 | 3.19 | 3.20 | 3.21 | 3.21 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22 | 3.22  | -0.4%         |
| Geothermal  | 0.43 | 0.47 | 0.48 | 0.48 | 0.48 | 0.49 | 0.51 | 0.50 | 0.51 | 0.54 | 0.53 | 0.59 | 0.61 | 0.66 | 0.64 | 0.64 | 0.77 | 0.73 | 0.77 | 0.82 | 0.82 | 0.89 | 0.94 | 0.97 | 1.01  | 3.6%          |
| Municipal Solid Waste   | 0.30 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 0.38 | 0.39 | 0.40 | 0.41 | 0.41 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48  | 1.9%          |
| Biomass   | 0.06 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.16 | 0.18 | 0.18 | 0.17 | 0.17 | 0.19 | 0.22 | 0.26 | 0.29 | 0.33 | 0.37 | 0.43 | 0.49 | 0.56 | 0.64 | 0.74  | 10.7%         |
| Solar Thermal   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00  | N/A           |
| Solar Photovoltaic  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 29.4%         |
| Wind  | 0.03 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.08 | 0.10 | 0.12 | 0.15 | 0.18 | 0.21 | 0.25 | 0.30 | 0.35 | 0.42 | 0.49 | 0.57 | 0.67 | 0.79 | 0.92 | 1.02 | 1.11  | 15.9%         |
| Total Marketed Renew. Energy  | 6.94 | 7.03 | 6.74 | 6.81 | 6.90 | 6.94 | 7.02 | 7.08 | 7.14 | 7.26 | 7.34 | 7.48 | 7.58 | 7.72 | 7.83 | 7.93 | 8.22 | 8.39 | 8.54 | 8.82 | 8.98 | 9.24 | 9.51 | 9.75 | 10.01 | 1.5%          |
| Non-Marketed Renewable Energy -- Selected Consumption 7/                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |               |
| Residential   | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05  | 4.3%          |
| Solar Hot Water Heating   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | -0.3%         |
| Ground-Source Heat  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04  | 6.8%          |
| Commercial  | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04  | 4.2%          |
| Solar Thermal   | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04  | 4.2%          |

1/ Actual heat rates used to determine fuel consumption for all renewable fuels except hydropower, solar, and wind. Consumption at hydroelectric, solar, and wind facilities determined by using the fossil fuel equivalent of 10,280 Btu per kilowatthour.

2/ Includes nonelectric renewable energy groups for which the energy source is bought and sold in the marketplace, although all transactions may not necessarily be marketed, and marketed renewable energy inputs for electricity entering the marketplace on the electric power grid. Excludes electricity imports; see Table 8.

3/ Value is less than 0.005 quadrillion Btu per year and rounds to zero.

4/ Includes all electricity production by industrial and other cogenerators for the grid and for own use.

5/ Excludes motor gasoline component of E85.

6/ Includes renewable energy delivered to the grid from electric utilities and nonutilities. Renewable energy used in generating electricity for own use is included in the individual sectoral electricity energy consumption values.

7/ Includes selected renewable energy consumption data for which the energy is not bought or sold, either directly or indirectly as an input to marketed energy. The Energy Information Administration does not estimate or project total consumption of nonmarketed renewable energy.

N/A = Not applicable.

Btu = British thermal unit.

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

Sources: 1996 electric generators: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Utility Report" and EIA, Form EIA-867, "Annual Nonutility Power Producer Report." 1996 ethanol: EIA, Petroleum Supply Annual 1996, DOE/EIA-0340(96/1) (Washington, DC, June 1997). Other 1996: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 19. Carbon Emissions by Sector and Source<br>(Million Metric Tons per Year, Unless Otherwise Noted) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|-------|
|   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1996-2020 |        |       |
|   | 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   |       |
| Residential   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum   | 27.3   | 26.2   | 25.9   | 25.5   | 25.3   | 24.9   | 24.7   | 24.5   | 24.3   | 23.1   | 22.6   | 22.0   | 21.8   | 21.5   | 21.4   | 21.3   | 21.3   | 21.2   | 21.2   | 21.1   | 21.0   | 20.8   | 20.7   | 20.6      | 20.6   | -1.2% |
| Natural Gas   | 77.4   | 72.8   | 75.7   | 77.2   | 77.8   | 77.7   | 78.3   | 78.6   | 79.4   | 75.6   | 74.3   | 72.9   | 72.8   | 72.2   | 72.0   | 72.2   | 72.6   | 72.5   | 72.9   | 72.8   | 73.0   | 72.8   | 72.9   | 72.8      | 73.4   | -0.2% |
| Coal  | 1.4    | 1.5    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.2    | 1.1    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0       | 1.0    | -1.4% |
| Electricity   | 179.9  | 181.6  | 195.2  | 196.8  | 199.6  | 204.0  | 204.7  | 206.1  | 207.8  | 187.5  | 175.6  | 161.6  | 153.0  | 146.9  | 143.9  | 142.0  | 138.9  | 136.0  | 133.5  | 132.9  | 132.3  | 131.6  | 130.3  | 129.2     | 129.5  | -1.4% |
| Total   | 286.0  | 282.2  | 298.2  | 301.0  | 304.1  | 308.1  | 309.1  | 310.6  | 312.9  | 287.3  | 273.6  | 257.5  | 248.6  | 241.6  | 238.3  | 236.5  | 233.8  | 230.7  | 228.6  | 227.8  | 227.2  | 226.2  | 224.9  | 223.6     | 224.4  | -1.0% |
| Commercial  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum   | 15.3   | 14.2   | 12.8   | 12.8   | 12.8   | 12.7   | 12.7   | 12.7   | 12.6   | 12.0   | 11.7   | 11.4   | 11.4   | 11.3   | 11.3   | 11.3   | 11.4   | 11.3   | 11.4   | 11.3   | 11.3   | 11.2   | 11.2   | 11.1      | 11.1   | -1.3% |
| Natural Gas   | 47.4   | 47.1   | 49.1   | 49.7   | 50.1   | 50.4   | 50.9   | 51.3   | 51.9   | 49.3   | 48.3   | 47.0   | 46.7   | 46.5   | 46.4   | 46.6   | 46.7   | 46.7   | 47.0   | 47.0   | 46.9   | 46.9   | 47.0   | 46.8      | 47.1   | -0.0% |
| Coal  | 2.1    | 2.1    | 2.2    | 2.2    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.2    | 2.2    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1       | 2.1    | 0.1%  |
| Electricity   | 164.8  | 171.7  | 180.1  | 183.3  | 182.6  | 184.0  | 184.7  | 185.9  | 187.0  | 168.0  | 156.2  | 142.7  | 134.2  | 129.0  | 126.3  | 124.5  | 121.3  | 118.9  | 116.5  | 115.5  | 113.8  | 112.7  | 110.7  | 108.9     | 107.8  | -1.8% |
| Total   | 229.6  | 235.2  | 244.1  | 248.0  | 247.7  | 249.3  | 250.5  | 252.2  | 253.8  | 231.5  | 218.4  | 203.2  | 194.3  | 188.9  | 186.1  | 184.5  | 181.5  | 179.0  | 177.0  | 175.9  | 174.1  | 173.0  | 171.0  | 168.9     | 168.1  | -1.3% |
| Industrial 1/   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum   | 104.8  | 102.9  | 102.9  | 104.7  | 105.9  | 107.9  | 107.7  | 108.5  | 108.7  | 108.2  | 110.4  | 108.4  | 110.0  | 111.8  | 113.5  | 114.9  | 117.0  | 119.0  | 121.1  | 124.5  | 124.0  | 126.2  | 126.3  | 126.8     | 127.0  | 0.8%  |
| Natural Gas 2/  | 142.8  | 145.1  | 149.5  | 153.6  | 152.8  | 152.6  | 153.6  | 153.2  | 154.3  | 158.0  | 160.0  | 162.3  | 162.5  | 163.3  | 164.1  | 165.4  | 165.9  | 165.9  | 165.5  | 163.0  | 163.3  | 161.7  | 162.0  | 161.3     | 160.7  | 0.5%  |
| Coal  | 59.3   | 62.4   | 63.3   | 63.6   | 63.3   | 64.0   | 65.0   | 65.3   | 65.7   | 54.0   | 51.3   | 48.7   | 48.1   | 48.1   | 48.4   | 49.0   | 49.8   | 50.2   | 50.8   | 50.6   | 50.3   | 50.3   | 50.2   | 49.8      | 50.4   | -0.7% |
| Electricity   | 169.2  | 177.8  | 183.8  | 187.2  | 185.5  | 188.7  | 190.1  | 191.4  | 193.0  | 178.0  | 167.4  | 153.3  | 144.5  | 138.8  | 135.6  | 133.9  | 130.0  | 126.9  | 123.5  | 121.1  | 118.5  | 117.1  | 114.4  | 111.9     | 110.8  | -1.7% |
| Total   | 476.1  | 488.2  | 499.4  | 509.1  | 507.5  | 513.1  | 516.4  | 518.4  | 521.8  | 498.2  | 489.0  | 472.8  | 465.1  | 461.9  | 461.5  | 463.2  | 462.7  | 462.0  | 460.8  | 459.2  | 456.2  | 455.3  | 453.0  | 449.8     | 449.0  | -0.2% |
| Transportation  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum 3/  | 457.9  | 470.5  | 479.9  | 494.4  | 502.9  | 512.8  | 522.4  | 530.3  | 539.7  | 543.0  | 544.7  | 543.4  | 545.5  | 547.8  | 552.6  | 559.0  | 565.6  | 569.7  | 576.7  | 580.0  | 584.0  | 588.5  | 592.4  | 595.3     | 598.9  | 1.1%  |
| Natural Gas 4/  | 10.5   | 11.2   | 11.5   | 12.1   | 11.9   | 12.1   | 12.7   | 12.9   | 13.6   | 14.3   | 14.9   | 15.5   | 15.9   | 16.3   | 17.1   | 17.4   | 18.0   | 18.7   | 19.0   | 19.4   | 19.6   | 19.8   | 20.0   | 20.2      | 20.3   | 2.8%  |
| Other 5/  | 0.0    | 0.1    | 0.2    | 0.3    | 0.4    | 0.6    | 0.8    | 1.0    | 1.2    | 1.5    | 1.7    | 1.9    | 2.1    | 2.3    | 2.5    | 2.6    | 2.8    | 2.9    | 3.1    | 3.2    | 3.3    | 3.4    | 3.5    | 3.6       | 3.7    | N/A   |
| Electricity   | 2.8    | 3.0    | 3.1    | 3.1    | 3.1    | 3.2    | 3.2    | 3.5    | 3.8    | 3.7    | 3.7    | 3.5    | 3.4    | 3.4    | 3.4    | 3.4    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3       | 3.3    | 0.6%  |
| Total 3/  | 471.2  | 484.8  | 494.7  | 509.9  | 518.2  | 528.7  | 539.2  | 547.7  | 558.3  | 562.5  | 565.0  | 564.3  | 566.9  | 569.8  | 575.6  | 582.5  | 589.7  | 594.6  | 602.1  | 605.9  | 610.3  | 615.0  | 619.3  | 622.4     | 626.3  | 1.2%  |
| Total Carbon Emissions 6/   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum   | 605.3  | 613.7  | 621.5  | 637.4  | 646.8  | 658.3  | 667.5  | 675.9  | 685.2  | 686.3  | 689.4  | 685.2  | 688.6  | 692.5  | 698.7  | 706.6  | 715.3  | 721.2  | 730.3  | 736.8  | 740.3  | 746.8  | 750.7  | 753.8     | 757.6  | 0.9%  |
| Natural Gas   | 278.1  | 276.3  | 285.8  | 292.6  | 292.8  | 295.5  | 296.0  | 299.2  | 297.2  | 297.4  | 297.7  | 297.9  | 298.2  | 299.7  | 301.6  | 303.2  | 303.7  | 304.4  | 302.2  | 302.9  | 301.2  | 301.9  | 301.2  | 301.6     | 301.6  | 0.3%  |
| Coal  | 62.8   | 66.0   | 66.9   | 67.2   | 67.0   | 67.7   | 68.7   | 69.0   | 69.5   | 57.4   | 54.6   | 51.8   | 51.2   | 51.4   | 52.1   | 52.9   | 53.3   | 53.9   | 53.7   | 53.4   | 53.4   | 52.9   | 53.6   | 53.6      | -0.7%  |       |
| Other 5/  | 0.0    | 0.1    | 0.2    | 0.3    | 0.4    | 0.6    | 0.8    | 1.0    | 1.2    | 1.5    | 1.7    | 1.9    | 2.1    | 2.3    | 2.5    | 2.6    | 2.8    | 2.9    | 3.1    | 3.2    | 3.3    | 3.4    | 3.5    | 3.6       | 3.7    | N/A   |
| Electricity   | 516.7  | 534.1  | 562.1  | 570.5  | 570.7  | 579.9  | 582.7  | 586.9  | 591.6  | 537.1  | 502.9  | 461.1  | 435.1  | 418.1  | 409.1  | 403.8  | 393.6  | 385.2  | 376.8  | 372.8  | 367.8  | 364.6  | 358.8  | 353.2     | 351.3  | -1.6% |
| Total 3/  | 1462.9 | 1490.3 | 1536.4 | 1567.9 | 1577.4 | 1599.2 | 1615.2 | 1628.8 | 1646.8 | 1579.5 | 1546.0 | 1497.8 | 1475.0 | 1462.2 | 1461.5 | 1466.6 | 1467.7 | 1466.3 | 1468.5 | 1468.8 | 1467.7 | 1469.5 | 1468.2 | 1464.7    | 1467.8 | 0.0%  |
| Electric Generators 7/  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |       |
| Petroleum   | 15.5   | 17.6   | 13.0   | 13.6   | 12.2   | 13.8   | 12.2   | 11.2   | 10.5   | 7.3    | 7.2    | 5.9    | 5.4    | 5.6    | 5.0    | 4.7    | 3.9    | 3.4    | 3.7    | 4.8    | 5.6    | 7.9    | 7.8    | 9.5       | 9.3    | -2.1% |
| Natural Gas   | 40.3   | 39.2   | 48.6   | 54.3   | 54.0   | 58.5   | 63.0   | 68.1   | 73.5   | 92.3   | 108.4  | 127.4  | 138.3  | 147.5  | 156.4  | 163.9  | 174.1  | 184.3  | 191.8  | 198.2  | 202.8  | 206.3  | 210.6  | 213.2     | 215.0  | 7.2%  |
| Coal  | 460.9  | 477.4  | 500.5  | 502.5  | 504.5  | 507.5  | 507.6  | 507.6  | 507.6  | 437.5  | 387.2  | 327.8  | 291.4  | 265.0  | 247.7  | 235.2  | 215.6  | 197.5  | 181.2  | 169.7  | 159.4  | 150.4  | 140.3  | 130.5     | 127.0  | -5.2% |
| Total   | 516.7  | 534.1  | 562.1  | 570.5  | 570.7  | 579.9  | 582.7  | 586.9  | 591.6  | 537.1  | 502.9  | 461.1  | 435.1  | 418.1  | 409.1  | 403.8  | 393.6  | 385.2  | 376.8  | 372.8  | 367.8  | 364.6  | 358.8  | 353.2     | 351.3  | -1.6% |

| Table 20. Macroeconomic Indicators<br>(Billion 1992 Chain-Weighted Dollars, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
|   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 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  | 1996-2020 |
| GDP Chain-Type Price Index<br>(1992=1.00)   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 1.102 | 1.125 | 1.151 | 1.178 | 1.207 | 1.238 | 1.271 | 1.305 | 1.341 | 1.401 | 1.455 | 1.509 | 1.558 | 1.606 | 1.655 | 1.706 | 1.760 | 1.818 | 1.878 | 1.942 | 2.012 | 2.084 | 2.157 | 2.237 | 2.317 | 3.1%      |
| Real Gross Domestic   | 6928  | 7165  | 7332  | 7497  | 7669  | 7840  | 8000  | 8158  | 8336  | 8474  | 8580  | 8699  | 8847  | 9022  | 9241  | 9470  | 9699  | 9891  | 10045 | 10177 | 10295 | 10417 | 10544 | 10672 | 10796 | 1.9%      |
| Real Consumption  | 4714  | 4865  | 5010  | 5131  | 5232  | 5331  | 5429  | 5521  | 5624  | 5724  | 5797  | 5887  | 5989  | 6108  | 6248  | 6400  | 6567  | 6724  | 6864  | 6991  | 7105  | 7220  | 7338  | 7461  | 7583  | 2.0%      |
| Real Investment   | 1069  | 1182  | 1223  | 1266  | 1310  | 1354  | 1391  | 1416  | 1459  | 1473  | 1489  | 1514  | 1567  | 1629  | 1719  | 1814  | 1892  | 1941  | 1962  | 1969  | 1980  | 2004  | 2035  | 2068  | 2098  | 2.8%      |
| Real Government   | 1258  | 1270  | 1288  | 1294  | 1302  | 1309  | 1321  | 1340  | 1361  | 1384  | 1398  | 1415  | 1431  | 1448  | 1468  | 1488  | 1509  | 1532  | 1552  | 1570  | 1584  | 1595  | 1605  | 1614  | 1622  | 1.1%      |
| Real Exports  | 857   | 954   | 1013  | 1090  | 1191  | 1296  | 1405  | 1521  | 1639  | 1746  | 1845  | 1943  | 2047  | 2161  | 2283  | 2406  | 2520  | 2621  | 2715  | 2809  | 2903  | 2996  | 3091  | 3186  | 3282  | 5.8%      |
| Real Imports  | 971   | 1109  | 1213  | 1295  | 1373  | 1453  | 1544  | 1636  | 1739  | 1853  | 1958  | 2083  | 2222  | 2372  | 2532  | 2704  | 2873  | 3040  | 3199  | 3354  | 3506  | 3667  | 3835  | 4016  | 4195  | 6.3%      |
| Real Disposable Personal Income   | 5077  | 5216  | 5376  | 5510  | 5611  | 5723  | 5833  | 5945  | 6071  | 6224  | 6315  | 6419  | 6516  | 6635  | 6783  | 6939  | 7102  | 7269  | 7419  | 7552  | 7667  | 7784  | 7901  | 8030  | 8153  | 2.0%      |
| AA Utility Bond Rate (percent)  | 7.57  | 7.60  | 7.34  | 7.17  | 7.07  | 6.98  | 6.94  | 7.00  | 7.09  | 7.55  | 7.55  | 7.66  | 7.56  | 7.45  | 7.36  | 7.30  | 7.25  | 7.33  | 7.50  | 7.65  | 7.82  | 7.96  | 8.03  | 8.20  | 8.34  | N/A       |
| Real Yield on Government 10 Year Bonds (percent)  | 4.99  | 5.01  | 4.98  | 4.89  | 4.30  | 3.94  | 3.77  | 3.77  | 3.80  | 3.97  | 3.58  | 3.46  | 3.48  | 3.64  | 3.71  | 3.74  | 3.72  | 3.77  | 3.88  | 3.97  | 4.03  | 4.07  | 4.03  | 4.13  | 4.20  | N/A       |
| Energy Intensity (thousand Btu/92 dollar of GDP)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Delivered Energy  | 10.14 | 9.91  | 9.88  | 9.88  | 9.77  | 9.69  | 9.62  | 9.52  | 9.45  | 9.18  | 9.08  | 8.92  | 8.80  | 8.67  | 8.54  | 8.43  | 8.32  | 8.23  | 8.17  | 8.11  | 8.04  | 7.98  | 7.92  | 7.84  | 7.79  | -1.1%     |
| Total Energy  | 13.54 | 13.14 | 13.15 | 13.14 | 13.00 | 12.89 | 12.77 | 12.64 | 12.51 | 12.00 | 11.76 | 11.46 | 11.22 | 11.00 | 10.78 | 10.58 | 10.42 | 10.25 | 10.15 | 10.05 | 9.96  | 9.87  | 9.78  | 9.69  | 9.62  | -1.4%     |
| Consumer Price Ind. (1982-4=1.00)   | 1.570 | 1.607 | 1.65  | 1.69  | 1.74  | 1.79  | 1.85  | 1.91  | 1.97  | 2.07  | 2.16  | 2.26  | 2.34  | 2.43  | 2.51  | 2.60  | 2.70  | 2.79  | 2.89  | 3.00  | 3.12  | 3.24  | 3.36  | 3.50  | 3.63  | 3.6%      |
| Unemployment Rate   | 5.38  | 4.97  | 4.92  | 5.16  | 5.28  | 5.40  | 5.52  | 5.67  | 5.72  | 5.87  | 6.29  | 6.65  | 6.82  | 6.78  | 6.51  | 6.15  | 5.73  | 5.45  | 5.42  | 5.50  | 5.66  | 5.79  | 5.87  | 5.91  | 5.94  | N/A       |
| Unit Sales Light-Duty Veh.(mill)  | 15.10 | 15.06 | 15.41 | 15.53 | 15.50 | 15.36 | 15.38 | 15.34 | 15.46 | 14.91 | 14.64 | 14.66 | 14.97 | 15.38 | 15.96 | 16.41 | 16.79 | 16.94 | 16.93 | 16.78 | 16.54 | 16.43 | 16.58 | 16.64 | 16.66 | 0.4%      |
| Millions of People  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Pop. w/Armed Forces Overseas  | 266.1 | 268.5 | 270.9 | 273.3 | 275.6 | 277.9 | 280.2 | 282.5 | 284.8 | 287.1 | 289.4 | 291.8 | 294.1 | 296.5 | 298.9 | 301.4 | 303.8 | 306.3 | 308.7 | 311.2 | 313.7 | 316.1 | 318.6 | 321.0 | 323.5 | 0.8%      |
| Population (aged 16 and over)   | 204.2 | 206.4 | 208.5 | 210.7 | 212.8 | 214.9 | 217.1 | 219.2 | 221.5 | 223.8 | 226.2 | 228.6 | 230.9 | 233.2 | 235.4 | 237.6 | 239.7 | 241.8 | 243.8 | 245.8 | 247.8 | 249.8 | 251.7 | 253.6 | 255.6 | 0.9%      |
| Labor Force   | 133.9 | 136.5 | 138.6 | 140.6 | 142.1 | 143.7 | 145.1 | 146.5 | 148.1 | 149.6 | 151.0 | 152.2 | 153.1 | 154.1 | 155.4 | 156.6 | 157.4 | 158.4 | 159.3 | 159.9 | 160.4 | 160.8 | 161.2 | 161.5 | 161.9 | 0.8%      |

GDP = Gross domestic product.

Btu = British thermal unit.

N/A = Not applicable.

Source: Simulation of the Data Resources, Inc. (DRI) Model of the U.S. Economy (1990 + 9%, Personal Income Tax Rebate).

| Table 19. Carbon Emissions by Sector and Source<br>(Million Metric Tons per Year, Unless Otherwise Noted) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
|   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1996-2020 |        |
|   | 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   |
| Total Carbon Emissions 8/   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |
| Petroleum   | 620.8  | 631.3  | 634.5  | 651.0  | 659.0  | 672.1  | 679.7  | 687.1  | 695.7  | 693.6  | 696.7  | 691.1  | 693.9  | 698.1  | 703.8  | 711.3  | 719.2  | 724.6  | 734.0  | 741.6  | 745.9  | 754.8  | 758.5  | 763.3     | 767.0  |
| Natural Gas   | 318.4  | 315.5  | 334.3  | 347.0  | 346.6  | 351.3  | 358.5  | 364.1  | 372.7  | 389.4  | 405.8  | 425.1  | 436.3  | 445.6  | 456.1  | 465.5  | 477.4  | 488.0  | 496.2  | 500.5  | 505.6  | 507.5  | 512.5  | 514.4     | 516.5  |
| Coal  | 523.7  | 543.4  | 567.4  | 569.7  | 571.5  | 575.3  | 576.3  | 576.6  | 577.1  | 494.9  | 441.8  | 379.7  | 342.7  | 316.2  | 299.1  | 287.3  | 268.5  | 250.8  | 235.2  | 223.4  | 212.9  | 203.8  | 193.7  | 183.4     | 180.5  |
| Other 5/  | 0.0    | 0.1    | 0.2    | 0.3    | 0.4    | 0.6    | 0.8    | 1.0    | 1.2    | 1.5    | 1.7    | 1.9    | 2.1    | 2.3    | 2.5    | 2.6    | 2.8    | 2.9    | 3.1    | 3.2    | 3.3    | 3.4    | 3.5    | 3.6       | 3.7    |
| Total 3/  | 1462.9 | 1490.3 | 1536.4 | 1567.9 | 1577.4 | 1599.2 | 1615.2 | 1628.8 | 1646.8 | 1579.5 | 1546.0 | 1497.8 | 1475.0 | 1462.2 | 1461.5 | 1466.6 | 1467.7 | 1466.3 | 1468.5 | 1468.8 | 1467.7 | 1469.5 | 1468.2 | 1464.7    | 1467.8 |
| Carbon Emissions<br>(tons per person)   | 5.5    | 5.6    | 5.7    | 5.7    | 5.7    | 5.8    | 5.8    | 5.8    | 5.8    | 5.5    | 5.3    | 5.1    | 5.0    | 4.9    | 4.9    | 4.9    | 4.8    | 4.8    | 4.8    | 4.7    | 4.7    | 4.6    | 4.6    | 4.6       | 4.5    |
|   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           | -0.8%  |

1/ Includes consumption by cogenerators.

2/ Includes lease and plant fuel.

3/ This includes international bunker fuels which, by convention, are excluded from the international accounting of carbon emissions. In the years 1989 through 1996, international bunker fuels account for 22 to 24 million metric tons of carbon annually.

4/ Includes pipeline fuel natural gas and compressed natural gas used as vehicle fuel.

5/ Includes methanol and liquid hydrogen.

6/ Measured for delivered energy consumption.

7/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

8/ Measured for total energy consumption, with emissions for electric power generators distributed to the primary fuels.

N/A = Not applicable

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

Sources: Carbon coefficients from Energy Information Administration, (EIA) Emissions of Greenhouse Gases in the United States 1996, DOE/EIA-0573(96) (Washington, DC, October 1997). 1996 consumption estimates based on: EIA, Short Term Energy Outlook, August 1997, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System run FD09ABV.D080398B.

| Table 20. Macroeconomic Indicators<br>(Billion 1992 Chain-Weighted Dollars, Unless Otherwise Noted) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
|   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 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  | 1996-2020 |
| GDP Chain-Type Price Index<br>(1992=1.00)   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
|   | 1.102 | 1.125 | 1.151 | 1.178 | 1.207 | 1.238 | 1.271 | 1.305 | 1.341 | 1.401 | 1.455 | 1.509 | 1.558 | 1.606 | 1.655 | 1.706 | 1.760 | 1.818 | 1.878 | 1.942 | 2.012 | 2.084 | 2.157 | 2.237 | 2.317 | 3.1%      |
| Real Gross Domestic   | 6928  | 7165  | 7332  | 7497  | 7669  | 7840  | 8000  | 8158  | 8336  | 8474  | 8580  | 8699  | 8847  | 9022  | 9241  | 9470  | 9699  | 9891  | 10045 | 10177 | 10295 | 10417 | 10544 | 10672 | 10796 | 1.9%      |
| Real Consumption  | 4714  | 4865  | 5010  | 5131  | 5232  | 5331  | 5429  | 5521  | 5624  | 5724  | 5797  | 5887  | 5989  | 6108  | 6248  | 6400  | 6567  | 6724  | 6864  | 6991  | 7105  | 7220  | 7338  | 7461  | 7583  | 2.0%      |
| Real Investment   | 1069  | 1182  | 1223  | 1266  | 1310  | 1354  | 1391  | 1416  | 1459  | 1473  | 1489  | 1514  | 1567  | 1629  | 1719  | 1814  | 1892  | 1941  | 1962  | 1969  | 1980  | 2004  | 2035  | 2068  | 2098  | 2.8%      |
| Real Government   | 1258  | 1270  | 1288  | 1294  | 1302  | 1309  | 1321  | 1340  | 1361  | 1384  | 1398  | 1415  | 1431  | 1448  | 1468  | 1488  | 1509  | 1532  | 1552  | 1570  | 1584  | 1595  | 1605  | 1614  | 1622  | 1.1%      |
| Real Exports  | 857   | 954   | 1013  | 1090  | 1191  | 1296  | 1405  | 1521  | 1639  | 1746  | 1845  | 1943  | 2047  | 2161  | 2283  | 2406  | 2520  | 2621  | 2715  | 2809  | 2903  | 2996  | 3091  | 3186  | 3282  | 5.8%      |
| Real Imports  | 971   | 1109  | 1213  | 1295  | 1373  | 1453  | 1544  | 1636  | 1739  | 1853  | 1958  | 2083  | 2222  | 2372  | 2532  | 2704  | 2873  | 3040  | 3199  | 3354  | 3506  | 3667  | 3835  | 4016  | 4195  | 6.3%      |
| Real Disposable Personal Income   | 5077  | 5216  | 5376  | 5510  | 5611  | 5723  | 5833  | 5945  | 6071  | 6224  | 6315  | 6419  | 6516  | 6635  | 6783  | 6939  | 7102  | 7269  | 7419  | 7552  | 7667  | 7784  | 7901  | 8030  | 8153  | 2.0%      |
| AA Utility Bond Rate (percent)  | 7.57  | 7.60  | 7.34  | 7.17  | 7.07  | 6.98  | 6.94  | 7.00  | 7.09  | 7.55  | 7.55  | 7.66  | 7.56  | 7.45  | 7.36  | 7.30  | 7.25  | 7.33  | 7.50  | 7.65  | 7.82  | 7.96  | 8.03  | 8.20  | 8.34  | N/A       |
| Real Yield on Government 10 Year Bonds (percent)  | 4.99  | 5.01  | 4.98  | 4.89  | 4.30  | 3.94  | 3.77  | 3.77  | 3.80  | 3.97  | 3.58  | 3.46  | 3.48  | 3.64  | 3.71  | 3.74  | 3.72  | 3.77  | 3.88  | 3.97  | 4.03  | 4.07  | 4.03  | 4.13  | 4.20  | N/A       |
| Energy Intensity (thousand Btu/92 dollar of GDP)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Delivered Energy  | 10.13 | 9.91  | 9.88  | 9.88  | 9.76  | 9.68  | 9.61  | 9.52  | 9.44  | 9.17  | 9.07  | 8.91  | 8.79  | 8.67  | 8.54  | 8.42  | 8.32  | 8.22  | 8.17  | 8.10  | 8.04  | 7.98  | 7.91  | 7.84  | 7.78  | -1.1%     |
| Total Energy  | 19.89 | 19.35 | 19.23 | 19.20 | 19.05 | 18.94 | 18.81 | 18.67 | 18.54 | 17.75 | 17.40 | 16.93 | 16.56 | 16.24 | 15.94 | 15.65 | 15.37 | 15.07 | 14.85 | 14.62 | 14.42 | 14.23 | 14.04 | 13.84 | 13.69 | -1.5%     |
| Consumer Price Ind. (1982-4=1.00)   | 1.57  | 1.61  | 1.65  | 1.69  | 1.74  | 1.79  | 1.85  | 1.91  | 1.97  | 2.07  | 2.16  | 2.26  | 2.34  | 2.43  | 2.51  | 2.60  | 2.70  | 2.79  | 2.89  | 3.00  | 3.12  | 3.24  | 3.36  | 3.50  | 3.63  | 3.6%      |
| Unemployment Rate   | 5.38  | 4.97  | 4.92  | 5.16  | 5.28  | 5.40  | 5.52  | 5.67  | 5.72  | 5.87  | 6.29  | 6.65  | 6.82  | 6.78  | 6.51  | 6.15  | 5.73  | 5.45  | 5.42  | 5.50  | 5.66  | 5.79  | 5.87  | 5.91  | 5.94  | N/A       |
| Unit Sales Light-Duty Veh.(mill)  | 15.10 | 15.06 | 15.41 | 15.53 | 15.50 | 15.36 | 15.38 | 15.34 | 15.46 | 14.91 | 14.64 | 14.66 | 14.97 | 15.38 | 15.96 | 16.41 | 16.79 | 16.94 | 16.93 | 16.78 | 16.54 | 16.43 | 16.58 | 16.64 | 16.66 | 0.4%      |
| Millions of People  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Pop. w/Armed Forces Overseas  | 266.1 | 268.5 | 270.9 | 273.3 | 275.6 | 277.9 | 280.2 | 282.5 | 284.8 | 287.1 | 289.4 | 291.8 | 294.1 | 296.5 | 298.9 | 301.4 | 303.8 | 306.3 | 308.7 | 311.2 | 313.7 | 316.1 | 318.6 | 321.0 | 323.5 | 0.8%      |
| Population (aged 16 and over)   | 204.2 | 206.4 | 208.5 | 210.7 | 212.8 | 214.9 | 217.1 | 219.2 | 221.5 | 223.8 | 226.2 | 228.6 | 230.9 | 233.2 | 235.4 | 237.6 | 239.7 | 241.8 | 243.8 | 245.8 | 247.8 | 249.8 | 251.7 | 253.6 | 255.6 | 0.9%      |
| Labor Force   | 133.9 | 136.5 | 138.6 | 140.6 | 142.1 | 143.7 | 145.1 | 146.5 | 148.1 | 149.6 | 151.0 | 152.2 | 153.1 | 154.1 | 155.4 | 156.6 | 157.4 | 158.4 | 159.3 | 159.9 | 160.4 | 160.8 | 161.2 | 161.5 | 161.9 | 0.8%      |

GDP = Gross domestic product.

Btu = British thermal unit.

N/A = Not applicable.

Source: Simulation of the Data Resources, Inc. (DRI) Model of the U.S. Economy (1990 + 9%, Personal Income Tax Rebate).