

# 4

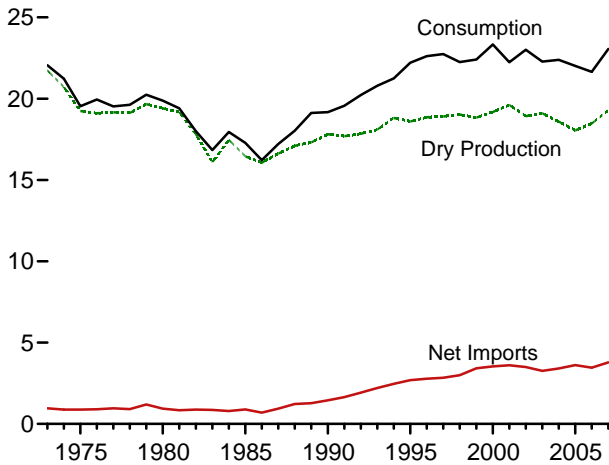
## Natural Gas



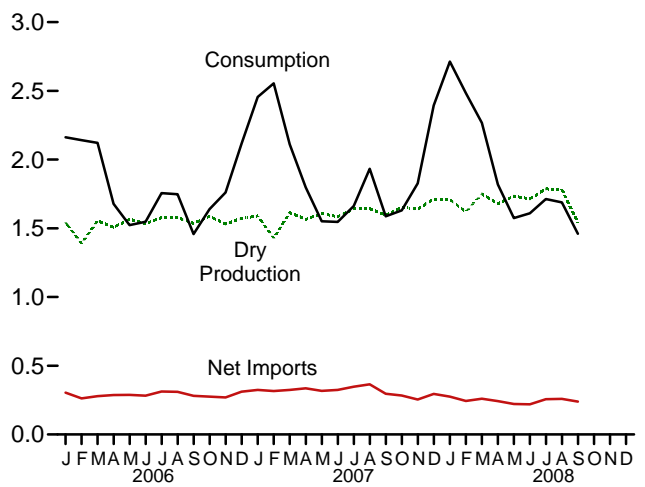
Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

**Figure 4.1 Natural Gas**  
(Trillion Cubic Feet)

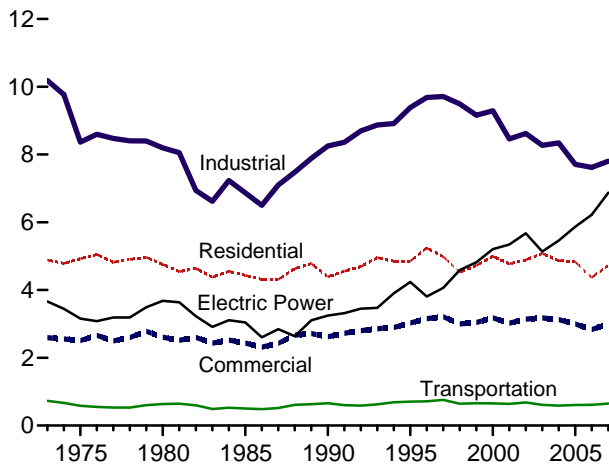
Overview, 1973-2007



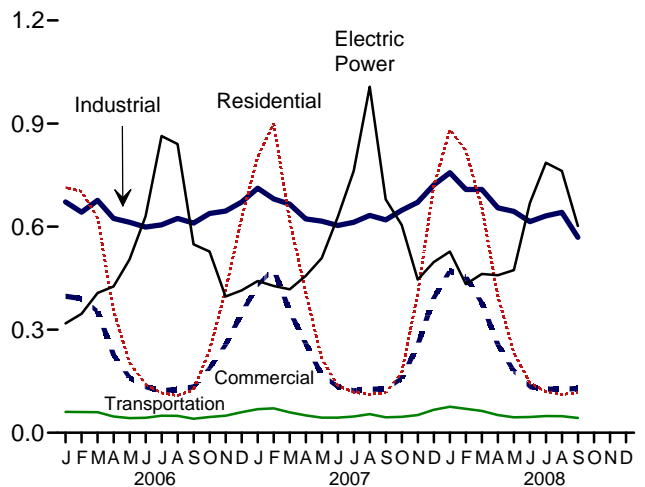
Overview, Monthly



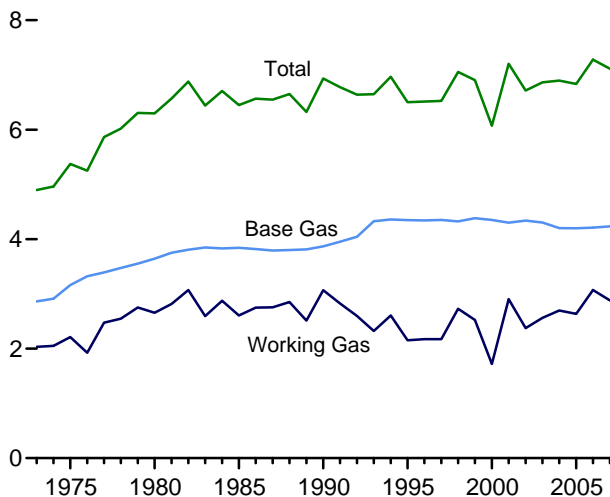
Consumption by Sector, 1973-2007



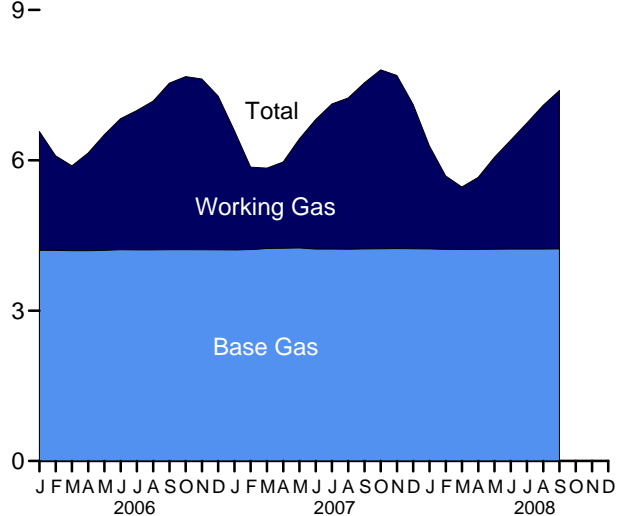
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2007



Underground Storage, End of Month



Note: Because vertical scales differ, graphs should not be compared.  
Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.  
Sources: Tables 4.1, 4.3, and 4.4.



**Table 4.2 Natural Gas Trade by Country**  
(Billion Cubic Feet)

|                                 | Imports              |                           |                    |                        |                      |                   |                    |                                  |                      |                           | Exports                 |                    |                         |                         |
|---------------------------------|----------------------|---------------------------|--------------------|------------------------|----------------------|-------------------|--------------------|----------------------------------|----------------------|---------------------------|-------------------------|--------------------|-------------------------|-------------------------|
|                                 | Algeria <sup>a</sup> | Canada <sup>b</sup>       | Egypt <sup>a</sup> | Mexico <sup>b</sup>    | Nigeria <sup>a</sup> | Oman <sup>a</sup> | Qatar <sup>a</sup> | Trinidad and Tobago <sup>a</sup> | Other <sup>a,c</sup> | Total                     | Canada <sup>b</sup>     | Japan <sup>a</sup> | Mexico <sup>b</sup>     | Total                   |
| 1973 Total .....                | 3                    | 1,028                     | 0                  | 2                      | 0                    | 0                 | 0                  | 0                                | 0                    | 1,033                     | 15                      | 48                 | 14                      | 77                      |
| 1975 Total .....                | 5                    | 948                       | 0                  | 0                      | 0                    | 0                 | 0                  | 0                                | 0                    | 953                       | 10                      | 53                 | 9                       | 73                      |
| 1980 Total .....                | 86                   | 797                       | 0                  | 102                    | 0                    | 0                 | 0                  | 0                                | 0                    | 985                       | (s)                     | 45                 | 4                       | 49                      |
| 1985 Total .....                | 24                   | 926                       | 0                  | 0                      | 0                    | 0                 | 0                  | 0                                | 0                    | 950                       | (s)                     | 53                 | 2                       | 55                      |
| 1990 Total .....                | 84                   | 1,448                     | 0                  | 0                      | 0                    | 0                 | 0                  | 0                                | 0                    | 1,532                     | 17                      | 53                 | 16                      | 86                      |
| 1995 Total .....                | 18                   | 2,816                     | 0                  | 7                      | 0                    | 0                 | 0                  | 0                                | 0                    | 2,841                     | 28                      | 65                 | 61                      | 154                     |
| 1996 Total .....                | 35                   | 2,883                     | 0                  | 14                     | 0                    | 0                 | 0                  | 0                                | 5                    | 2,937                     | 52                      | 68                 | 34                      | 153                     |
| 1997 Total .....                | 66                   | 2,899                     | 0                  | 17                     | 0                    | 0                 | 0                  | 0                                | 12                   | 2,994                     | 56                      | 62                 | 38                      | 157                     |
| 1998 Total .....                | 69                   | 3,052                     | 0                  | 15                     | 0                    | 0                 | 0                  | 0                                | 17                   | 3,152                     | 40                      | 66                 | 53                      | 159                     |
| 1999 Total .....                | 76                   | 3,368                     | 0                  | 55                     | 0                    | 0                 | 20                 | 51                               | 17                   | 3,586                     | 39                      | 64                 | 61                      | 163                     |
| 2000 Total .....                | 47                   | 3,544                     | 0                  | 12                     | 13                   | 10                | 46                 | 99                               | 11                   | 3,782                     | 73                      | 66                 | 106                     | 244                     |
| 2001 Total .....                | 65                   | 3,729                     | 0                  | 10                     | 38                   | 12                | 23                 | 98                               | 2                    | 3,977                     | 167                     | 66                 | 141                     | 373                     |
| 2002 Total .....                | 27                   | 3,785                     | 0                  | 2                      | 8                    | 3                 | 35                 | 151                              | 5                    | 4,015                     | 189                     | 63                 | 263                     | 516                     |
| 2003 Total .....                | 53                   | 3,437                     | 0                  | 0                      | 50                   | 9                 | 14                 | 378                              | 3                    | 3,944                     | 271                     | 66                 | 343                     | 680                     |
| 2004 Total .....                | 120                  | 3,607                     | 0                  | 0                      | 12                   | 9                 | 12                 | 462                              | 36                   | 4,259                     | 395                     | 62                 | 397                     | 854                     |
| 2005 Total .....                | 97                   | 3,700                     | 73                 | 9                      | 8                    | 2                 | 3                  | 439                              | 9                    | 4,341                     | 358                     | 65                 | 305                     | 729                     |
| <b>2006</b> January .....       | 3                    | 320                       | 3                  | 1                      | 3                    | 0                 | 0                  | 30                               | 0                    | 360                       | 32                      | 6                  | 18                      | 56                      |
| February .....                  | 3                    | 282                       | 5                  | (s)                    | 3                    | 0                 | 0                  | 28                               | 0                    | 321                       | 33                      | 6                  | 20                      | 59                      |
| March .....                     | 3                    | 314                       | 0                  | 1                      | 0                    | 0                 | 0                  | 30                               | 0                    | 348                       | 37                      | 6                  | 26                      | 69                      |
| April .....                     | 3                    | 273                       | 14                 | (s)                    | 6                    | 0                 | 0                  | 36                               | 0                    | 332                       | 16                      | 6                  | 24                      | 45                      |
| May .....                       | 0                    | 283                       | 20                 | (s)                    | 3                    | 0                 | 0                  | 44                               | 0                    | 351                       | 21                      | 6                  | 36                      | 63                      |
| June .....                      | 3                    | 286                       | 14                 | 0                      | 6                    | 0                 | 0                  | 39                               | 0                    | 348                       | 23                      | 6                  | 37                      | 66                      |
| July .....                      | 3                    | 313                       | 15                 | 0                      | 6                    | 0                 | 0                  | 33                               | 0                    | 371                       | 17                      | 6                  | 37                      | 59                      |
| August .....                    | 0                    | 313                       | 9                  | 0                      | 6                    | 0                 | 0                  | 37                               | 0                    | 365                       | 17                      | 6                  | 32                      | 55                      |
| September .....                 | 0                    | 290                       | 9                  | 3                      | 6                    | 0                 | 0                  | 25                               | 0                    | 334                       | 23                      | 4                  | 26                      | 53                      |
| October .....                   | 0                    | 296                       | 3                  | 1                      | 9                    | 0                 | 0                  | 25                               | 0                    | 334                       | 30                      | 3                  | 25                      | 59                      |
| November .....                  | 0                    | 290                       | 17                 | 1                      | 6                    | 0                 | 0                  | 25                               | 0                    | 339                       | 45                      | 5                  | 20                      | 70                      |
| December .....                  | 0                    | 328                       | 11                 | 4                      | 3                    | 0                 | 0                  | 37                               | 0                    | 383                       | 47                      | 4                  | 21                      | 72                      |
| <b>Total .....</b>              | <b>17</b>            | <b>3,590</b>              | <b>120</b>         | <b>13</b>              | <b>57</b>            | <b>0</b>          | <b>0</b>           | <b>389</b>                       | <b>0</b>             | <b>4,186</b>              | <b>341</b>              | <b>61</b>          | <b>322</b>              | <b>724</b>              |
| <b>2007</b> January .....       | 3                    | 336                       | 9                  | 4                      | 5                    | 0                 | 0                  | 37                               | 0                    | 393                       | 41                      | 5                  | 24                      | 69                      |
| February .....                  | 0                    | 321                       | 6                  | 8                      | 6                    | 0                 | 0                  | 33                               | 0                    | 373                       | 34                      | 5                  | 17                      | 57                      |
| March .....                     | 9                    | 309                       | 15                 | 6                      | 9                    | 0                 | 0                  | 54                               | 0                    | 402                       | 53                      | 5                  | 19                      | 77                      |
| April .....                     | 24                   | 279                       | 14                 | 9                      | 9                    | 0                 | 0                  | 51                               | 0                    | 387                       | 32                      | 4                  | 15                      | 51                      |
| May .....                       | 24                   | 283                       | 15                 | 3                      | 15                   | 0                 | 3                  | 38                               | 0                    | 380                       | 35                      | 4                  | 24                      | 62                      |
| June .....                      | 12                   | 291                       | 15                 | 4                      | 20                   | 0                 | 6                  | 30                               | 3                    | 381                       | 28                      | 3                  | 26                      | 57                      |
| July .....                      | 0                    | 315                       | 12                 | 5                      | 12                   | 0                 | 3                  | 62                               | 9                    | 419                       | 38                      | 4                  | 29                      | 71                      |
| August .....                    | 3                    | 335                       | 12                 | 4                      | 15                   | 0                 | 6                  | 46                               | 6                    | 427                       | 28                      | 4                  | 30                      | 62                      |
| September .....                 | 3                    | 318                       | 12                 | 2                      | 3                    | 0                 | 0                  | 24                               | 0                    | 361                       | 33                      | 4                  | 28                      | 65                      |
| October .....                   | 0                    | 314                       | 3                  | 2                      | 0                    | 0                 | 0                  | 29                               | 0                    | 347                       | 31                      | 2                  | 29                      | <sup>64</sup>           |
| November .....                  | 0                    | 311                       | 3                  | 3                      | 0                    | 0                 | 0                  | 24                               | 0                    | 341                       | 58                      | 3                  | 26                      | 86                      |
| December .....                  | 0                    | 372                       | 0                  | 4                      | 0                    | 0                 | 0                  | 21                               | 0                    | 397                       | 72                      | 4                  | 25                      | 101                     |
| <b>Total .....</b>              | <b>77</b>            | <b>3,783</b>              | <b>115</b>         | <b>54</b>              | <b>95</b>            | <b>0</b>          | <b>18</b>          | <b>448</b>                       | <b>18</b>            | <b>4,608</b>              | <b>482</b>              | <b>47</b>          | <b>292</b>              | <sup>d</sup> <b>822</b> |
| <b>2008</b> January .....       | 0                    | <sup>R</sup> 356          | 3                  | 1                      | 0                    | 0                 | 0                  | 25                               | 0                    | <sup>R</sup> 386          | 68                      | 3                  | <sup>R</sup> 40         | <sup>R</sup> 111        |
| February .....                  | 0                    | <sup>R</sup> 322          | 0                  | 0                      | 0                    | 0                 | 0                  | 21                               | 3                    | <sup>R</sup> 346          | 62                      | 3                  | <sup>R</sup> 37         | <sup>R</sup> 102        |
| March .....                     | 0                    | <sup>R</sup> 339          | 0                  | 1                      | 0                    | 0                 | 0                  | 21                               | 3                    | <sup>R</sup> 364          | 69                      | 4                  | <sup>R</sup> 31         | <sup>R</sup> 104        |
| April .....                     | 0                    | <sup>R</sup> 289          | 3                  | (s)                    | 3                    | 0                 | 0                  | 26                               | 0                    | <sup>R</sup> 321          | 46                      | 4                  | <sup>R</sup> 28         | <sup>R</sup> 78         |
| May .....                       | 0                    | <sup>R</sup> 259          | 3                  | 4                      | 0                    | 0                 | 0                  | 25                               | 3                    | <sup>R</sup> 295          | 43                      | 5                  | 25                      | 73                      |
| June .....                      | 0                    | <sup>R</sup> 250          | 6                  | 3                      | 3                    | 0                 | 3                  | 21                               | 0                    | <sup>R</sup> 285          | 30                      | 5                  | 30                      | 65                      |
| July .....                      | 0                    | 284                       | 6                  | 4                      | 0                    | 0                 | 0                  | 25                               | 0                    | 318                       | 29                      | 5                  | 28                      | 61                      |
| August .....                    | 0                    | <sup>R</sup> 285          | 3                  | 4                      | 3                    | 0                 | 0                  | 24                               | 5                    | <sup>R</sup> 325          | <sup>R</sup> 25         | 6                  | <sup>R</sup> 35         | <sup>R</sup> 66         |
| September .....                 | 0                    | <sup>E</sup> 268          | 9                  | <sup>E</sup> 6         | 3                    | 0                 | 0                  | 20                               | 0                    | <sup>E</sup> 306          | <sup>E</sup> 28         | 4                  | <sup>E</sup> 35         | <sup>E</sup> 67         |
| <b>9-Month Total .....</b>      | <b>0</b>             | <sup>E</sup> <b>2,652</b> | <b>34</b>          | <sup>E</sup> <b>23</b> | <b>12</b>            | <b>0</b>          | <b>3</b>           | <b>207</b>                       | <b>14</b>            | <sup>E</sup> <b>2,946</b> | <sup>E</sup> <b>401</b> | <b>38</b>          | <sup>E</sup> <b>289</b> | <sup>E</sup> <b>727</b> |
| <b>2007 9-Month Total .....</b> | <b>77</b>            | <b>2,786</b>              | <b>109</b>         | <b>45</b>              | <b>95</b>            | <b>0</b>          | <b>18</b>          | <b>374</b>                       | <b>18</b>            | <b>3,523</b>              | <b>322</b>              | <b>37</b>          | <b>212</b>              | <b>571</b>              |
| <b>2006 9-Month Total .....</b> | <b>17</b>            | <b>2,675</b>              | <b>89</b>          | <b>6</b>               | <b>40</b>            | <b>0</b>          | <b>0</b>           | <b>303</b>                       | <b>0</b>             | <b>3,130</b>              | <b>219</b>              | <b>48</b>          | <b>256</b>              | <b>523</b>              |

<sup>a</sup> As liquefied natural gas.

<sup>b</sup> By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 8, "Imports and Exports," at end of section.

<sup>c</sup> Australia in 1997-2001 and 2004; Brunei in 2002; Equatorial Guinea in 2007; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002-2005; Norway in 2008; United Arab Emirates in 1996-2000; and Other (unassigned) in 2004.

<sup>d</sup> Includes 2 billion cubic feet to Russia.

R=Revised. E=Estimate. (s)=Less than 500 million cubic feet.

Notes: • See Note 8, "Imports and Exports," at end of section. • Totals may

not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • **1973-1987:** Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988-2005:** EIA, *Natural Gas Annual*, annual reports. • **2006 forward:** EIA, *Natural Gas Monthly*, November 2008, Table 4; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."



**Table 4.4 Natural Gas in Underground Storage**  
(Volumes in Billion Cubic Feet)

|                                 | Natural Gas in Underground Storage, End of Period |              |                    | Change in Working Gas From Same Period Previous Year |              | Storage Activity |              |                    |
|---------------------------------|---|--------------|--------------------|--|--------------|------------------|--------------|--------------------|
|                                 | Base Gas  | Working Gas  | Total <sup>a</sup> | Volume   | Percent      | Withdrawals      | Injections   | Net <sup>b,c</sup> |
| <b>1973 Total</b> .....         | <b>2,864</b>                                      | <b>2,034</b> | <b>4,898</b>       | <b>305</b>   | <b>17.6</b>  | <b>1,533</b>     | <b>1,974</b> | <b>-442</b>        |
| <b>1975 Total</b> .....         | <b>3,162</b>                                      | <b>2,212</b> | <b>5,374</b>       | <b>162</b>   | <b>7.9</b>   | <b>1,760</b>     | <b>2,104</b> | <b>-344</b>        |
| <b>1980 Total</b> .....         | <b>3,642</b>                                      | <b>2,655</b> | <b>6,297</b>       | <b>-99</b>   | <b>-3.6</b>  | <b>1,910</b>     | <b>1,896</b> | <b>14</b>          |
| <b>1985 Total</b> .....         | <b>3,842</b>                                      | <b>2,607</b> | <b>6,448</b>       | <b>-270</b>  | <b>-9.4</b>  | <b>2,359</b>     | <b>2,128</b> | <b>231</b>         |
| <b>1990 Total</b> .....         | <b>3,868</b>                                      | <b>3,068</b> | <b>6,936</b>       | <b>555</b>   | <b>22.1</b>  | <b>1,934</b>     | <b>2,433</b> | <b>-499</b>        |
| <b>1995 Total</b> .....         | <b>4,349</b>                                      | <b>2,153</b> | <b>6,503</b>       | <b>-453</b>  | <b>-17.4</b> | <b>2,974</b>     | <b>2,566</b> | <b>408</b>         |
| <b>1996 Total</b> .....         | <b>4,341</b>                                      | <b>2,173</b> | <b>6,513</b>       | <b>19</b>  | <b>.9</b>    | <b>2,911</b>     | <b>2,906</b> | <b>6</b>           |
| <b>1997 Total</b> .....         | <b>4,350</b>                                      | <b>2,175</b> | <b>6,525</b>       | <b>2</b>   | <b>.1</b>    | <b>2,824</b>     | <b>2,800</b> | <b>24</b>          |
| <b>1998 Total</b> .....         | <b>4,326</b>                                      | <b>2,730</b> | <b>7,056</b>       | <b>554</b>   | <b>25.5</b>  | <b>2,379</b>     | <b>2,905</b> | <b>-526</b>        |
| <b>1999 Total</b> .....         | <b>4,383</b>                                      | <b>2,523</b> | <b>6,906</b>       | <b>-207</b>  | <b>-7.6</b>  | <b>2,772</b>     | <b>2,598</b> | <b>174</b>         |
| <b>2000 Total</b> .....         | <b>4,352</b>                                      | <b>1,719</b> | <b>6,071</b>       | <b>-806</b>  | <b>-31.9</b> | <b>3,498</b>     | <b>2,684</b> | <b>814</b>         |
| <b>2001 Total</b> .....         | <b>4,301</b>                                      | <b>2,904</b> | <b>7,204</b>       | <b>1,185</b>   | <b>68.9</b>  | <b>2,309</b>     | <b>3,464</b> | <b>-1,156</b>      |
| <b>2002 Total</b> .....         | <b>4,340</b>                                      | <b>2,375</b> | <b>6,715</b>       | <b>-528</b>  | <b>-18.2</b> | <b>3,138</b>     | <b>2,670</b> | <b>468</b>         |
| <b>2003 Total</b> .....         | <b>4,303</b>                                      | <b>2,563</b> | <b>6,866</b>       | <b>187</b>   | <b>7.9</b>   | <b>3,099</b>     | <b>3,292</b> | <b>-193</b>        |
| <b>2004 Total</b> .....         | <b>4,201</b>                                      | <b>2,696</b> | <b>6,897</b>       | <b>133</b>   | <b>5.2</b>   | <b>3,150</b>     | <b>3,150</b> | <b>-113</b>        |
| <b>2005 Total</b> .....         | <b>4,200</b>                                      | <b>2,635</b> | <b>6,835</b>       | <b>-61</b>   | <b>-2.3</b>  | <b>3,057</b>     | <b>3,002</b> | <b>55</b>          |
| <b>2006</b>                     |   |              |                    |  |              |                  |              |                    |
| January .....                   | 4,202   | 2,371        | 6,573              | 377  | 18.9         | 374              | 110          | 264                |
| February .....                  | 4,202   | 1,886        | 6,089              | 322  | 20.6         | 539              | 54           | 485                |
| March .....                     | 4,197   | 1,692        | 5,889              | 407  | 31.7         | 331              | 131          | 200                |
| April .....                     | 4,198   | 1,945        | 6,143              | 447  | 29.8         | 77               | 332          | -255               |
| May .....                       | 4,202   | 2,310        | 6,512              | 435  | 23.2         | 52               | 420          | -367               |
| June .....                      | 4,215   | 2,617        | 6,832              | 419  | 19.1         | 62               | 373          | -311               |
| July .....                      | 4,214   | 2,779        | 6,993              | 329  | 13.4         | 144              | 305          | -161               |
| August .....                    | 4,213   | 2,969        | 7,182              | 307  | 11.5         | 113              | 302          | -189               |
| September .....                 | 4,215   | 3,323        | 7,539              | 391  | 13.4         | 37               | 395          | -358               |
| October .....                   | 4,217   | 3,452        | 7,669              | 258  | 8.1          | 115              | 246          | -131               |
| November .....                  | 4,216   | 3,407        | 7,623              | 217  | 6.8          | 206              | 159          | 48                 |
| December .....                  | 4,211   | 3,070        | 7,281              | 435  | 16.5         | 443              | 99           | 343                |
| <b>Total</b> .....              | <b>4,211</b>                                      | <b>3,070</b> | <b>7,281</b>       | <b>435</b>   | <b>16.5</b>  | <b>2,493</b>     | <b>2,924</b> | <b>-431</b>        |
| <b>2007</b>                     |   |              |                    |  |              |                  |              |                    |
| January .....                   | 4,215   | 2,379        | 6,594              | 8  | .3           | 740              | 56           | 684                |
| February .....                  | 4,214   | 1,649        | 5,863              | -238   | -12.6        | 782              | 51           | 731                |
| March .....                     | 4,242   | 1,603        | 5,845              | -89  | -5.2         | 269              | 221          | 48                 |
| April .....                     | 4,246   | 1,720        | 5,966              | -225   | -11.6        | 154              | 274          | -120               |
| May .....                       | 4,251   | 2,179        | 6,430              | -131   | -5.7         | 39               | 498          | -459               |
| June .....                      | 4,230   | 2,580        | 6,810              | -37  | -1.4         | 48               | 437          | -389               |
| July .....                      | 4,229   | 2,894        | 7,123              | 114  | 4.1          | 84               | 397          | -313               |
| August .....                    | 4,226   | 3,017        | 7,243              | 48   | 1.6          | 168              | 294          | -126               |
| September .....                 | 4,232   | 3,316        | 7,547              | -7   | -2           | 73               | 372          | -298               |
| October .....                   | 4,236   | 3,567        | 7,803              | 115  | 3.3          | 76               | 334          | -258               |
| November .....                  | 4,238   | 3,456        | 7,694              | 49   | 1.5          | 255              | 148          | 108                |
| December .....                  | 4,234   | 2,879        | 7,113              | -191   | -6.2         | 633              | 64           | 569                |
| <b>Total</b> .....              | <b>4,234</b>                                      | <b>2,879</b> | <b>7,113</b>       | <b>-191</b>  | <b>-6.2</b>  | <b>3,321</b>     | <b>3,144</b> | <b>177</b>         |
| <b>2008</b>                     |   |              |                    |  |              |                  |              |                    |
| January .....                   | 4,232   | 2,055        | 6,287              | -324   | -13.6        | 892              | 68           | 824                |
| February .....                  | 4,222   | 1,465        | 5,687              | -184   | -11.1        | 649              | 56           | 593                |
| March .....                     | 4,221   | 1,247        | 5,468              | -356   | -22.2        | 350              | 131          | 219                |
| April .....                     | 4,223   | 1,436        | 5,659              | -284   | -16.5        | 106              | 295          | -190               |
| May .....                       | 4,226   | 1,836        | 6,062              | -342   | -15.7        | 56               | 458          | -402               |
| June .....                      | 4,230   | 2,171        | 6,401              | -409   | -15.8        | 80               | 420          | -339               |
| July .....                      | 4,228   | 2,516        | 6,745              | -377   | -13.0        | 88               | 430          | -342               |
| August .....                    | 4,228   | 2,867        | 7,094              | -151   | -5.0         | 91               | 442          | -350               |
| September .....                 | 4,231   | 3,163        | 7,394              | -153   | -4.6         | 98               | 398          | -300               |
| <b>9-Month Total</b> .....      | <b>--</b>   | <b>--</b>    | <b>--</b>          | <b>--</b>  | <b>--</b>    | <b>2,410</b>     | <b>2,698</b> | <b>-288</b>        |
| <b>2007 9-Month Total</b> ..... | <b>--</b>   | <b>--</b>    | <b>--</b>          | <b>--</b>  | <b>--</b>    | <b>2,357</b>     | <b>2,599</b> | <b>-242</b>        |
| <b>2006 9-Month Total</b> ..... | <b>--</b>   | <b>--</b>    | <b>--</b>          | <b>--</b>  | <b>--</b>    | <b>1,729</b>     | <b>2,420</b> | <b>-691</b>        |

<sup>a</sup> For total underground storage capacity at the end of each calendar year, see Note 4, "Storage," at end of section.

<sup>b</sup> For 1980-2006, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

<sup>c</sup> Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Storage," at end of section.

-- = Not applicable.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • **Storage Activity: 1973-1975**—Energy Information Administration (EIA), *Natural Gas Annual 1994*, Volume 2, Table 9. **1976-1979**—EIA, *Natural Gas*

*Production and Consumption 1979*, Table 1. **1980-1995**—EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 11. **1996-2002**—EIA, *Natural Gas Monthly (NGM)*, monthly issues. **2003 forward**—EIA, *NGM*, November 2008, Table 6.

• **All Other Data: 1973 and 1974**—American Gas Association (AGA), *Gas Facts, 1972 Data*, Table 57, *Gas Facts, 1973 Data*, Table 57, and *Gas Facts, 1974 Data*, Table 40. **1975 and 1976**—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978**—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979-1995**—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996-2005**—EIA, *NGM*, monthly issues. **2006 forward**—EIA, *NGM*, November 2008, Table 6.

# Natural Gas

## Note 1. Natural Gas Production.

Annual data—Final annual data are from the Energy Information Administration (EIA) *Natural Gas Annual (NGA)*.

Estimated monthly data—Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *Natural Gas Monthly (NGM)*.

Preliminary monthly data—Monthly data are considered preliminary until after publication of the EIA *NGA*. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA *NGA*.

Final monthly data—Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

**Note 2. Natural Gas Extraction Loss.** Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data are from the EIA *NGA*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *NGA*.

Preliminary monthly data are estimated on the basis of extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

**Note 3. Supplemental Gaseous Fuels.** Supplemental gaseous fuels are any substances that, introduced into or commingled with natural gas, increase the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from the EIA, *NGA*.

Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years. Monthly data are considered preliminary until after the publication of the EIA *NGA*. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, EIA estimates the amount consumed by each energy-use sector. It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

**Note 4. Natural Gas Storage.** Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

|               |                |                |
|---------------|----------------|----------------|
| 1975 .. 6,280 | 1986 ... 8,145 | 1997 ... 8,332 |
| 1976 .. 6,544 | 1987 ... 8,124 | 1998 ... 8,179 |
| 1977 .. 6,678 | 1988 ... 8,124 | 1999 ... 8,229 |
| 1978 .. 6,890 | 1989 ... 8,120 | 2000 ... 8,241 |
| 1979 .. 6,929 | 1990 ... 7,794 | 2001 ... 8,415 |
| 1980 .. 7,434 | 1991 ... 7,993 | 2002 ... 8,207 |
| 1981 .. 7,805 | 1992 ... 7,932 | 2003 ... 8,206 |
| 1982 .. 7,915 | 1993 ... 7,989 | 2004 ... 8,255 |
| 1983 .. 7,985 | 1994 ... 8,043 | 2005 ... 8,268 |
| 1984 .. 8,043 | 1995 ... 7,953 | 2006 ... 8,330 |
| 1985 .. 8,087 | 1996 ... 7,980 |                |

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate

data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2006 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

**Note 5. Natural Gas Balancing Item.** The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems that vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the “Balancing Item” category in 1983, followed by a decline of 0.5 Tcf in 1984, reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15 through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 EIA *NGM*, which was published in July 1985.

**Note 6. Natural Gas Consumption.** Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle

fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

Final data for series other than “Other Industrial CHP” and “Electric Power Sector” are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

**Note 7. Natural Gas Consumption, 1989-1992.** Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.” As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

**Note 8. Natural Gas Imports and Exports.** The United States imports natural gas via pipeline from Canada and Mexico and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, “Annual Report for Importers and Exporters of Natural Gas,” which requires data to be reported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.