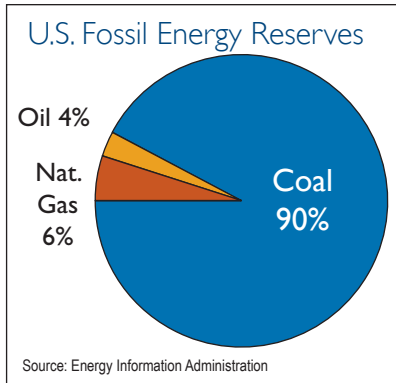


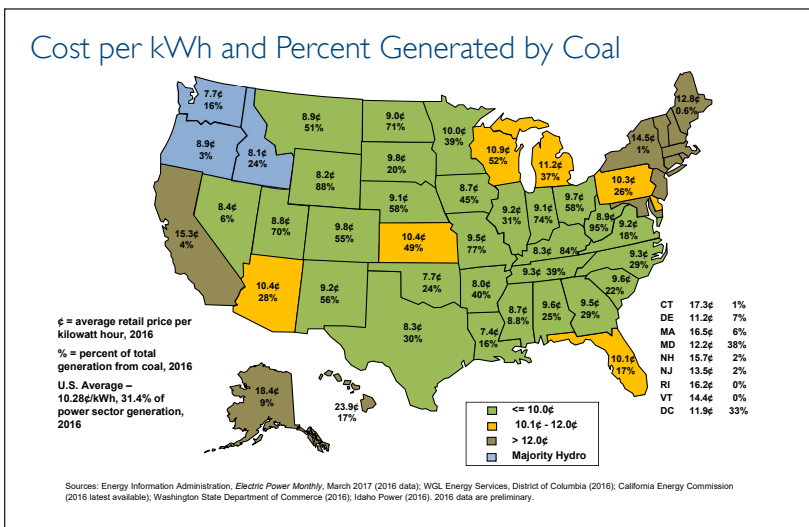
# COAL: AMERICA'S POWER



Coal is America's most abundant energy resource—making up 90 percent of U.S. fossil energy reserves on a Btu basis. At current consumption rates, the U.S. has more than 250 years of remaining coal reserves.

Coal is essential to the U.S. economy, providing affordable electricity to households, businesses, manufacturing facilities, transportation and communications systems, and services throughout our economy.

Because of its abundance, reliability and affordability, about 30 percent of the nation's electricity is generated from coal, resulting in electricity costs that generally are 30 percent lower in states that rely upon coal for more than half of their electricity generation versus states that rely on other fuels.

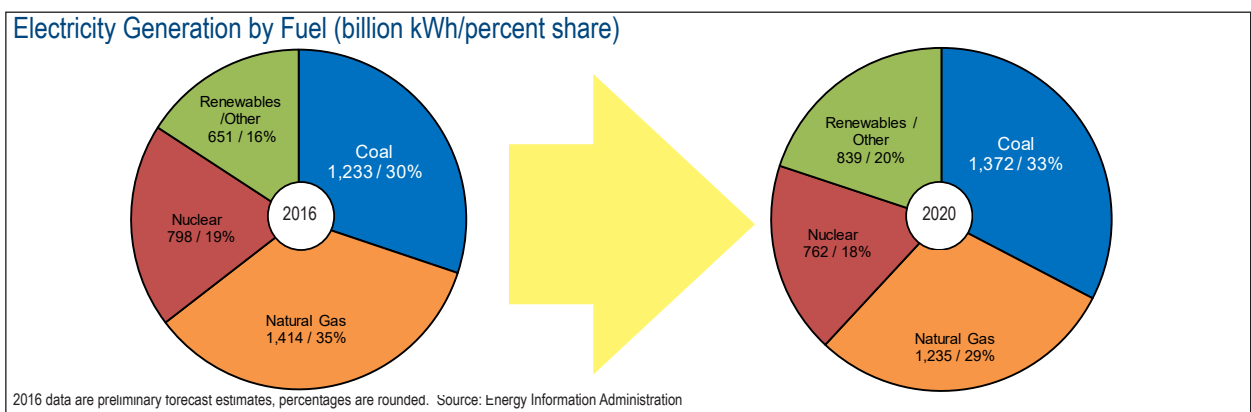


As our economy and population expand, our need for electricity will continue to grow, and coal is projected to remain the workhorse fuel for power generation—growing from 1,233 billion kWhs of coal-based generation in 2016 to 1,372 billion kWhs of power generation at utilities and industrial sources in 2020. Coal will continue to be called upon to meet the nation's power needs even assuming ambitious growth scenarios are met for electricity generation from renewables and natural gas energy sources, according to Energy Information Administration analysis (Annual Energy Outlook 2017).

## Economic Contributions of Coal

Although coal's total contribution to the American economy and way of life is impossible to estimate, coal production has demonstrable benefits. These include the direct employment of nearly 150,000 people and the creation of 3.3 jobs for every job in coal mining, for a total of more than 500,000 jobs.

Coal generated \$26 billion in sales and paid \$13 billion in direct wages and salaries according to 2016 analysis by the National Mining Association.



## U.S. Coal Production, Reserves, Consumption, Generation Percent of Generation, Electricity Prices, and Employment by State - 2016

| State                  | Coal Production<br>(Million Short Tons) | U.S. Estimated<br>Recoverable<br>Coal Reserves<br>(Mil. Short Tons) | Total Coal<br>Consumption<br>For Electricity<br>(Mil. Short Tons) | Total Net<br>Electricity Generation<br>From Coal<br>(Million KWH) | Total Net<br>Electricity Generation<br>from Coal<br>(Percent Share) | Power Sector<br>Generation<br>from Coal<br>(Percent Share) | Average Retail<br>Electricity<br>Price<br>(Cents/kWh) | MSHA Coal Mining<br>Industry<br>Employment<br>(Number) |
|------------------------|---|---|---|---|---|--|---|--|
| Alabama                | 9.6                                     | 2,598   | 17.5  | 34,284  | 24.0%   | 24.6%  | 9.59  | 3,111  |
| Alaska                 | 0.9                                     | 2,816   | 0.4   | 541   | 10.0%   | 8.5%   | 18.40   | 113  |
| Arizona                | 5.4                                     | -   | 16.6  | 30,403  | 28.0%   | 28.0%  | 10.40   | 508  |
| Arkansas               | 0.0                                     | 227   | 14.1  | 23,800  | 39.4%   | 40.4%  | 8.05  | 82   |
| California *           | -                                       | -   | 0.1   | 319   | 4.3%  | 4.3%   | 15.31   | 23   |
| Colorado               | 12.6                                    | 9,478   | 16.6  | 29,980  | 55.1%   | 55.2%  | 9.76  | 1,813  |
| Connecticut            | -                                       | -   | 0.1   | 177   | 0.5%  | 0.5%   | 17.27   | 7  |
| Delaware               | -                                       | -   | 0.2   | 479   | 5.5%  | 6.5%   | 11.15   | 7  |
| District of Columbia * | -                                       | -   | -   | -   | 33.4%   | 33.4%  | 11.87   | -  |
| Florida                | -                                       | -   | 17.7  | 39,425  | 16.6%   | 16.9%  | 10.13   | 280  |
| Georgia                | -                                       | 2   | 19.3  | 37,890  | 28.4%   | 29.4%  | 9.46  | 53   |
| Hawaii                 | -                                       | -   | 0.7   | 1,519   | 15.8%   | 17.0%  | 23.87   | -  |
| Idaho *                | -                                       | 2   | 0.0   | 61  | 24.4%   | 24.4%  | 8.13  | 5  |
| Illinois               | 43.4                                    | 37,700  | 36.0  | 59,315  | 31.7%   | 31.4%  | 9.17  | 4,347  |
| Indiana                | 28.8                                    | 3,752   | 36.1  | 72,582  | 71.3%   | 73.6%  | 9.14  | 4,413  |
| Iowa                   | -                                       | 1,127   | 15.0  | 25,601  | 46.7%   | 45.4%  | 8.74  | -  |
| Kansas                 | 0.0                                     | 679   | 14.6  | 23,096  | 48.4%   | 48.5%  | 10.40   | 39   |
| Kentucky               | 42.9                                    | 13,984  | 32.1  | 66,889  | 83.3%   | 83.9%  | 8.26  | 10,138   |
| Louisiana              | 2.8                                     | 277   | 8.6   | 12,014  | 11.3%   | 16.1%  | 7.41  | 729  |
| Maine                  | -                                       | -   | 0.0   | 70  | 0.6%  | 0.6%   | 12.84   | 2,085  |
| Maryland               | 1.6                                     | 335   | 6.0   | 13,826  | 37.1%   | 37.7%  | 12.21   | -  |
| Massachusetts          | -                                       | -   | 0.9   | 1,892   | 5.8%  | 5.9%   | 16.47   | 3  |
| Michigan               | -                                       | 58  | 23.2  | 40,560  | 36.0%   | 36.7%  | 11.16   | 48   |
| Minnesota              | -                                       | -   | 13.9  | 23,484  | 39.0%   | 39.2%  | 10.02   | 80   |
| Mississippi            | 2.9                                     | -   | 4.5   | 5,342   | 8.5%  | 8.8%   | 8.72  | 371  |
| Missouri               | 0.2                                     | 3,843   | 35.6  | 60,580  | 76.8%   | 76.9%  | 9.53  | 275  |
| Montana                | 32.3                                    | 74,479  | 9.4   | 14,329  | 50.9%   | 50.9%  | 8.89  | 1,280  |
| Nebraska               | -                                       | -   | 13.3  | 21,914  | 58.3%   | 58.0%  | 9.09  | -  |
| Nevada                 | -                                       | -   | 1.2   | 2,167   | 5.5%  | 5.5%   | 8.40  | 20   |
| New Hampshire          | -                                       | -   | 0.2   | 422   | 2.2%  | 2.2%   | 15.68   | 6  |
| New Jersey             | -                                       | -   | 0.6   | 1,315   | 1.7%  | 1.7%   | 13.49   | 44   |
| New Mexico             | 13.3                                    | 6,766   | 10.5  | 18,365  | 55.6%   | 55.8%  | 9.17  | 1,150  |
| New York               | -                                       | -   | 0.7   | 1,770   | 1.3%  | 1.1%   | 14.53   | 16   |
| North Carolina         | -                                       | 5   | 14.8  | 37,539  | 28.5%   | 28.9%  | 9.25  | 65   |
| North Dakota           | 28.1                                    | 6,603   | 21.8  | 26,589  | 70.7%   | 70.9%  | 9.05  | 1,482  |
| Ohio                   | 12.6                                    | 11,265  | 29.1  | 68,944  | 57.8%   | 58.1%  | 9.74  | 3,049  |
| Oklahoma               | 0.7                                     | 788   | 12.3  | 19,164  | 24.7%   | 24.4%  | 7.72  | 182  |
| Oregon                 | -                                       | 9   | 1.1   | 1,898   | 3.2%  | 3.2%   | 8.90  | 12   |
| Pennsylvania           | 45.7                                    | 11,107  | 25.8  | 54,453  | 25.3%   | 25.5%  | 10.26   | 9,028  |
| Rhode Island           | -                                       | -   | -   | -   | 0.0%  | 0.0%   | 16.24   | -  |
| South Carolina         | -                                       | -   | 8.6   | 21,006  | 21.7%   | 22.0%  | 9.64  | 51   |
| South Dakota           | -                                       | 277   | 1.4   | 2,083   | 20.1%   | 20.1%  | 9.79  | 105  |
| Tennessee              | 0.6                                     | 442   | 15.6  | 31,168  | 38.9%   | 39.0%  | 9.26  | 469  |
| Texas                  | 39.0                                    | 9,097   | 86.1  | 121,231   | 26.6%   | 29.5%  | 8.28  | 4,157  |
| Utah                   | 14.0                                    | 2,514   | 12.2  | 25,897  | 68.5%   | 69.5%  | 8.77  | 2,498  |
| Vermont                | -                                       | -   | -   | -   | 0.0%  | 0.0%   | 14.41   | 2  |
| Virginia               | 12.9                                    | 769   | 7.5   | 16,551  | 17.9%   | 18.1%  | 9.16  | 4,437  |
| Washington *           | -                                       | 681   | 3.1   | 4,602   | 16.3%   | 16.3%  | 7.70  | 63   |
| West Virginia          | 79.8                                    | 16,613  | 29.3  | 71,412  | 94.4%   | 95.4%  | 8.89  | 17,623   |
| Wisconsin              | -                                       | -   | 19.1  | 33,370  | 51.5%   | 52.2%  | 10.92   | 54   |
| Wyoming                | 297.2                                   | 35,904  | 24.3  | 39,770  | 85.9%   | 87.6%  | 8.19  | 7,562  |
| Waste/Unknown/other    | 0.9                                     | 0   | 0   | 0   | 0   | 0  | 0   | -  |
| <b>U.S. Total</b>      | <b>728.3</b>                            | <b>254,197</b>  | <b>678.0</b>  | <b>1,240,088</b>  | <b>30.4%</b>  | <b>31.4%</b>   | <b>10.28</b>  | <b>81,885</b>  |

2016 data are preliminary.

Sources: U.S. Department of Energy/Energy Information Administration; Mine Safety & Health Administration

1/ Power sector share for California is from California Energy Commission (2016). 2/ Generation share estimates from WGL Energy Services (2016) 3/ Washington State Department of Commerce (2015) 4/ Idaho Power 2016.

Note: The electric power sector comprises electricity -only and combined-heat-and-power plants whose primary business is to sell electricity or electricity and power to the public.