



2019 Wyoming Coal Overview

Joint Committee on Minerals, Business and Economic Development

Casper, Wyoming

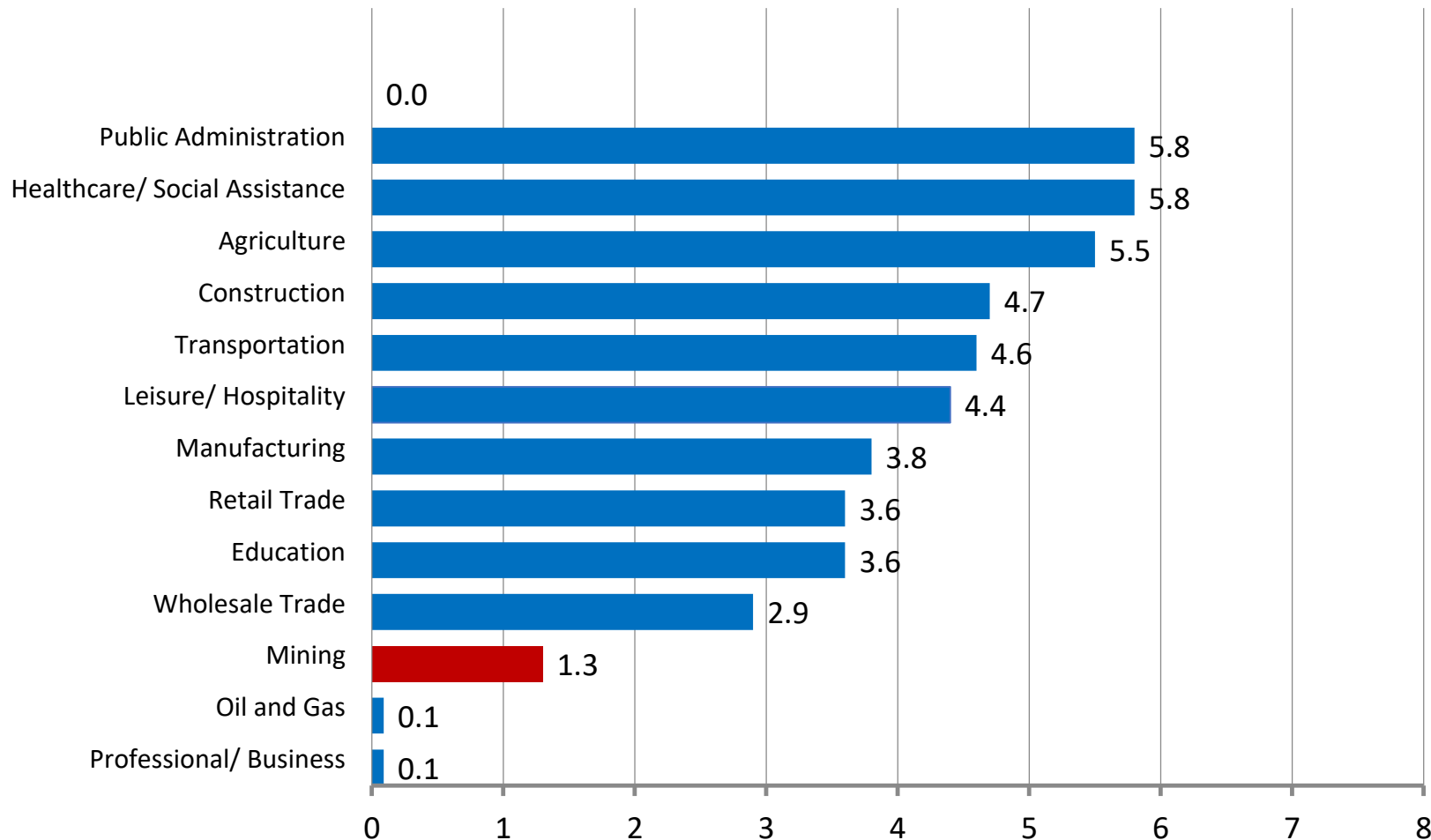
August 30, 2019

Safety Share

- Safety is paramount in Wyoming mining and is one of the core values of the industry.
- All WMA board and committee meetings start with a “safety share” in which an individual offers an example of how safety is important in our work and daily routines.
- It is critical for the public to understand the steps taken by individual companies to ensure a safe work environment for employees.

Wyoming Incident Rate in 2016

(Injuries per 200,000 Hours Worked)



Source: Bureau of Labor Statistics: http://doe.state.wy.us/LMI/OSH/OSH_16/Tables_SD_Table_1.pdf



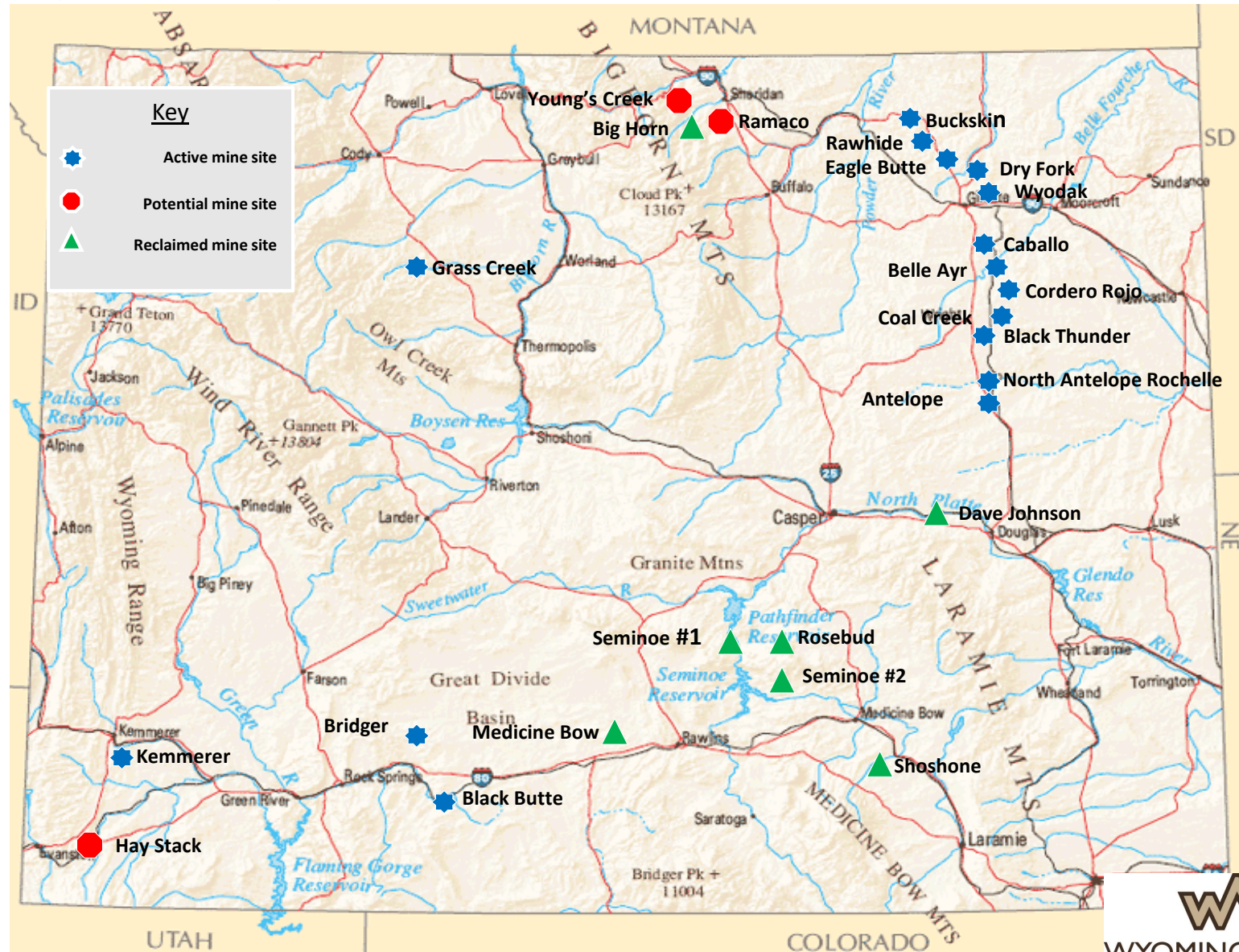
Wyoming Coal Producers

- **Arch Coal**
- **Black Butte Coal**
- **Blackjewell Mining (Contura)**
- **Bridger Coal Company**
- **Buckskin Mining Company**
- **Cloud Peak Energy (Navajo Transitional Energy Company)**
- **Kemmerer Mine**
- **Peabody**
- **Western Fuels**
- **Wyodak Coal**

Wyoming Coal Resource/Reserves

- Wyoming produces 40% of the nation's coal and has been the leading coal producing state since 1986.
- Recent estimates give Wyoming more than 165 billion tons of recoverable coal. Nearly 20 billion tons is economically recoverable today.
- Wyoming is home to over 1.4 trillion tons in total coal resources (885 billion tons in the PRB).

Wyoming's Coal Mines



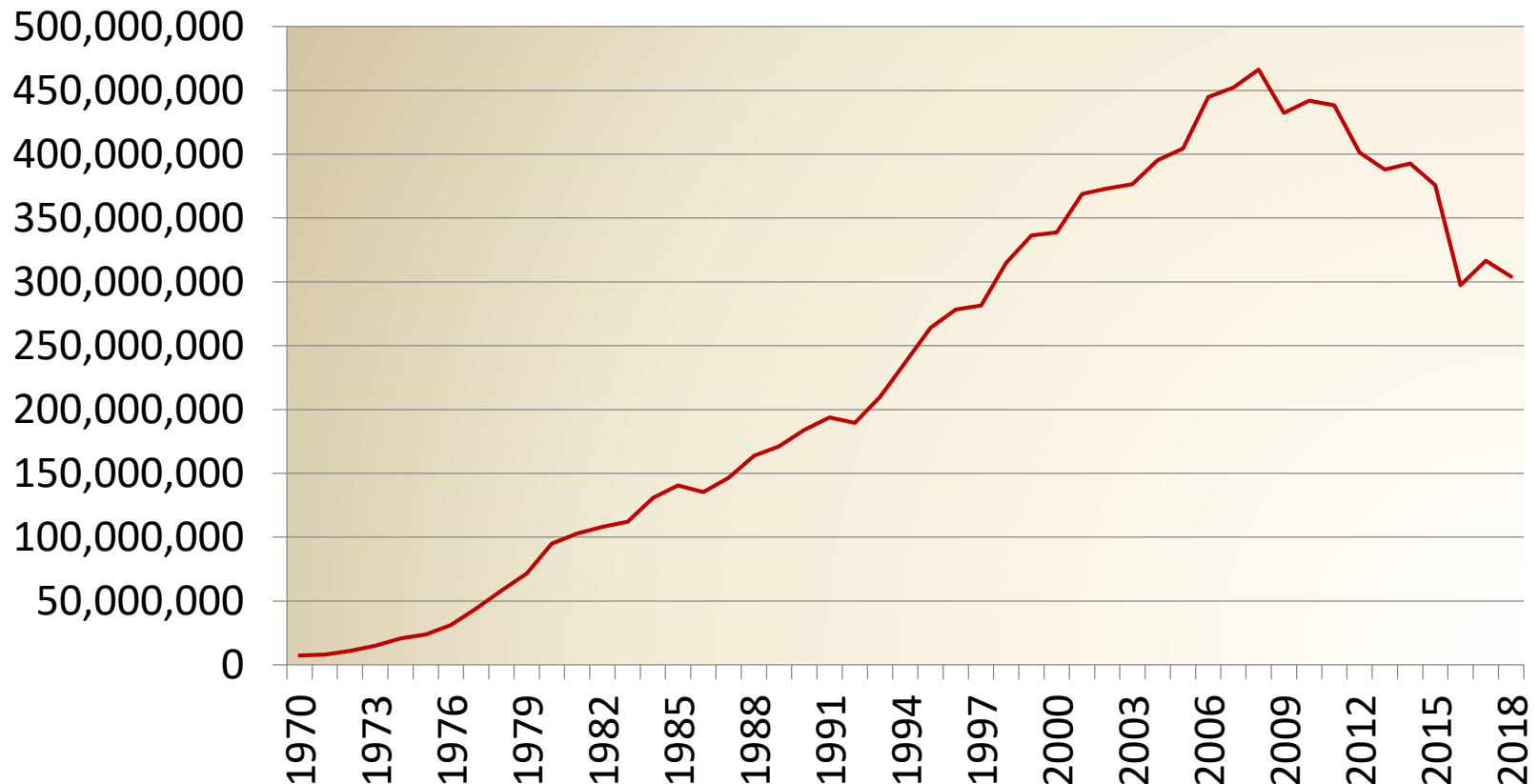
WYOMING MINING
ASSOCIATION

Wyoming Coal Production

- Wyoming mines produced 304.2 million tons of coal in 2018, most of that from the Powder River Basin (PRB).
- Up to 60 single destination trains of up to 150 cars leave the PRB for energy markets across America each day.
- In 2018, Wyoming coal mines employed 5,534 workers with a payroll of about \$625 million.
- In 2018, coal's estimated financial contribution to Wyoming in taxes, royalties and fees was over \$790 million based on the prior year's production.

Wyoming Coal Production

1970-2018 (in Tons)

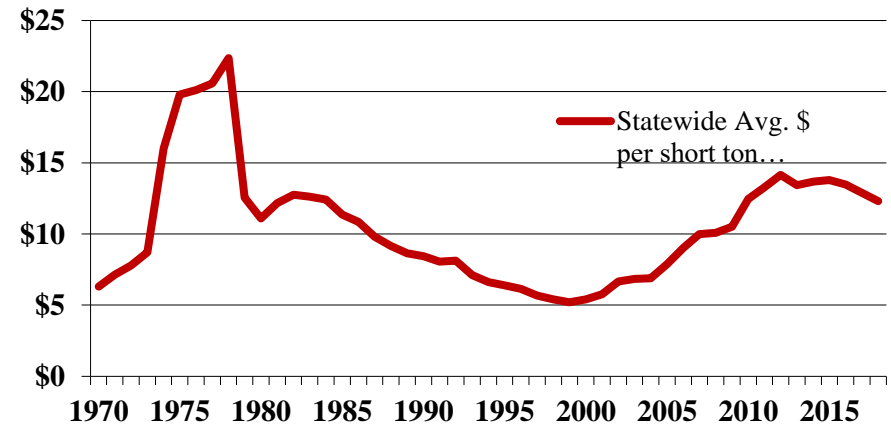
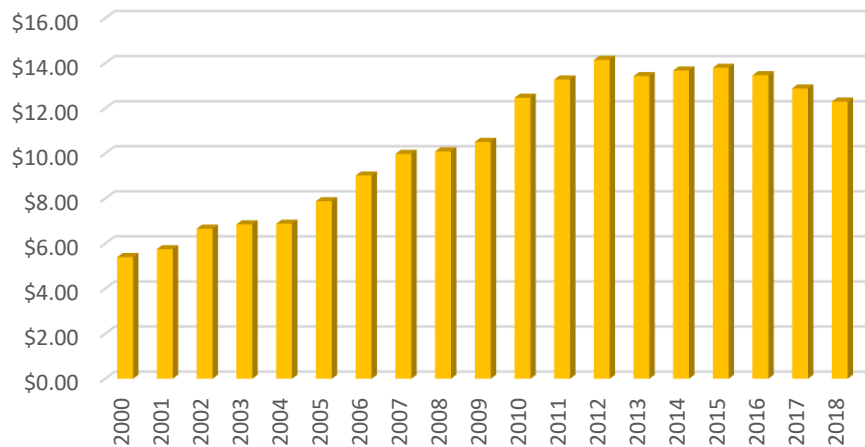


- Wyoming mined a total of 304,180,569 tons of coal in 2018.
- This is down 12.4 million tons or 3.9 percent from 2017, 162.3 million tons or 35 percent from all time in 2008.

Source: Annual Reports of the State Inspector of Mines of Wyoming

Wyoming Coal Prices (2000 – 2018)

Wyoming coal price



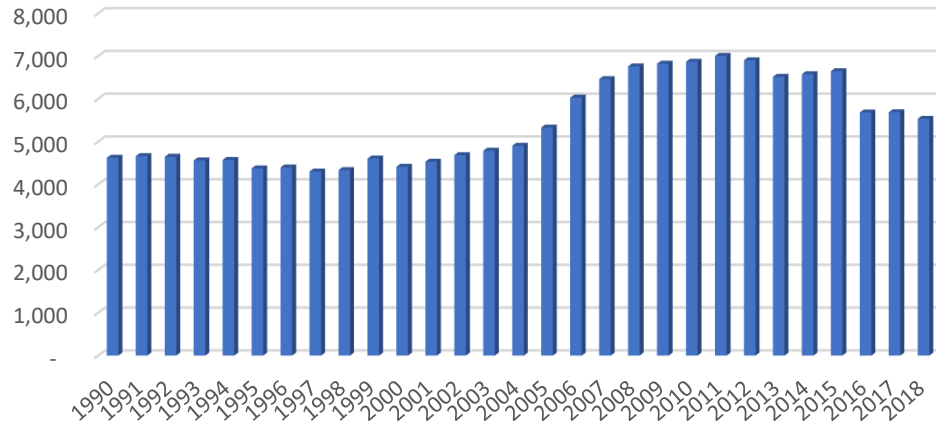
...But put in a longer term perspective, nominal prices are still holding on.

Average coal price declined 13.1 percent from the most recent high in 2012...

Source: Wyoming Department of Administration & Information, Economic Analysis Division

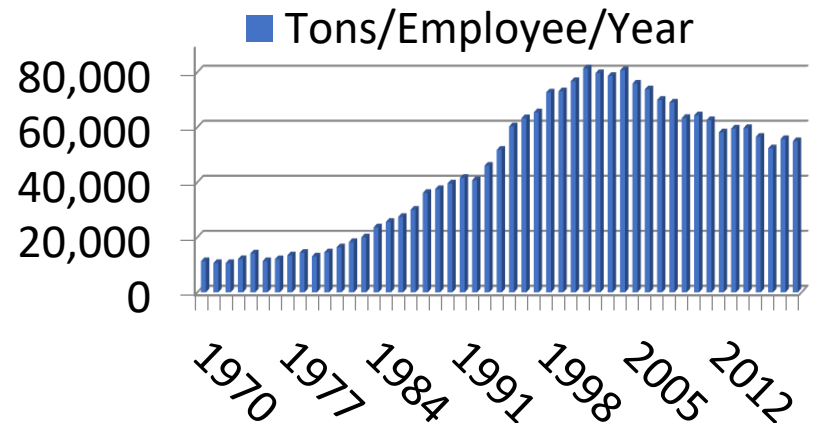
Wyoming Coal Employment

WY Coal mining employment



- Coal mining employment in Wyoming decreased 2.7 percent or 150 employees in 2018

- Productivity in 2018 was 54,966 tons per employee.

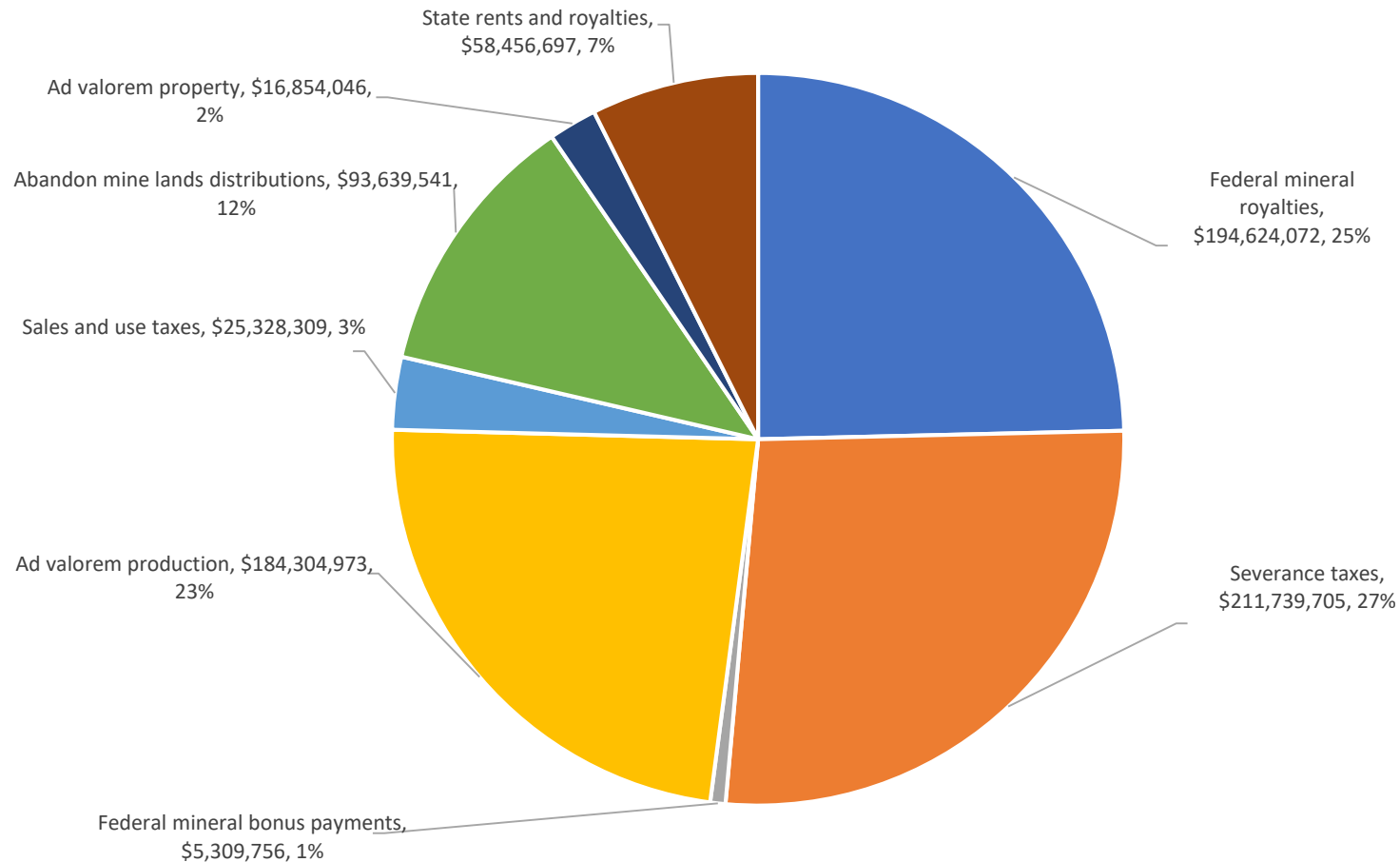


Note: these numbers are 2018 year-end and do not include latest layoffs.

Source: Annual Reports of the State Inspector of Mines

Revenue for Wyoming

2018 Estimated State and Local Revenue from Coal Mining - **\$790,257,018***



**Note: 2017 numbers for rents and royalties, sales and use tax, and ad valorem property taxes.*

**based on 2017 production*

Source: University of Wyoming Department of Agricultural and Applied Economics

Where Does Our Coal Go?

- The vast majority of Wyoming coal is used as steam coal for the generation of electricity and shipped to 26 states in 2018.
- Electrical power generation is by far the largest consumer of coal in the United States.
- According to the EIA, about 93% of the coal consumed in the United States is used to generate electricity. In 2017, about 30% of total U.S. electricity generation was from coal. When based only on the cost per million British thermal units (Btu), coal has been the least expensive fossil fuel used to generate electricity since 1976.
- Wyoming produces about 40 percent of the nation's coal. With coal currently providing about 25-27 percent of America's electricity generation, Wyoming coal provides about 11 percent of the electricity produced in this country.

Where Wyoming Coal Went in 2018

- These numbers are distilled down from the 22,000-odd shipments on EIA Form-923
- 269 million tons of coal was shipped to 26 states.
- This is a 19 million ton decrease from 2017
- The top four states retained their order from 2016.
- Those four states account for nearly half (47.08%) of all coal shipments that leave the state.
- Energy Policy Network efforts.

State	Tons	Percent
TX	41,933,335	15.58
MO	34,706,529	12.89
IL	32,324,067	12.01
WI	17,756,020	6.60
AR	16,764,641	6.23
IA	14,917,276	5.54
MI	14,109,423	5.24
NE	13,209,747	4.91
KS	12,262,276	4.55
CO	9,996,863	3.71
AL	9,468,702	3.52
GA	8,884,347	3.30
OK	8,429,431	3.13
MN	7,780,800	2.89
KY	7,333,288	2.72
LA	5,619,993	2.09
AZ	4,325,350	1.61
IN	2,672,693	0.99
SD	1,462,999	0.54
MS	1,240,668	0.46
NV	1,058,598	0.39
WA	1,053,918	0.39
TN	916,986	0.34
OR	763,614	0.28
OH	197,364	0.07
MD	42,376	0.02
Grand Total	269,231,304	100

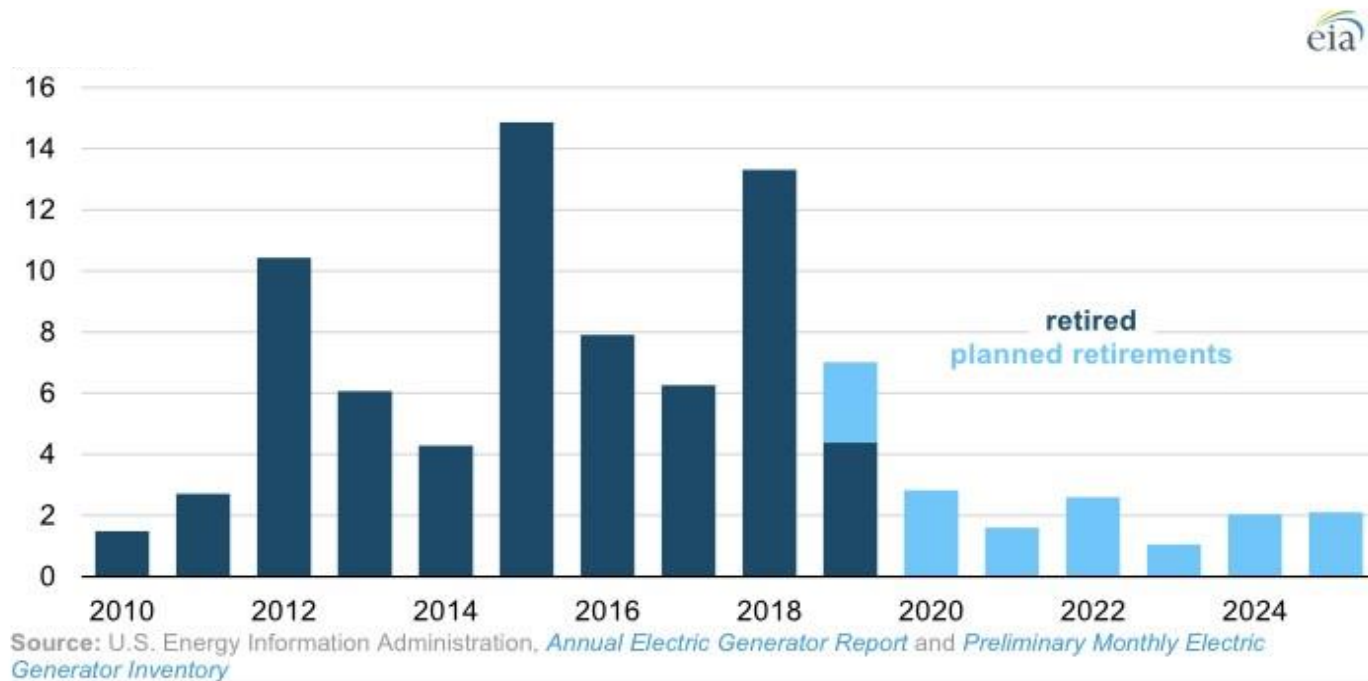
Source: EIA form 923, page 5

State of the Industry Today

- Continuously Adapting to a Changed Environment
 - Improved Federal Regulatory Environment
 - Clean Coal Plan Replacement
 - Moratorium on Federal Coal Leases Lifted
 - Stream Protection Rule Repealed
 - Mercury Rule Under Review
 - Waters of the US Rule Under Review
 - CPP Replacement – Affordable Clean Energy Plan
 - Heavy Competition from Natural Gas/Renewables Remains
 - Market Uncertainty Remains – Contraction of Domestic Customer Base
 - 2020 Elections, Concerns of Increased Taxes on Production (Severance and Ad Valorem Mill Levies)

JULY 26, 2019

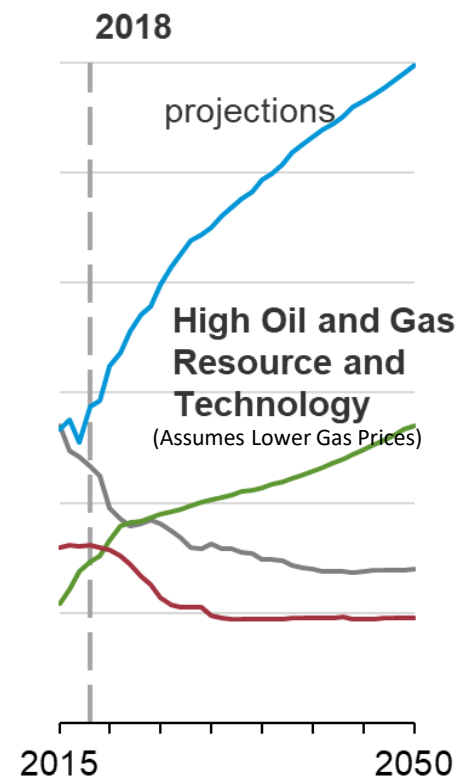
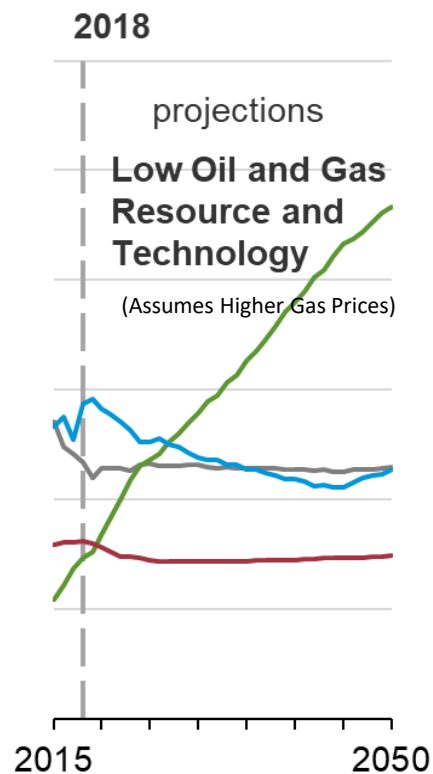
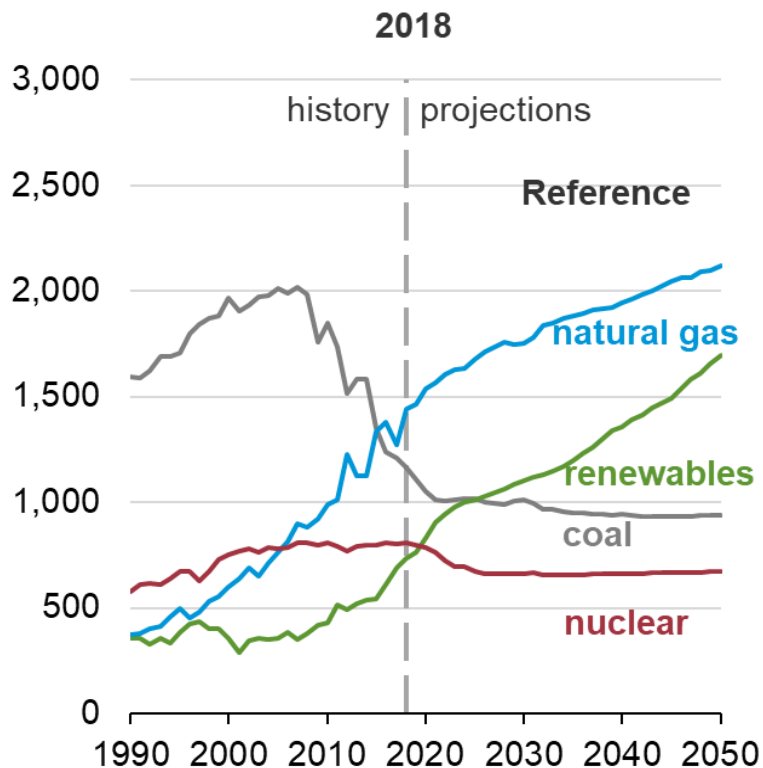
More U.S. coal-fired power plants are decommissioning as retirements continue



“Between 2010 and the first quarter of 2019, U.S. power companies announced the retirement of more than 546 coal-fired power units, totaling about 102 gigawatts (GW) of generating capacity. Plant owners intend to retire another 17 GW of coal-fired capacity by 2025.” - US Energy Information Administration

Electricity generation from selected fuels

billion kilowatthours



Source: US Energy Information Administration

Reclamation and Stewardship

- Wyoming mine reclamation has been recognized nationally with awards.
- The reclamation process is done contemporaneously with mining operations. It includes backfilling the void with overburden, contouring the filled surface, replacing topsoil, preparing the seedbed and sowing approved seed mixtures, and monitoring plants, fauna, water, air quality, etc.
- Mine reclamation is heavily regulated and monitored by the Wyoming Department of Environmental Quality.
- Wyoming's mines are meeting and will continue to meet reclamation obligations.
- All mines are fully bonded, and none has missed a reclamation obligation to date.

World Class Reclamation



The Future

- WMA is supportive of state efforts to maintain the viability of the resource while looking to address the challenge of contracting production.
- Technology is Key
 - The industry strongly supports Wyoming's leadership in the development of advanced coal technologies including carbon capture, use and storage (CCUS).
 - The industry supports development of alternative value-added coal and carbon products.
- Exports
 - Access to growing Asian markets offers growth opportunities for exporting Wyoming coal.
 - Significant recent coal fueled plant buildouts in China and India as well as coal investments in Japan, S. Korea and Vietnam.
 - Support and action from all levels of government is needed to improve access and expansion to deep water sea ports on the west coast.
- America and the World Need Coal
 - Coal is an abundant, affordable and reliable energy resource.
 - Coal continues to be in demand around the world with countries building new coal-fueled plants to meet growing demand.
 - The U.S. is sacrificing affordability and reliability through pre-mature retirement of the coal fleet.
 - Renewables simply can't offer the same reliability as coal.

Thank You!



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