

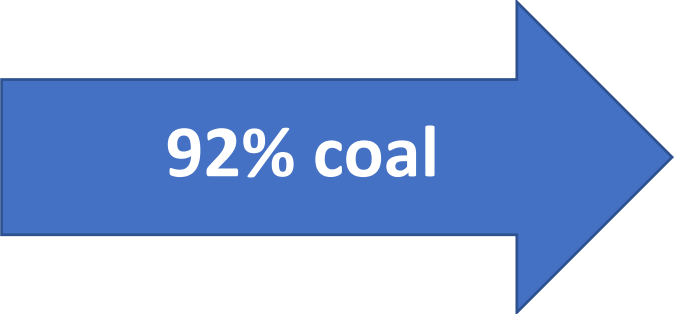
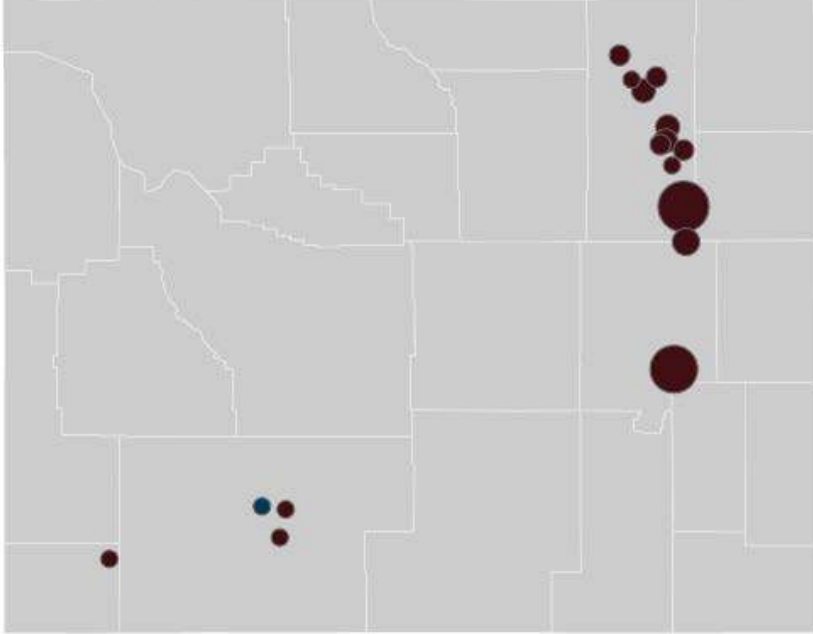


Wyoming Coal Transition

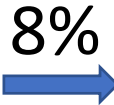
Economic Impact and State Policy

Wyoming Coal Mines and Plants

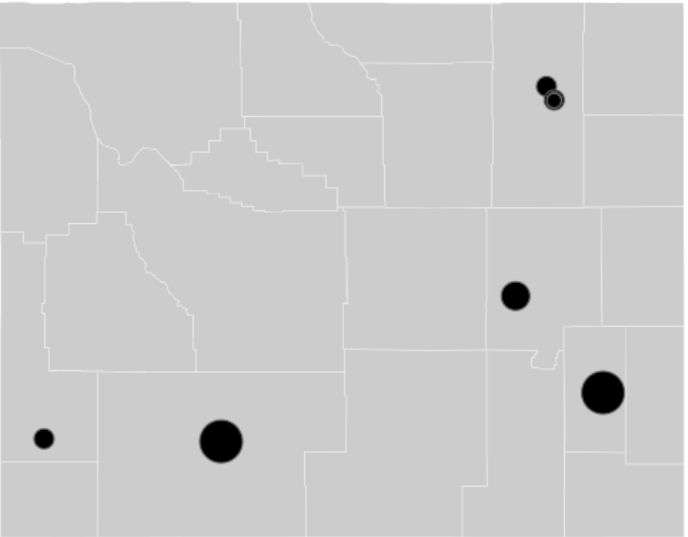
Wyoming: 16 mines, 40% US coal production



5% Coal Exported as electricity



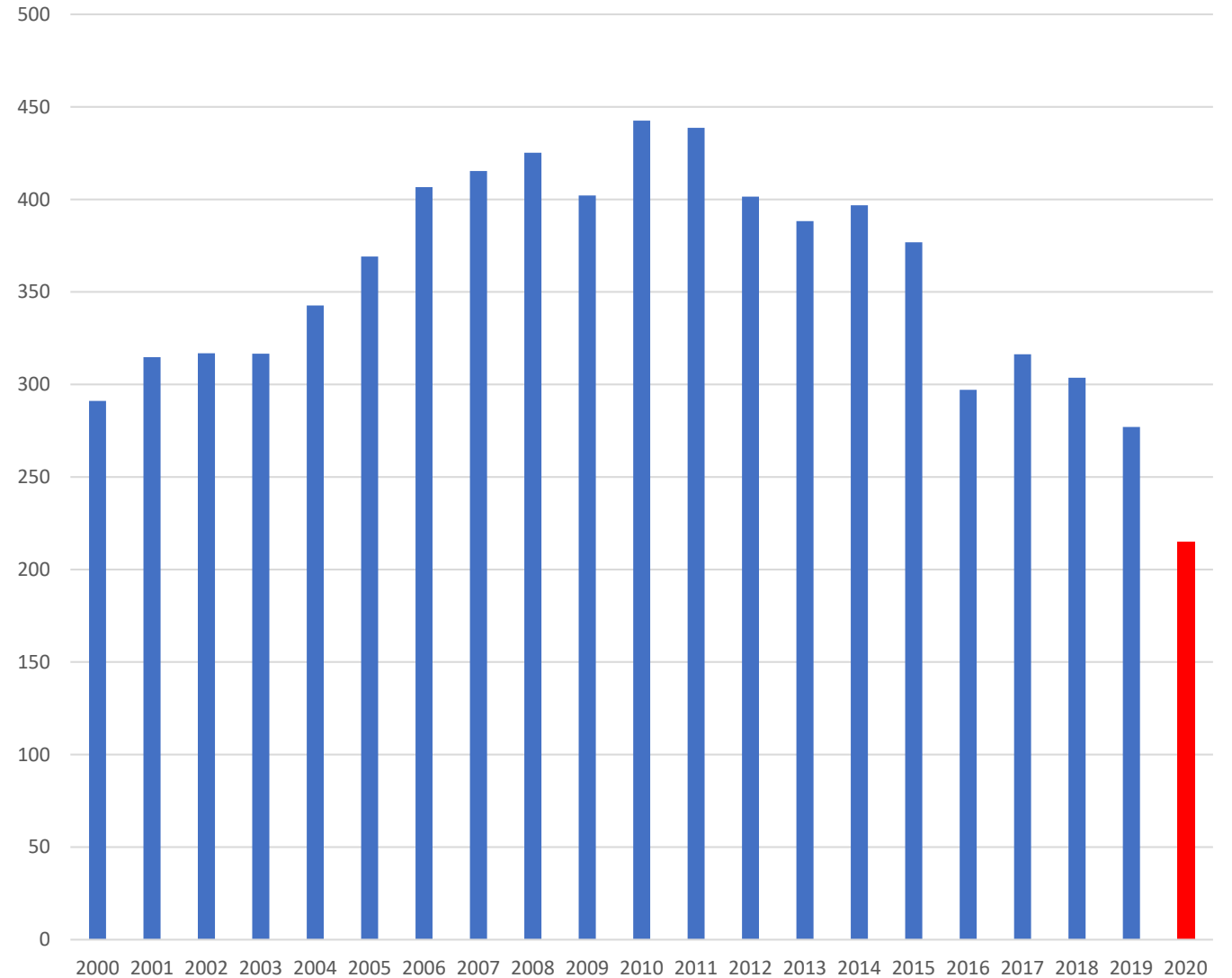
Wyoming:
10 Coal
Plants,
19 units, 6.6
GW capacity



Wyoming actually
uses about 3% of
its coal output
through electricity
consumption

Wyoming
Coal
Production
Down 48% in
a decade.
(employment down
almost 40%)

Wyoming Coal Production
2000-2020 (millions of tons)



Wyoming Coal Economy

- Employment:
 - 4,400 miners (1.6%), Oct 2020
 - 5,300 (1.8%) end of 2019
 - 1,100 coal generation workers (0.4%)
 - Total direct, indirect, induced employment from coal: 12,000 (4.2%)
- Economic Value to state:
 - 9% of total state product (13% including generation, rail)
 - 14% of total state revenues

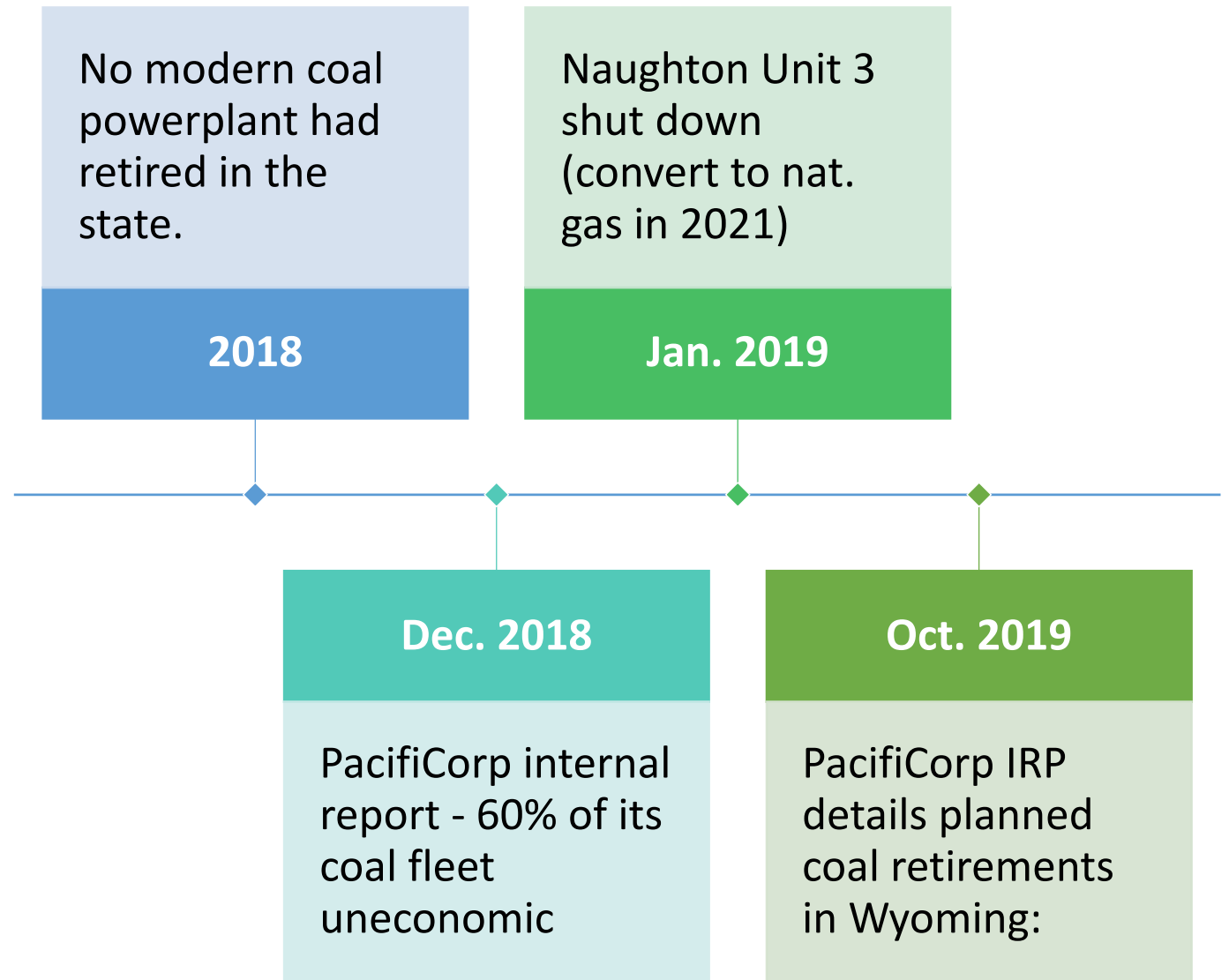


What has Wyoming done about coal decline?

Largely nothing through 2018

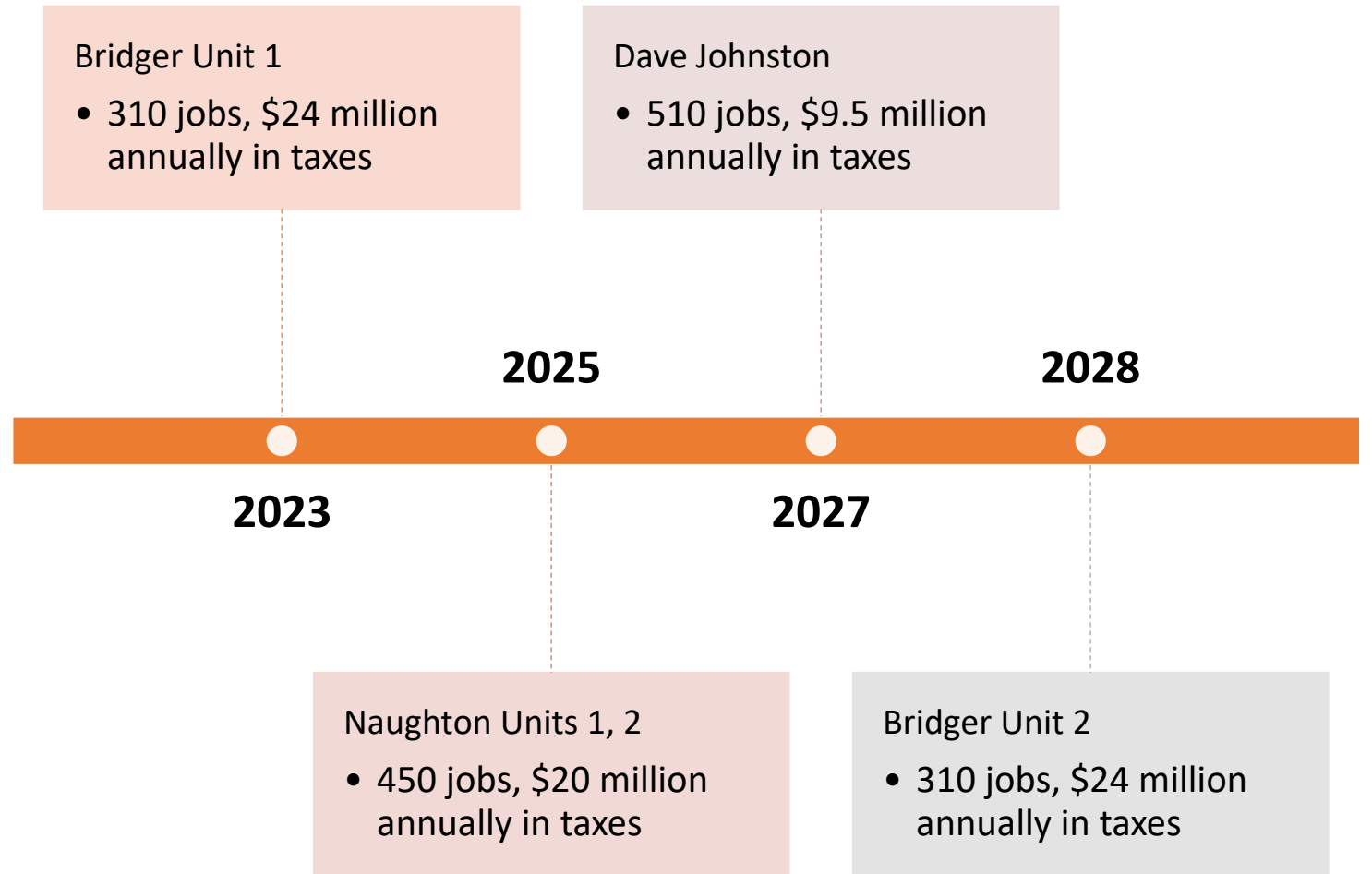
- At least nothing obvious

Late 2018: Watershed moment in Wyoming



Wyoming Coal Plant Retirements and Estimated Costs:

- 1,600 jobs (total impact)
- \$77.5 million/ yr. taxes



Just say no...

SF159 (2019)

- Requires attempted sale of any retired coal plant
- Requires power sales back to utility at avoided cost (as determined by Wyoming PSC).

HB200 (2020)

- Requires Wyoming PSC to develop a low-carbon (CCS) portfolio standard to apply to all utilities no later than 2030.
- Could limit cost recovery on any capacity built to replace retired coal units
- Rate recovery passed on to ratepayers – 2% limit but may be exceeded if insufficient.
 - Allows utility higher rate of return for CCS capital expenditures

Other Actions

- Continued funding for lobbying efforts to slow or stop coal plant closures in other states (\$250,000/yr.)
- \$2.5 million made available to fund a lawsuit against Washington State over the blocked coal export terminals (if SCOTUS takes it up)
- Continue to support development of CCS technology in state/attract external funding
- Funding for development of coal-products and technologies to use carbon

Wyoming Tax System **REQUIRES** Minerals

Direct Tax Collections & Public Service Costs 2019

For a 3-person family with income of \$65,000 and owning a home valued at \$250,000



Personal Tax Collections

Retail Sales	\$ 1,000	} \$ 3,500
Gasoline	\$ 220	
Cigarettes	\$ 110	
Alcohol	\$ 100	
Vehicle Registration	\$ 500	
Property Tax	\$ 1,570	

Public Service Costs

County	\$ 3,010	} \$27,090
City/Town	\$ 3,290	
Special District	\$ 5,300	
K-12 Education	\$ 7,360	
State Services	\$ 8,130	

Source: Department of Administration & Information, Economic Analysis Division 2019

NOTE: Excludes Federal Funds and Enterprise Revenues

Wyoming's Strategy: “thread the needle”

Short term

- Attempt to delay or avoid plant shutdowns through regulatory requirements
- Protect existing markets – lobbying
- Develop new markets - export

Medium term

- Develop Carbon Capture as a means of keeping plants open
 - BECCS as a negative emission technology

Long term

- Develop new products from coal
- Economic diversification strategy

Policy Going Forward?

- No Plan B
- Adapting is accepting.

Community Funding?

- Difficult due to serious statewide budget shortfall

Compensation?

- Has not been discussed officially
- Focus has been on forcing coal plants to delay or cancel retirement plans

Securitization?

- Has not been formally discussed
- Difficult to envision given PacifiCorp serves 6 states, Wyoming only ~16% of load.