Overview Of Ohio's Coal Industry

About Ohio Coal Association

- OCA Staff: Zane T. Daniels (President), Christian R. Palich (Manager, Government Affairs).
- Mission Statement: The Ohio Coal Association is a trade association dedicated to representing Ohio's coal industry. As a united front, the Association is committed to advancing the development and utilization of Ohio coal as an abundant, economic and environmentally sound energy source.
- Office Location: 17 South High Street, Suite 310, Columbus, Ohio 43215
- Membership: 11 Active members, 67 Associate members.

Ohio Coal Association Member Companies

- B & N Coal, Inc.
- Buckingham Coal Company Inc.
- East Fairfield Coal Company
- Hopedale Mining
- Kimble Clay & Limestone
- Oxford Mining Company, LLC
- Rosebud Mining Company
- Sands Hill Mining LLC
- Sterling Mining Corporation
- The Ohio Valley Coal Company
- Waterloo Coal Company

Coal Producing States

- Of 25 coal-producing states, Ohio ranked 10th in 2012 (USDOE,2013).
- Top five states, in descending order of production, Wyoming (401.4 million tons), West Virginia (120.1 million tons), Kentucky (90.6 million tons), Pennsylvania (55.8 million tons), and Illinois (48.2 million tons)

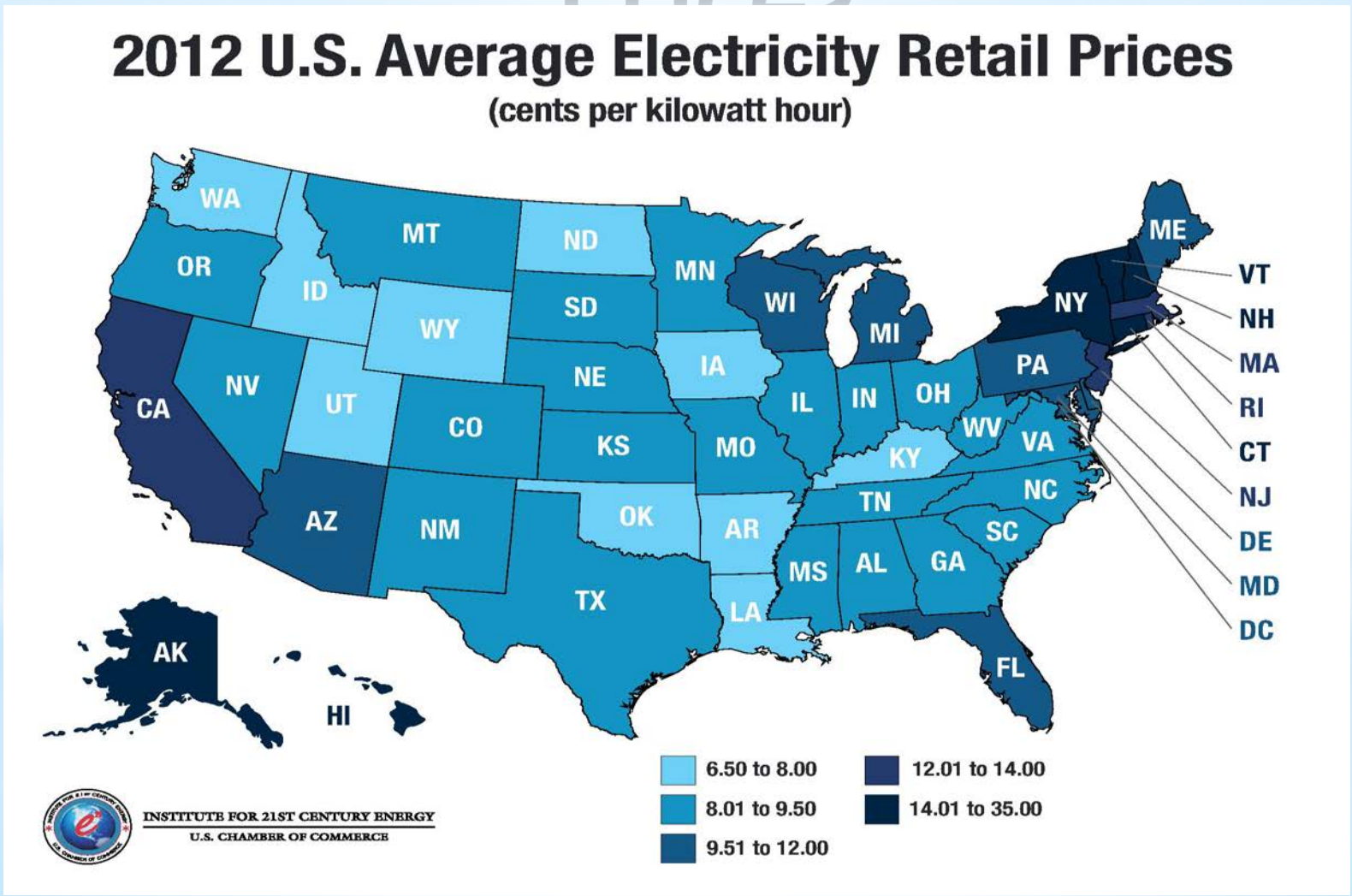
HISTORY OF OHIO COAL

- Coal mining in Ohio began around 1800, with reported production amounting to 100 tons of coal mined from Jefferson County.
- As Ohio transformed into an industrial state in the late 1800s, it became one of the largest coal-producing and coal-consuming states in the nation.
- In 1918, Ohio's coal work force swelled to its greatest level of more than 50,000 individuals.
- During World War I, Ohio's coal industry realized production levels that would not be seen again until the 1960s.

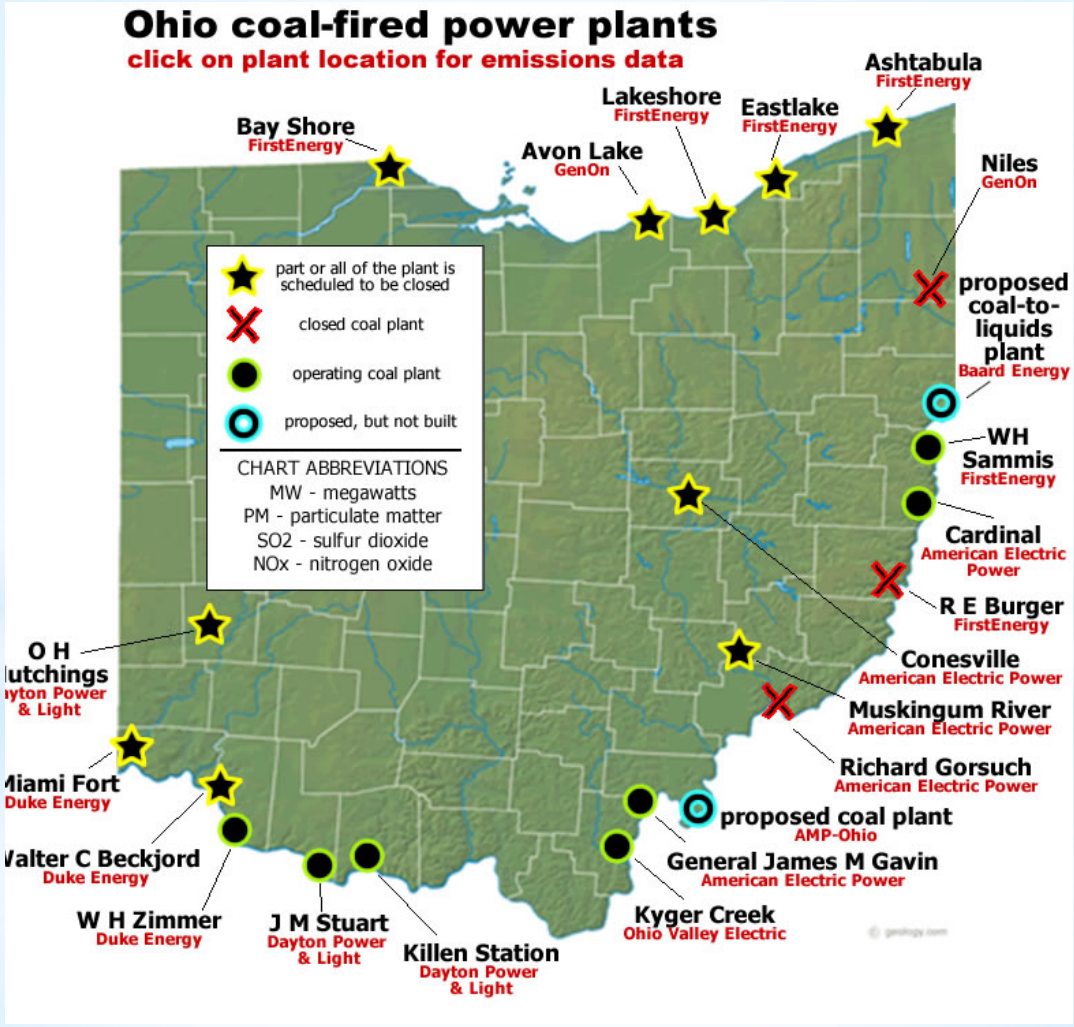
*Ohio Coal Usage

* Ohio Coal is primarily used to generate electricity.
* 69% of the state's electricity is produced by burning coal (EIA, 2013).
* Ohio coal is also used in commercial, institutional, and industrial applications, while minor amounts are exported.
* Ohio ranked fifth in the nation in 2011 in energy consumption by the industrial sector and output from its factories accounted for 17% of the state's gross domestic product (GDP); the state contributed 4.7% to the total U.S. manufacturing GDP in 2012.

*Coal & Electricity Prices



*Map of Ohio Coal Fired Power Plants



*Production Data for Ohio Coal

* Coal was produced by 22 companies at 61 mines in 13 Ohio counties during 2012.
* In 2012 Ohio produced 26,344,046 tons of coal.
* Of the total production, 7,168,585 tons (27.2%) were produced at 52 surface mines.
* Of the total production, 19,175,461 tons (72.8%) were produced at 9 underground mines.
* The 5 leading counties for coal production in descending order: Belmont, Harrison, Perry, Tuscarawas, and Jefferson Counties.

Coal Seams

- The Pennsylvania-age Monongahela Group Pittsburgh (No.8) coal was the most heavily mined.
- Followed by: Allegheny Group Middle Kittanning (No.6) coal, Monongahela Group Meigs Creek (No. 9) coal, Allegheny Group Upper Freeport (No. 7) coal, and Allegheny Group Lower Freeport (No. 6a) coal.
- Coal from these five seams constituted 91.8% of total 2012 production.
- Since 1816, mining of the Pittsburgh (No. 8) coal in eastern Ohio has produced more than 1 Billion tons of coal.

Mining Statistics

- In underground mining, 64.7% of the coal was produced by longwall mining and 35.3% was mined by continuous miner.
- In surface mining operations 89.6% of the coal was mined by conventional surface methods, 3.5% was mined by augering, and 6.9% was mined by highwall miner.

Coal Transportation

- Rail was the primary means of coal disposition from the mine, carrying 55.8% of total sales in 2012.
- Trucking transported 42.7% of coal sold in 2012.
- Water carried 1.5% of coal sold in 2012.
- A total of 137,919 tons (0.5%) of the coal produced was reported as stored.

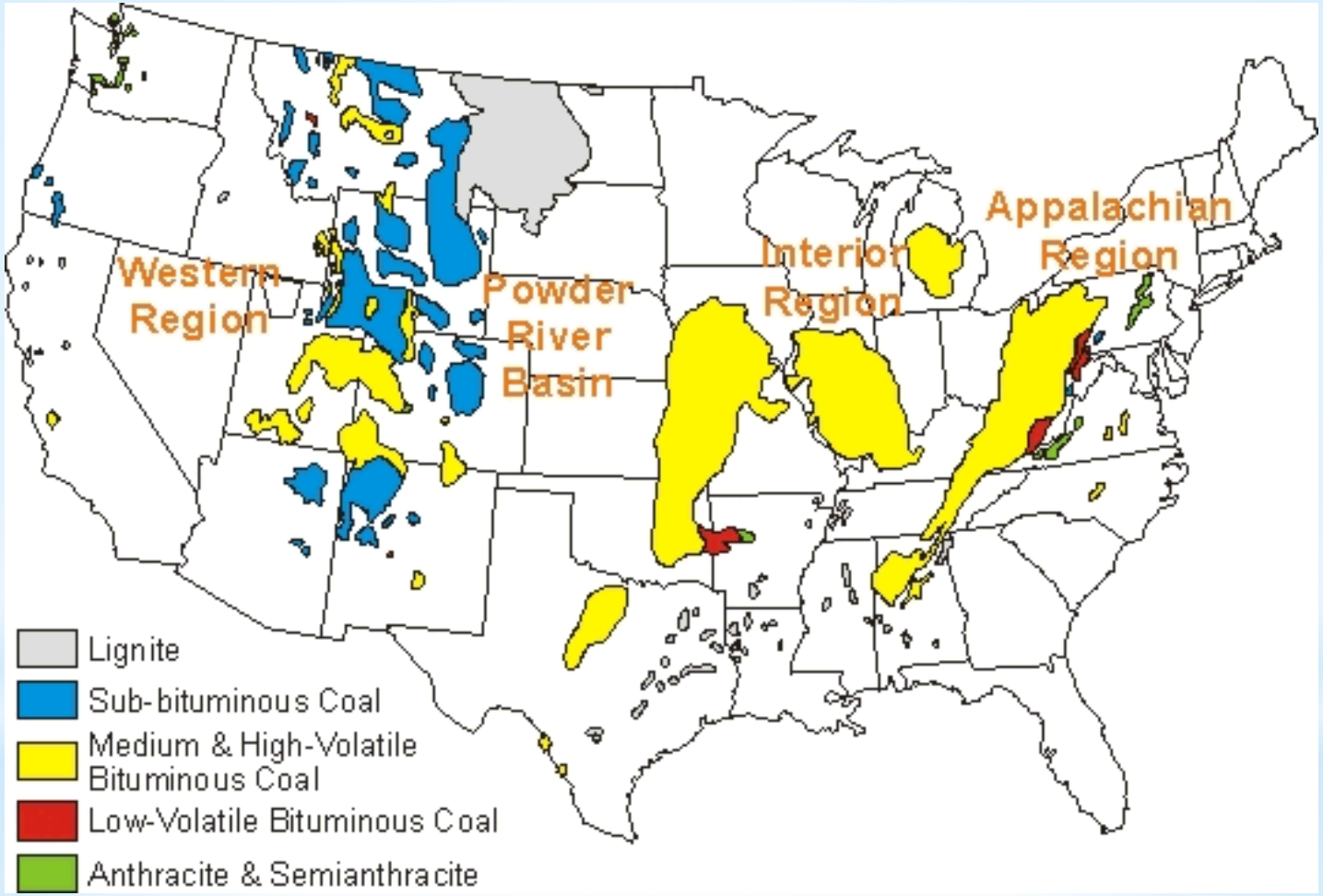
Coal Prices 2012

- Total of 25,508,364 tons of coal were sold in 2012; total value was $1,182,184,498.
- This was the fifth consecutive year coal values were greater than $1 Billion. (This had not happened since 1980's)
- Average price of all coal sold was $46.38 per ton; surface-mined coal averaged $43.92 per ton and underground-mined coal averaged $47.33 per ton.

*Employment

- Total average of annual employment reported in 2012 was 2,918 employees; 2,189 of these were production employees.
- Production employees worked an average of 223 days producing coal in 2012.
- Average annual wage for all production employees was $70,854. (Based on employees whom wages were reported)
- Average annual wage for surface-mine production employee was $58,459; underground-mine production employee was $76,228.
- Wages earned by all employees totaled $218,785,067 in 2012.

*Types of Coal Map



Bituminous Coal Facts

- Bituminous coal is the most common coal.
- Bituminous and sub-bituminous coal together represent more than 90 percent of all the coal consumed in the U.S.
- When burned, bituminous coal produces a high, white flame.
- Bituminous coal includes two subtypes: thermal and metallurgical.
- Bituminous coal provides approximately 10,500 to 15,000 Btu per pound as mined.

Bituminous Coal Characteristics

- Bituminous coal contains moisture up to about 17 percent.
- Its fixed carbon content can range up to about 85 percent, with ash content up to 12 percent by weight.
- Bituminous coal can be categorized further by the level of volatile matter it contains: high-volatile A, B, and C, medium-volatile, and low-volatile. About 0.5 to 2 percent of the weight of bituminous coal is nitrogen.
- Burning of bituminous coal releases trace mineral impurities into the air as pollution. During combustion, about 95 percent of the sulfur content of bituminous coal gets oxidized and released as gaseous sulfur oxides.

EPA Issues facing Coal Industry

- EPA regulations and rules that affect industry:
  - New Source Performance Standards (NSPS)
  - Coal Dust Rule
  - MATS (Mercury and Air Toxics Standards)

- "If somebody wants to build a coal-fired power plant, they can. It's just that it will bankrupt them. Under my plan … electricity rates would necessarily skyrocket." (President Barack Obama)

*2014 State and Federal Legislative Outlook

- Federally with a Republican controlled House of Representatives and Democratic controlled Senate very little expectation of energy or coal legislation expected to become law.
- Two bills which would be positive for coal industry have passed the U.S. House but are waiting on Senate action:
  - HR 3824 (Whitfield/Manchin)
  - HR 2824 (Stream Buffer Zone Rule)
- In Ohio the legislature and Governor John Kasich have understood and worked hard to make sure the coal industry plays vital role in Ohio, for both job creation and to produce affordable energy.

Educating Lawmakers on Coal

* Part of our role at the Ohio Coal Association is to educate our lawmakers and regulators both here in Ohio as well as Washington the important role coal plays in our economy.
* In picture US Senator Rob Portman (R-OH) visits B & N Coal Co. in Noble County to learn more about the industry.

Learn More And Follow Ohio Coal

- For more information about the Ohio Coal Association please visit www.OhioCoal.com.
- Follow Ohio Coal Association on Social Media.
  - Twitter: @OhioCoalAssn
  - Facebook: www.Facebook.com/OhioCoalAssociation