About Me

• Fall 2009 - Michigan State University, B.S. Applied Engineering Sciences (Business & Supply Chain Management)

• June 2010 – ArcelorMittal USA, By-products Sales and Marketing Excellence

• Fall 2012 (to present) – ArcelorMittal USA, Sourcing Manager Coal
About ArcelorMittal

- The world's leading steel and mining company with about 199,000 employees in 60 countries; $56.79B revenue (2016)

- Recognized leader in all major global steel markets, including automotive, construction, household appliances and packaging, with leading R&D and technology, as well as sizeable captive supplies of raw materials and outstanding distribution networks

- An industrial presence in 18 countries exposes the company to all major markets, from emerging to mature

- ArcelorMittal values geographical breadth, product diversity and raw material security:
  - 37% steel production in the Americas
  - 47% steel production in Europe
  - 16% steel production in other countries such as Kazakhstan, South Africa and Ukraine
The Evolution of ArcelorMittal

Book: Cold Steel, Tim Bouquet
ArcelorMittal in the United States

- Operates 27 facilities including mines, integrated operations, mini-mills and finishing facilities
- Industrial presence in 13 of the United States
- Employs over 18,000 in the United States
- 2016 raw steel production: 14.9 million tons
- 2016 economic contribution: $7.7 billion
  - Suppliers: $5.1 billion
  - Wages and benefits: $2.1 billion
  - Research and development: $239 million
  - Capex: $265 million
  - Property taxes: $41 million
  - Community investment: $8.2 million
ArcelorMittal in the United States

ArcelorMittal USA flat product portfolio

By product:
- Coated AL
- Coated AZ
- Coated EG
- Coated HD
- Cold-rolled
- Hot-rolled
- Plate
- Tin
- Secondary/Non-prime
- Reap/Excess prime

By market segment:
- Transportation (non-auto)
- Heavy equipment
- Packaging
- Appliance
- Energy
- Distribution
- Construction
- Automotive

Based on 2013 data.
ArcelorMittal has facilities, offices and joint venture partnerships in 14 states and the District of Columbia.
ArcelorMittal **Needs** Coal

Steelmaking: The Process

Follow the integrated steelmaking process from raw materials through finished product.

[Diagram of steelmaking process]
Coke and Coal Related Operations

• 5 blast furnace operations / 12 BF
  – Dofasco in Hamilton Canada
  – Indiana Harbor / Burns Harbor / Cleveland in the USA
  – Lazaro Cardenas in Mexico

• 4 coke operations
  – Dofasco in Hamilton
  – Burns Harbor / Monessen / Warren in the USA

• 2 long term coke suppliers
  – SunCoke: Indiana Harbor, Jewell and Haverhill
  – ERP Coke Birmingham AL

• 1 coal mine in WV
  – ArcelorMittal Mining Princeton
Metallurgical vs. Thermal Coal

• Baking vs. Burning
  – Focus on VM, Ro, Ash, Sulfur, etc.
    • BTU only considered in PCI/GCI applications
  – Classified by VM (LV, MV, HVA, HVB, etc.)
  – Goal is Coke
    • Maximize carbon, minimize ash & sulfur
    • Sizing is important

• ArcelorMittal USA buys roughly 10M NT of Met Coal per year
  – 6.4M NT direct, with balance via Coke Suppliers
    • 4.7M NT Hard Coking Coal; 1.7M NT PCI/GCI (injection)
Steel: Everywhere you look – making the world lighter, stronger and more sustainable
Future of Steel in the US & Impact on Coal

- Current forecasted steel demand is down
  - Declining automotive market

- Any significant growth will be long term (2018 & beyond)
  - Infrastructure Bill will take years to have any real affect
  - Reducing and reshaping our footprint to account for this

- Metallurgical coal demand is down
  - Blast Furnace closures – Wheeling Pitt, Fairfield, RG Steel, Sparrows Point, IH 5&6
  - Blast Furnaces idled – Granite City, Ashland, Stelco

- Although lagged, steel and met coal growth are closely tied

- How do we increase demand?
Future Steel Growth: Bridges

• Bridging the gap in our infrastructure needs
  – ArcelorMittal facilities are doing their part to help rebuild some of the largest and more critical bridges in the U.S. and Canada, including supplying steel plate for:
    • NY Bridge (formerly the Tappan Zee Bridge) in New York City
    • Gerald Desmond Bridge in Long Beach, California
    • Champlain Bridge in Montreal, Quebec, Canada
Future Steel Growth: Structures

- **One World Trade Center**
  - Since 2007, ArcelorMittal Coatesville has been directly contributing to the reconstruction of the New York skyline after 9/11
  - Coatesville steel was used for the foundation of the building, the foundation for the subway system underneath the building, floor support girders and building antenna
  - ArcelorMittal Differdange in Luxembourg supplied the beams for the skyscraper and the memorial
Future Steel Growth: War

• Steel plate protecting our shores
  – ArcelorMittal supplied steel to two world class Navy vessels:
    • USS Illinois, new Virginia class submarine commissioned in 2015, capable of remaining submerged for months in the harshest environments
    • USS Zumwalt, USA’s newest guided missile destroyer (right)

ArcelorMittal is the only “made and manufactured in the USA” producer of Navy armor plate and the sole qualified U.S. supplier of these grades of steel
Conclusion

• As long as we need steel, we need coal

• Thank you for your time

• Questions?