



Xcoal Introduction & International Coal Markets

"Coal's Role in Making America Great Again"

The Coal Institute – STS July 17, 2017

We Manage the Process

From the Ground Up





# **Xcoal Energy & Resources:**

- » Privately owned and operated company located in Latrobe, Pennsylvania USA, & founded in 2003
- » Experienced Management team
- » World-wide marketer of various coal products from mines located in U.S.A.
- » Creative & competitive transport and logistical company
  - Complete supply chain ownership
- » Internationally recognized company with a strong customer base
- » Global coverage with customers in the Atlantic and Pacific Basins



# Key business attributes:

- » Top exporter of USA origin coals
- » Xcoal's suppliers have the ability to produce hard coking, semi soft, PCI, thermal and anthracite coals
- Exporting capabilities from five (5) terminals on US East Coast & one
   (1) terminal on the U.S. Gulf Coast
- » Transportation providers (railroads & vessel owners) remain supportive of export activities. USA has strong supply chain network supporting USA coal exports
- » Xcoal maintains a network of 16 offices providing "on the ground" marketing in the regions of the world where demand for USA products remains strong
- » We have the ability to adjust our business model to meet demand for different products and in different regions of the world



# Coal's Role in Making America Great Again

What one word defines the industry we all participate?



# **DOGGED**

(adjective)

having or showing tenacity and grim persistence

synonyms: <u>tenacious</u>, <u>determined</u>, <u>resolute</u>, <u>resolved</u>, <u>purposeful</u>, <u>single-minded</u>, <u>tireless</u>, <u>strong-willed</u>, <u>steadfast</u>, <u>staunch</u>,

"Success required dogged determination"



#### U.S.A. Coal Market

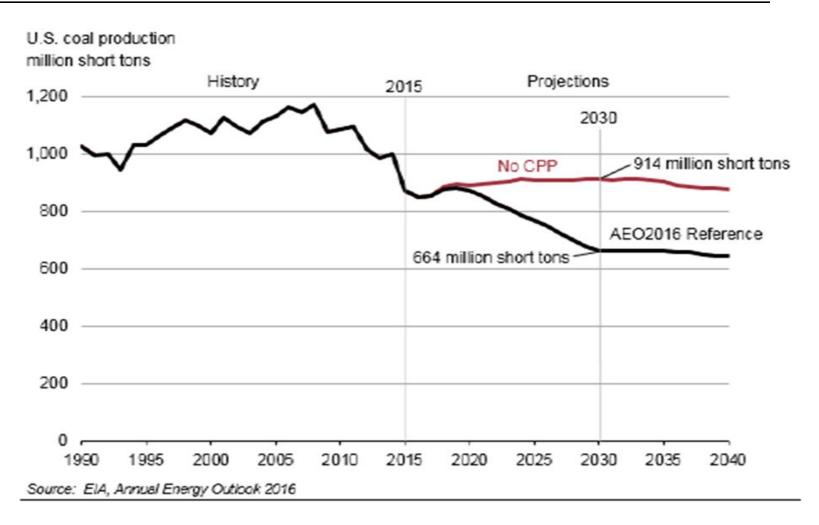
#### What changed over last 12 months – Domestic Market

- »For one, 2017 is starting off much better than 2016
- »Almost every publicly traded coal company was in bankruptcy this time last year
- »YoY 2017 U.S.A. coal consumption and production are up 7.11% and 15.81%, respectively
- »Last year new Govt. regulations being formulated



#### U.S.A. Coal Market

#### EIA Outlook for U.S. Coal: With and Without the CPP





#### What changed over last 12 months – Global Markets

- » By mid 2016 the Global coal markets were approaching equilibrium – particularly for coking coal
- » That all changed in about Qtr.4 2016 with increased demand due mainly to U.S.A. lead supply side rationalization and Australian supply disruptions
- » Second half 2016 prices spiked allowing supply side rationalization to end and U.S.A, exports to improve
- » In early 2017 prices began to soften, from historical highs
- » Followed by new historical high prices influenced by Cyclone Debbie (end March)
- » Leading to rarely matched coking and thermal coal price volatility



- » Prices corrected relatively quickly to or below pre-cyclone levels before China recently returned to the market
- » Current spot pricing are improving and today prices are at or above pre-cyclone lows
- » After almost 50 years of stable pricing system the Benchmark system is "almost dead" in favor of index pricing
- » Quarterly pricing considered long term and spot pricing widely accepted

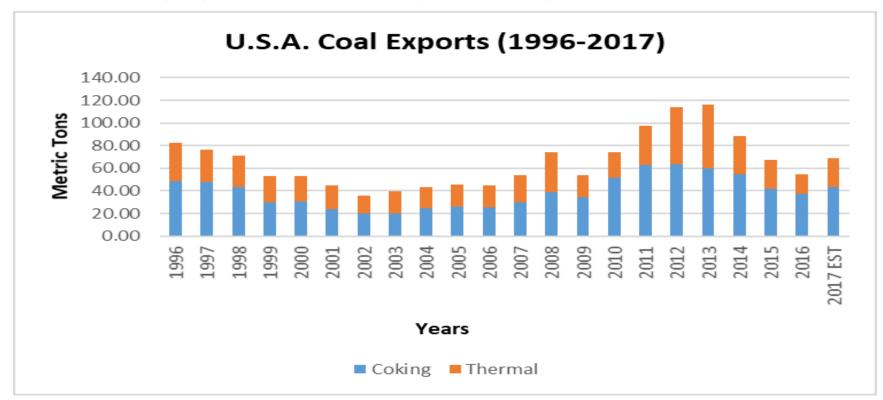


#### **Seaborne Coal Markets:**

- » Approx. 1.2 billion MT
- » Thermal Coal:
  - Approx. 920m MT
  - USA approx. 2% recent peak 2012 at 6% of Total Seaborne Thermal Coal Exports
- » Coking Coal:
  - Approx. 300m MT
  - USA approx. 13% recent peak 2011 at 25% of Total Seaborne Coking Coal Exports



#### **U.S.A.** Role in Global Coal Markets



U.S.A. Coal Exports peaked in 2012. Expecting an increase in 2017. May YTD 2017 exports up 62% and annualizing at 80m MT, almost 50% ahead of 2016



#### Exports a key outlet for U.S.A. producers

- Thermal exports account for smaller piece of U.S. supply, but are important outlet amid fluctuations in utility demand
  - Economics not always favorable, but allow producers to optimize operations
- >70% of U.S. coking coal production is exported due to limited domestic demand

Exports as Share of U.S.  Production						
Thermal Coal Coking Coa						
2011	3.49%	76.44%				
2012	5.78%	77.10%				
2013	5.41%	75.37%				
2014	3.79%	73.83%				
2015	3.16%	70.16%				
2016	2.67%	71.49%				

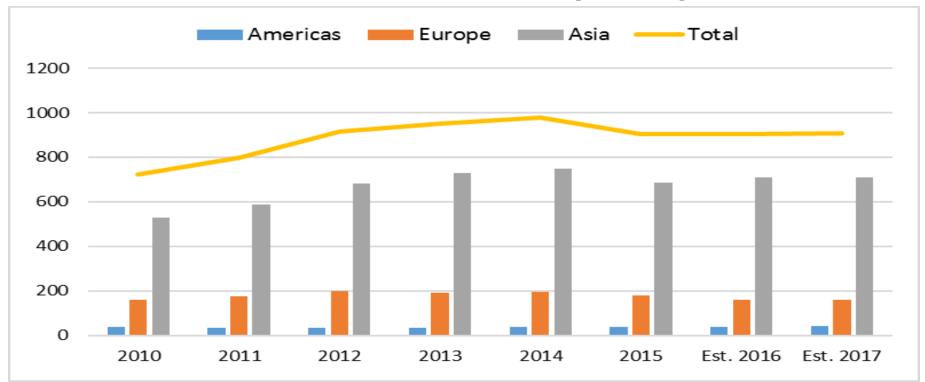


# **Macro View Thermal Seaborne Market**



#### **Thermal Demand**

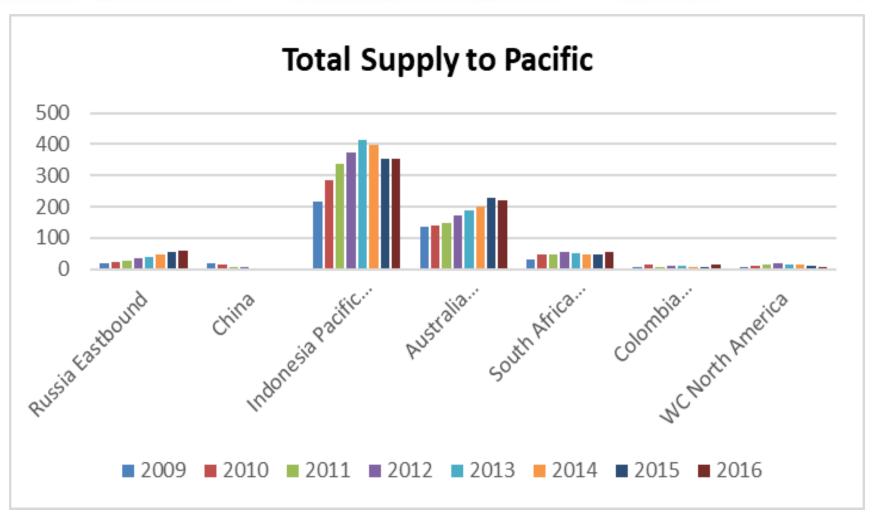
# **Global Thermal Demand (MMT)**



Seaborne thermal coal demand down two years in a row, first & second time this millennium. Down a total of 54 MMt since 2014. Pacific market recovered in 2016 but not enough to overcome the fall in the Atlantic market. Both markets expecting to improve slightly during 2017



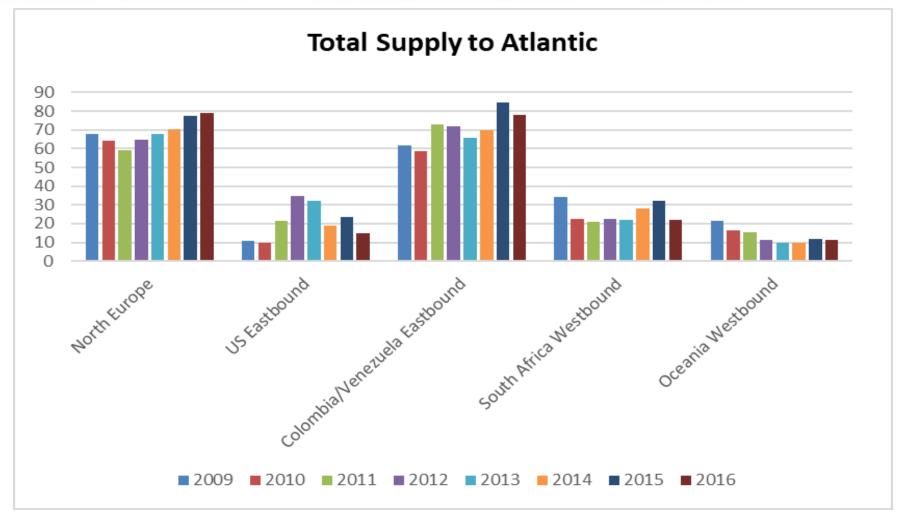
#### Thermal Supply in the Pacific Basin



Demand in the Pacific Basin up 19 MMT during 2016. Russia, SA and Colombia captured the entire increase



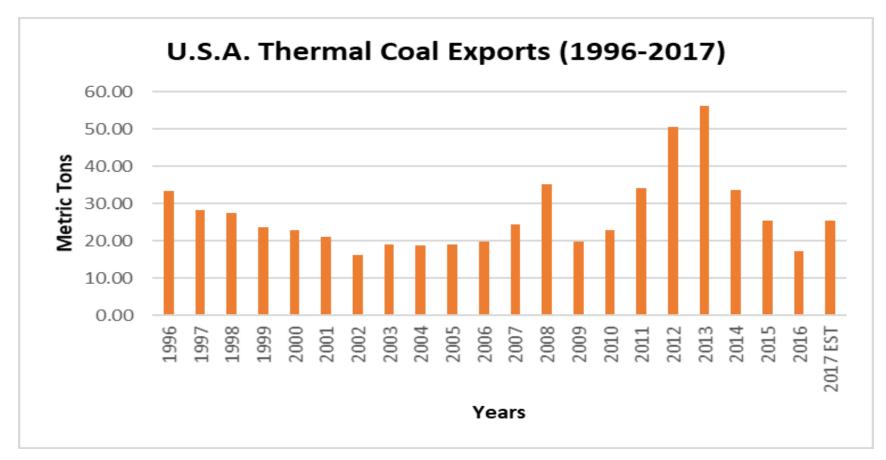
#### Thermal Supply in the Atlantic Basin



Demand down 24 MMt during 2016. U.S.A., Colombia and SA all down. Colombia and SA found homes in the Pacific market 16



# **Global Thermal Coal Markets**



U.S.A. thermal coal exports peaked in 2013. Expecting an increase in 2017. May YTD 2017 exports up 164% and annualizing at 33m MT, almost 100% ahead of 2016



But U.S.A. remains small piece of seaborne supply

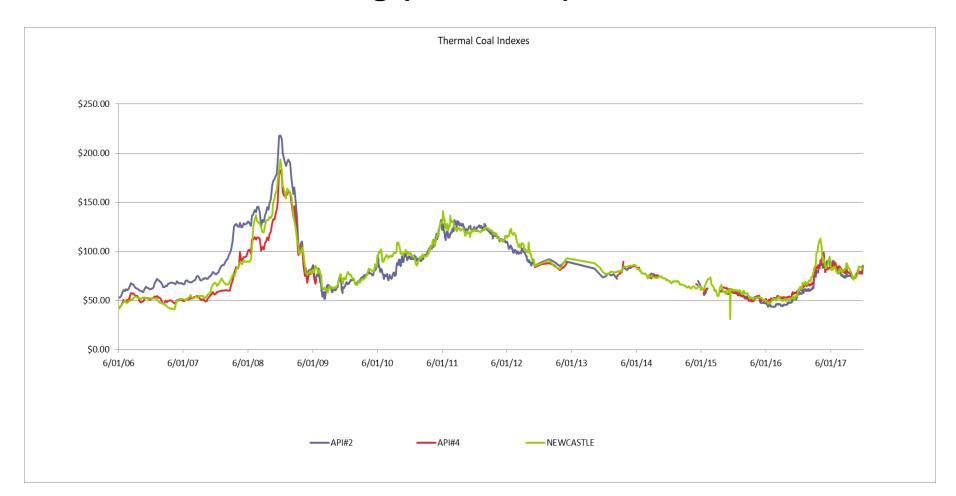
of Thermal Coal

- U.S. a much smaller piece of seaborne thermal market amid plentiful supply from export-reliant countries
  - High quality coal allows US to compete in Atlantic and Pacific Basins
  - Low cost longwalls underpin competitiveness
- U.S. remains the second largest seaborne supplier of coking coal
  - Strategic importance serving Atlantic Basin mills
  - Premier qualities needed in Pacific Basin mills

U.S. Share of Seaborne Supply					
Thermal Coal Coking Coa					
2011	<b>3.62%</b>	25.33%			
2012	5.53%	24.10%			
2013	<mark>4.77%</mark>	20.07%			
2014	<mark>3.44%</mark>	17.82%			
2015	2.75%	14.80%			
2016	1.92%	13.34%			

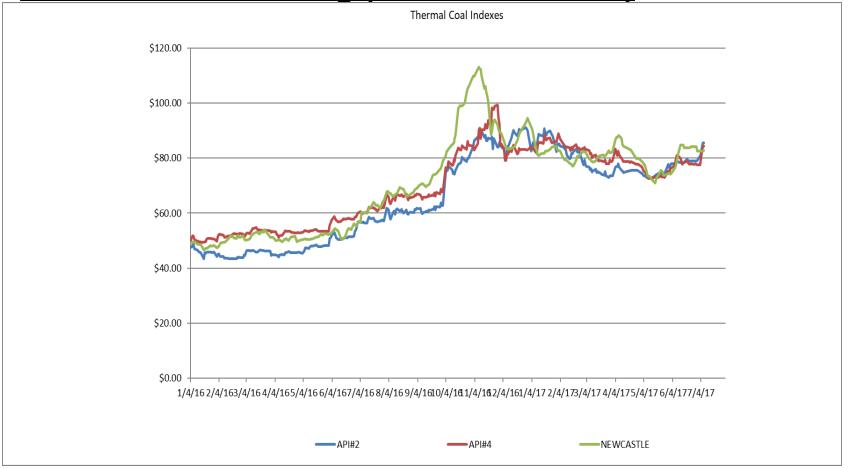


#### **Thermal Index Pricing (2006-2017)**





<u>Thermal Index Pricing (2016 – YTD 2017)</u>

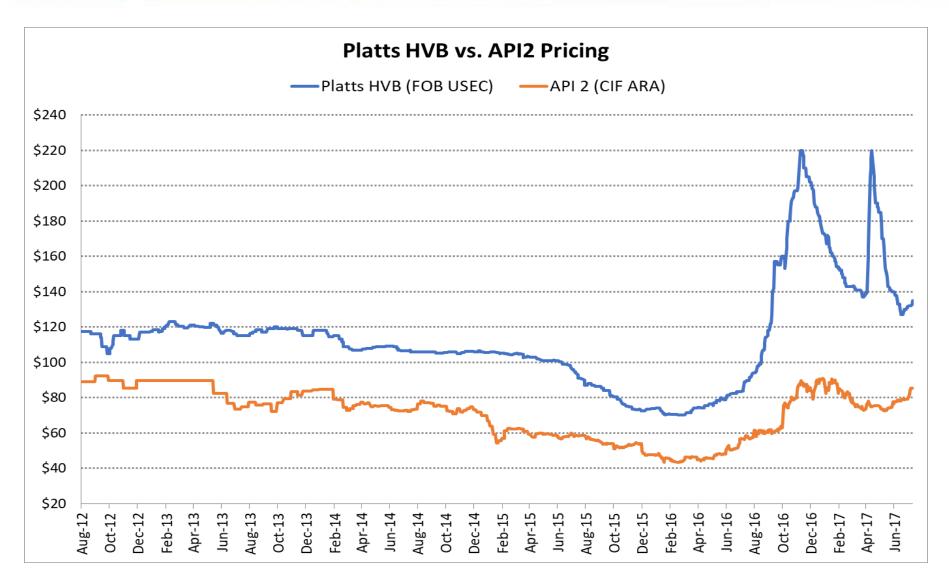


Currently realizing improved pricing environment, allowing the U.S.A. to participate



Index	01/03/17	05/11/17	07/07/17	Recent	Recent	YTD A	YTD % Δ
				Period <sub>A</sub>	Period % Δ		
API2 CIF ARA 6000 NAR	\$82.50	\$72.45	\$85.45	13.00	17.94%	2.95	3.58%
API4 FOB RB 6000 NAR	\$84.15	\$72.55	\$84.25	11.70	16.13%	0.10	0.12%
NEWCASTLE	\$91.21	\$72.95	\$82.62	9.67	13.26%	-8.59	-9.42%







#### Thermal Market Update – Europe and India





#### Thermal Market Update - Current Situation Europe

#### **Demand:**

- EU Economy robust
- Cold weather conditions
- Reduced nuclear power in France at the end of 2016
- Reduction in hydro in Spain and Portugal

#### **Consequences:**

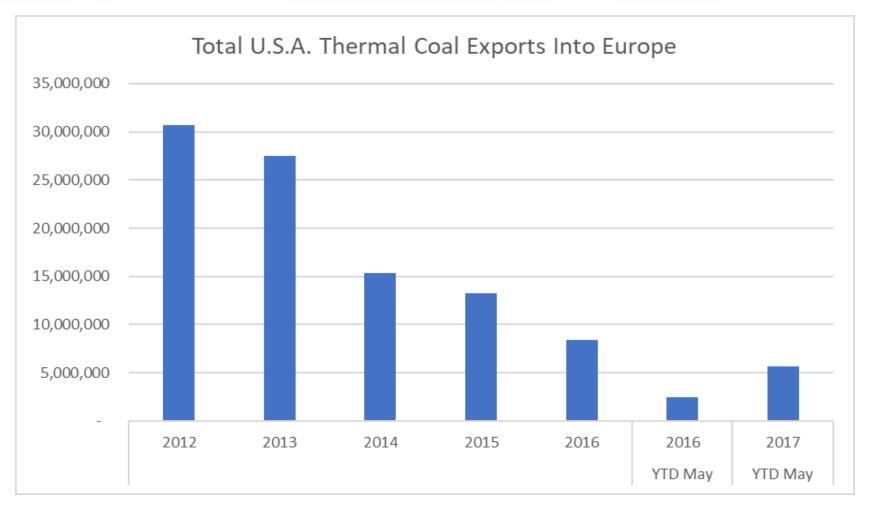
- API 2 is currently better supported
- Current price level allowing U.S.A. coal to participate

#### **Future:**

- Renewelable energy should keep replacing coal burn in europe
- But in 2022, Germany nuclear complete phase out (15 % of total electricity production)
- And in 2025, France is scheduled to reduce nuclear electricity from 78% down to 50%



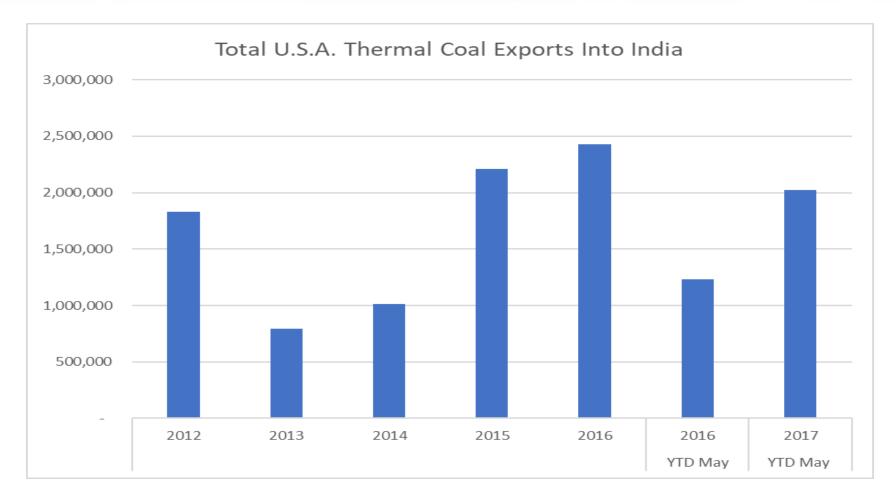
#### Thermal Market Update – Exports to Europe



U.S.A. Exports of Thermal Coal to Europe YTD May 2017 are 5.70m MT or up 129% compared to YTD May 2016



#### Thermal Market Update – Exports to India



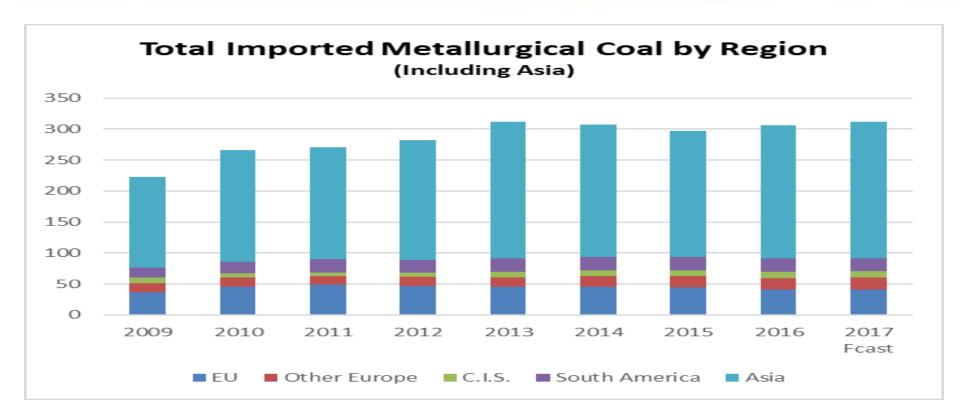
U.S.A. Exports of Thermal Coal to India YTD May 2017 are 2.020m MT or up 64% compared to YTD May 2016



# Macro View coking Seaborne Market



#### Seaborne Coking Coal Demand Growth - 2009 to 2017



After two consecutive years of decline, seaborne demand for coking coal was est. to have increased by 9.5 MMT during 2016 with an additional demand of about 6 MMT during 2017



# Steel Production Looking Strong

- Jan May 2017 reports significant increase in <u>all HCC</u> importing countries:
- 13 consecutive months of YoY increases
- Germany ↑ 3%
- France ↑ 11%
- Turkey ↑ 12%
- Brazil ↑ 14%
- China ↑ 5%
- India ↑ 7%
- Worldwide ↑ 4.7%
- Excl. China ↑ 5%

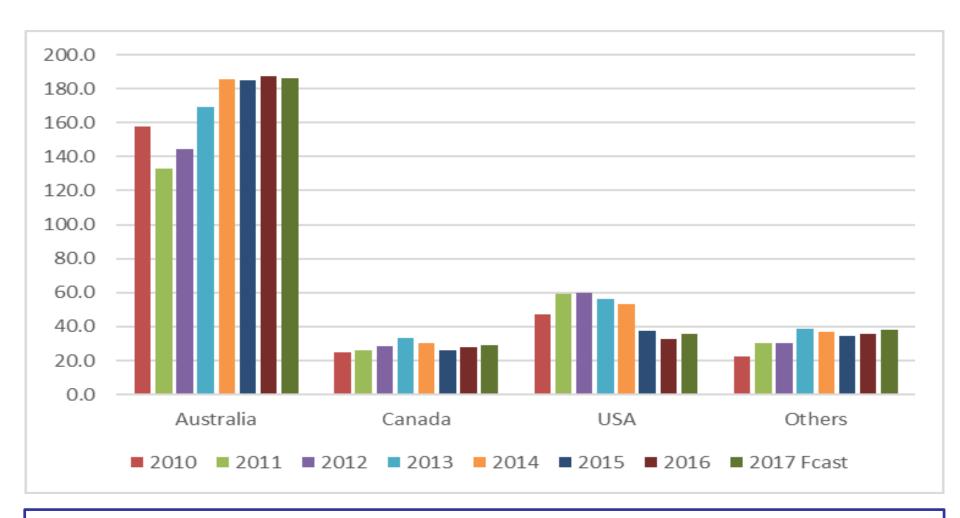


- WSA global steel production growth forecast for 2017 is 1.3%
- However YTD pig iron output up 2.5%

Global Pig Iron Production								
D	May-17	Seq	Seq Pd	YoY	'17 YTD	YTD YoY		
Region/Country	(000 MT)	Change	Change	Change	(000 MT)	Change		
European Union	8,064	2.8%	-0.5%	2.0%	39,290	2.5%		
Germany	2,410	-0.5%	-3.7%	-2.8%	11,886	0.0%		
France	981	20.4%	16.5%	34.5%	4,411	15.0%		
United Kingdom	495	-12.2%	-15.0%	-13.7%	2,588	-0.3%		
Italy	455	6.8%	3.4%	-17.0%	2,174	-14.3%		
Austria	561	7.5%	4.1%	17.8%	2,663	12.9%		
Netherlands	500	1.3%	-2.0%	-4.8%	2,508	-0.2%		
Other Europe	1,111	7.2%	3.8%	4.5%	5,272	7.4%		
Turkey	932	12.3%	8.6%	4.5%	4,435	4.7%		
Total CIS	6,180	-0.4%	-3.6%	-11.1%	31,264	-5.6%		
Russia	4,300	-2.5%	-5.7%	-2.0%	21,634	-0.6%		
Ukraine	1,530	3.8%	0.5%	-31.8%	8,058	-20.9%		
North America	2,820	4.0%	0.6%	3.2%	14,075	0.2%		
United States	1,950	4.3%	1.0%	2.2%	9,649	-0.9%		
Canada	550	3.0%	-0.3%	12.8%	2,729	2.0%		
Mexico	320	3.5%	0.2%	-5.3%	1,697	3.4%		
South America	2,735	3.1%	-0.2%	15.7%	12,809	13.3%		
Brazil	2,479	3.3%	-0.1%	18.6%	11,571	15.6%		
Argentina	183	1.5%	-1.8%	-4.6%	877	-3.2%		
Asia	78,738	-0.41%	-3.6%	-0.1%	385,346	2.9%		
China	61,733	-1.3%	-4.5%	-0.1%	300,472	3.3%		
Japan	6,700	2.9%	-0.5%	-2.1%	32,921	-1.5%		
South Korea	3,565	3.4%	0.0%	-1.8%	18,416	-0.3%		
India	5,480	3.3%	-0.0%	3.3%	27,396	7.8%		
Taiwan	1,260	3.3%	-0.1%	1.8%	6,141	0.4%		
Total excl. China	38,883	2.7%	-0.6%	-0.3%	192,107	1.3%		
Total	100,616	0.2%	-3.0%	-0.2%	492,579	2.5%		
Source: World Steel Association								



#### Seaborne Coking Coal Supply Growth - 2010 to 2017

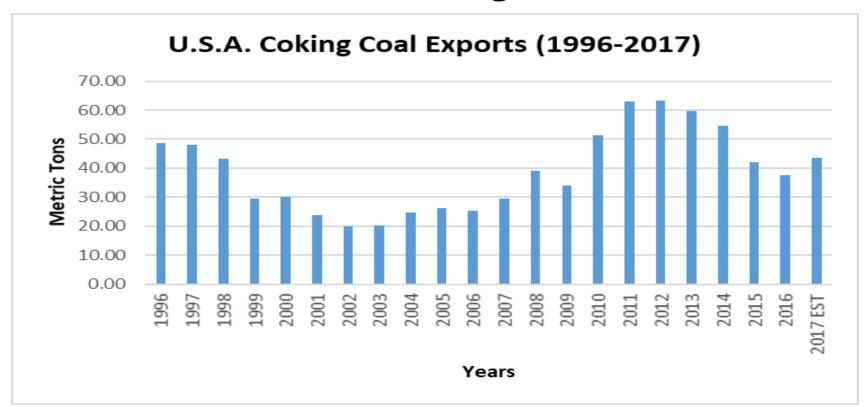


U.S.A. second largest supplier to the Seaborne Coking Market



# **Global Coking Coal Markets**

#### U.S.A. Role in Global Coking Coal Markets



U.S.A. Coking Coal exports peaked in 2012. Expecting an increase in 2017. May YTD 2017 exports annualizing at 47m MT, more than 27% ahead of 2016



U.S.A. larger piece of seaborne supply of Coking Coal

- U.S. a much smaller piece of seaborne thermal market amid plentiful supply from export-reliant countries
  - High quality coal allows US to compete in Atlantic and Pacific Basins
  - Low cost longwalls underpin competitiveness
- U.S. remains the second largest seaborne supplier of coking coal
  - Strategic importance serving Atlantic Basin mills
  - Premier qualities needed in Pacific Basin mills

U.S. Share of Seaborne Supply							
	Thermal Coal	Coking Coal					
2011	3.62%	<b>25.33%</b>					
2012	5.53%	24.10%					
2013	4.77%	<mark>20.07%</mark>					
2014	3.44%	<mark>17.82%</mark>					
2015	2.75%	14.80%					
2016	1.92%	13.34%					



# Seaborne Coking Coal Supply 2010 to 2016

# Percentage Seaborne Coking Coal Market By Region

Region	2009	2010	2011	2012	2013	2014	2015	2016
Australia	65%	62%	53%	55%	57%	61%	65%	66%
Canada	10%	10%	11%	11%	11%	10%	9%	10%
USA	15%	19%	25%	24%	20%	18%	15%	13%
Others	10%	9%	11%	10%	12%	11%	11%	11%



# Global Coking Coal Markets

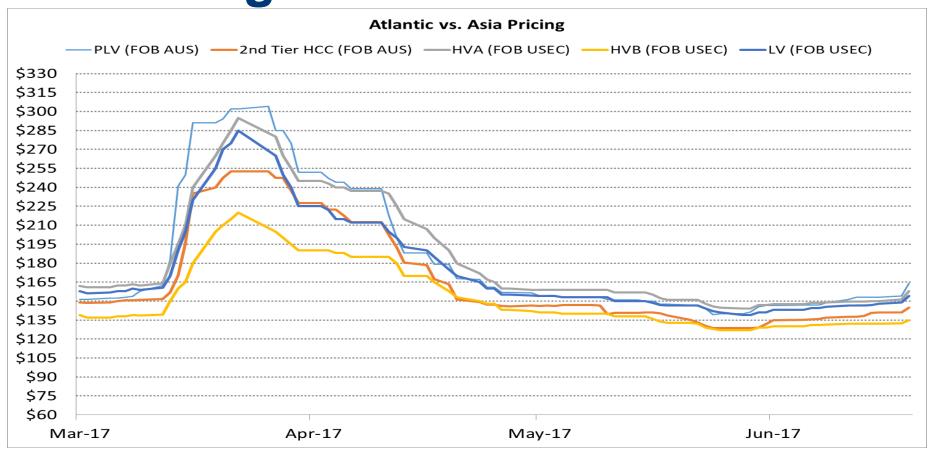
# **Coking Coal Price Overview**





# Global Coking Coal Markets

# **Coking Coal Price Overview**



Prices dipped below pre-cyclone levels but recently recovered to pre-cyclone levels. HVB index prices did not increase as much as the other indices

36



#### **Seaborne Coking Coal Supply**

#### Coking Coal Exports (million MT) Jan - May '17 Change YoY % 19.36 27.12% 4.13 US 15.23 (12.15) -15.82% Australia 76.82 64.67 10.90 0.46% Canada 10.95 0.05 102.95 (7.97)Total 94.98 -7.74%



# **Expectations for 2017 and beyond**

- » Both Seaborne thermal and coking coal demand expected to grow
- » Importance of U.S.A. as key (swing) supplier reinforced
- » Index pricing widely accepted for both thermal and coking coals
- » Benchmark system has ended due to extreme volatility
- » Seaborne coal demand for U.S.A. coal should remain strong for the balance of 2017
- » U.S.A. thermal and coking coal tonnage is available as long as the international market prices remain supportive
- » Better balance sheets allow U.S.A. producers to participate in seaborne markets
- » Wild cards: Chinese Policy, forex movements, continued supply disruptions (geological and weather), coal production surprises