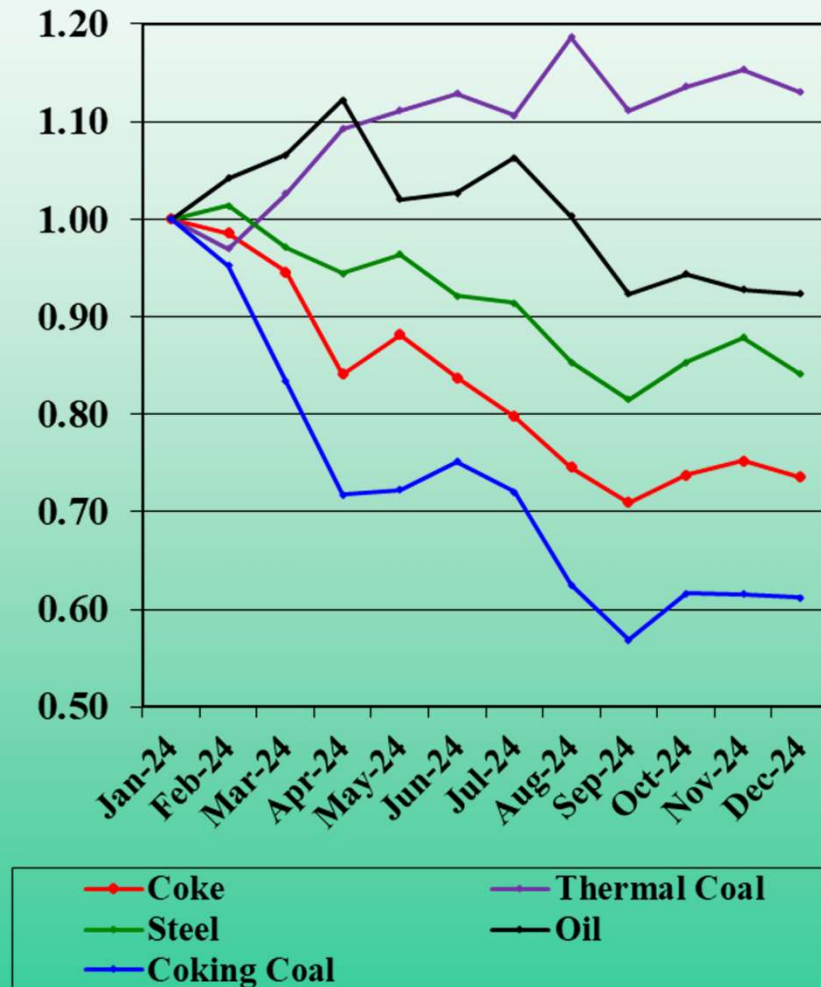


***"Coke Market Report"***  
***Summary of 2024***

Resource-Net  
*January 2025*

**Note: Some data for  
2024 are estimated,  
based on data  
available in 01/2025.**

# Pricing for Coke Compared to Other Commodities



- In general, commodity prices have declined through 2024. In the last few months, some stabilization in indices emerged.
- Uniquely, thermal coal ended the year at a higher level than at which it started. The other markets were between 10% and 40% lower. Coking coal was the worst performing market of those surveyed.

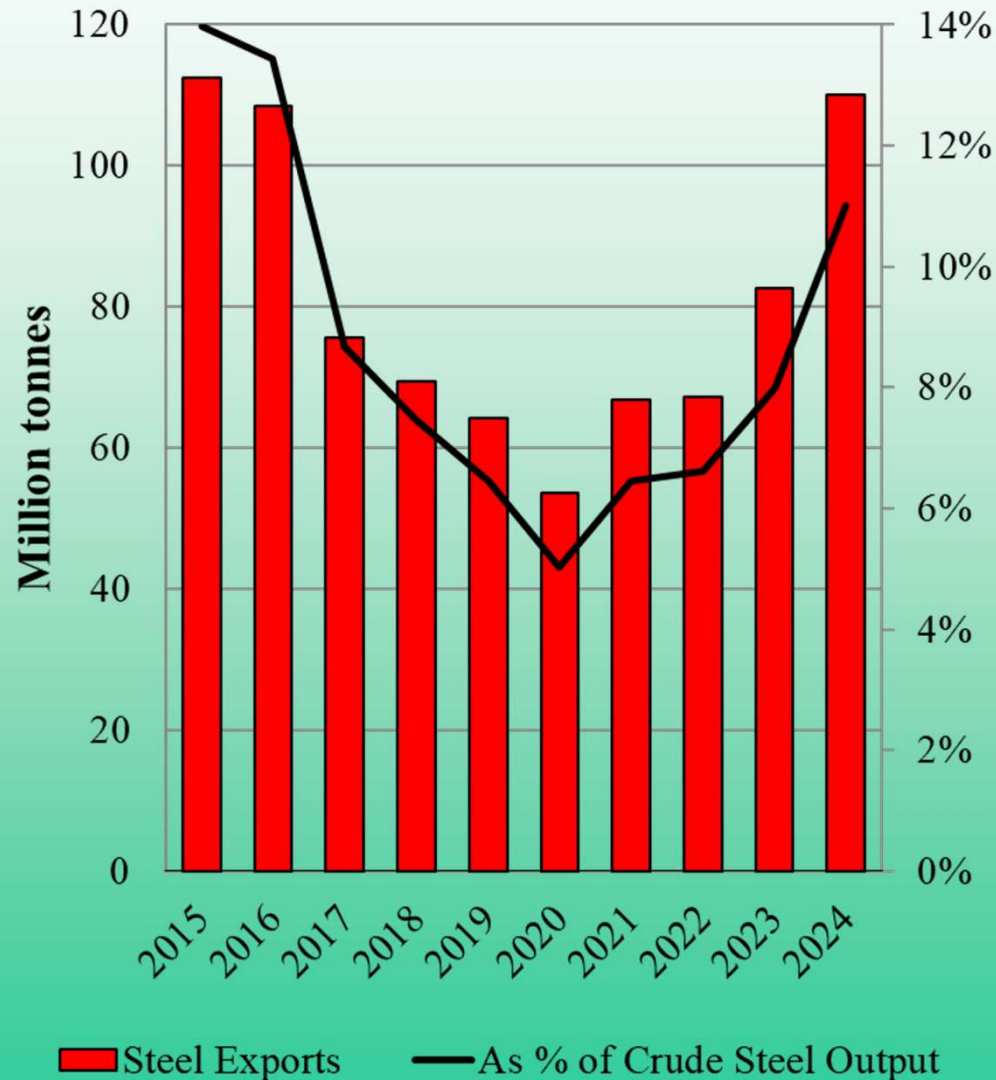
# Iron Output by World Region

Million tonnes	2023	2024	% Change 2024/23
Europe	70.2	70.0	-0.3%
Eurasia	63.3	60.8	-4.1%
North America	29.6	26.8	-9.5%
Latin America	28.6	28.9	+1.0%
China	863.9	850.0	-1.6%
Other Asia	227.5	227.9	+0.2%
Rest of World	19.5	20.3	+4.3%
<b>Total excl China</b>	<b>438.7</b>	<b>434.6</b>	<b>-0.6%</b>
<b>Total</b>	<b>1302.6</b>	<b>1284.6</b>	<b>-1.4%</b>

- Shown is iron production by region for last year (estimated from data to 11/24) compared to 2023. We expect total for the year to be slightly less than 1.3bn tonnes, just 1.4% down from 2023.
- Over the last ten years, there has been an average growth in iron output of 1.4% per year.
- The steepest declines in iron output last year were in Eurasia (Russia/Kazakhstan/Ukraine) (-4%) and North America (-10%).

Source: WSA, Resource-Net estimates

# Chinese Steel Exports



- Steel exports from China have risen significantly over the past two years. Last year they maybe reached 110m tonnes, equivalent to 11% of China's steel production (crude basis).
- This growth in steel exports is held to be largely responsible for the downturn in the world steel market.
- A key factor is said to be the collapse in China's property market, which has led to an over-supply of steel products.

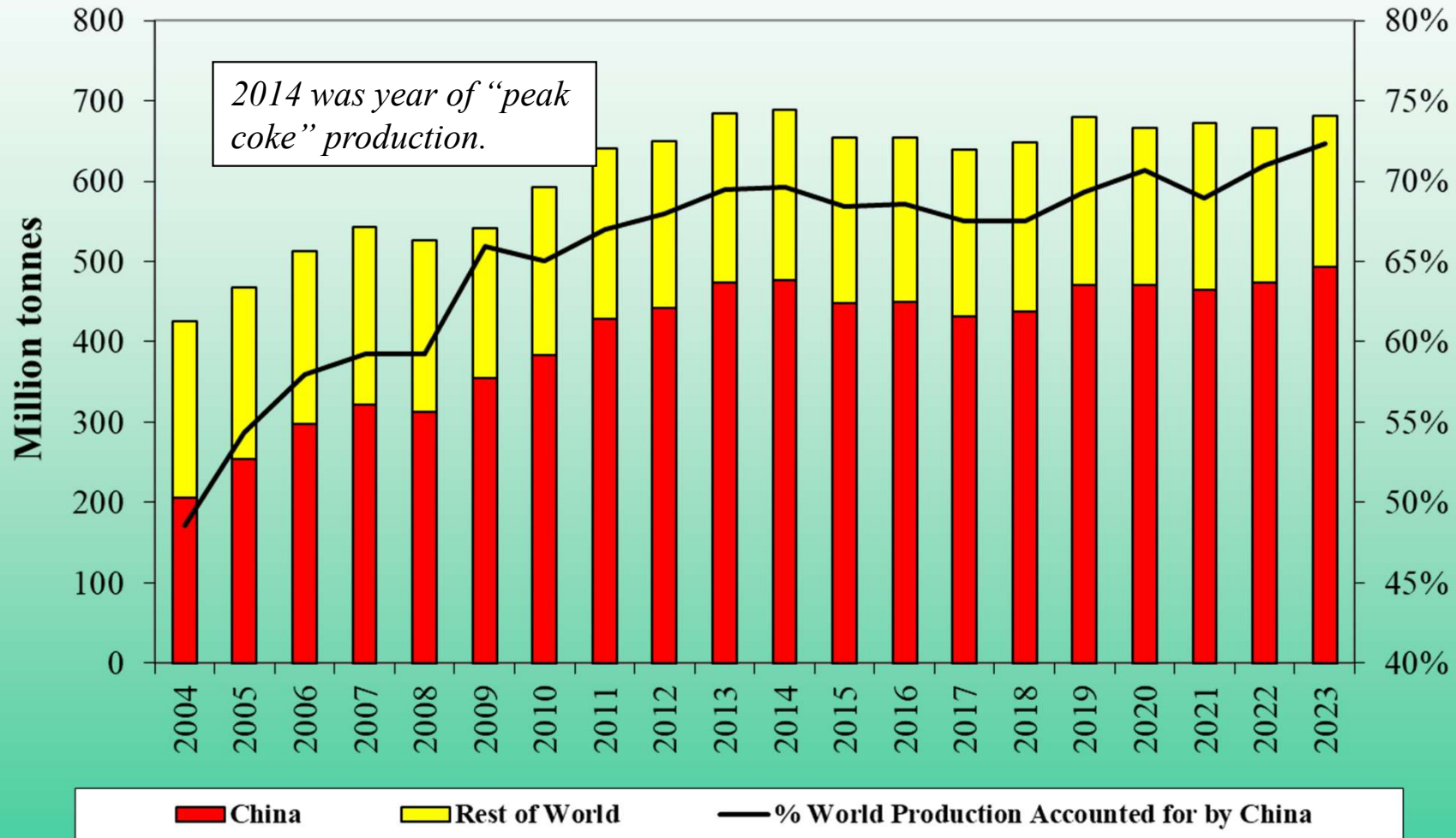
# **Coke Market Overview**

# Blast Furnace Coke Pricing



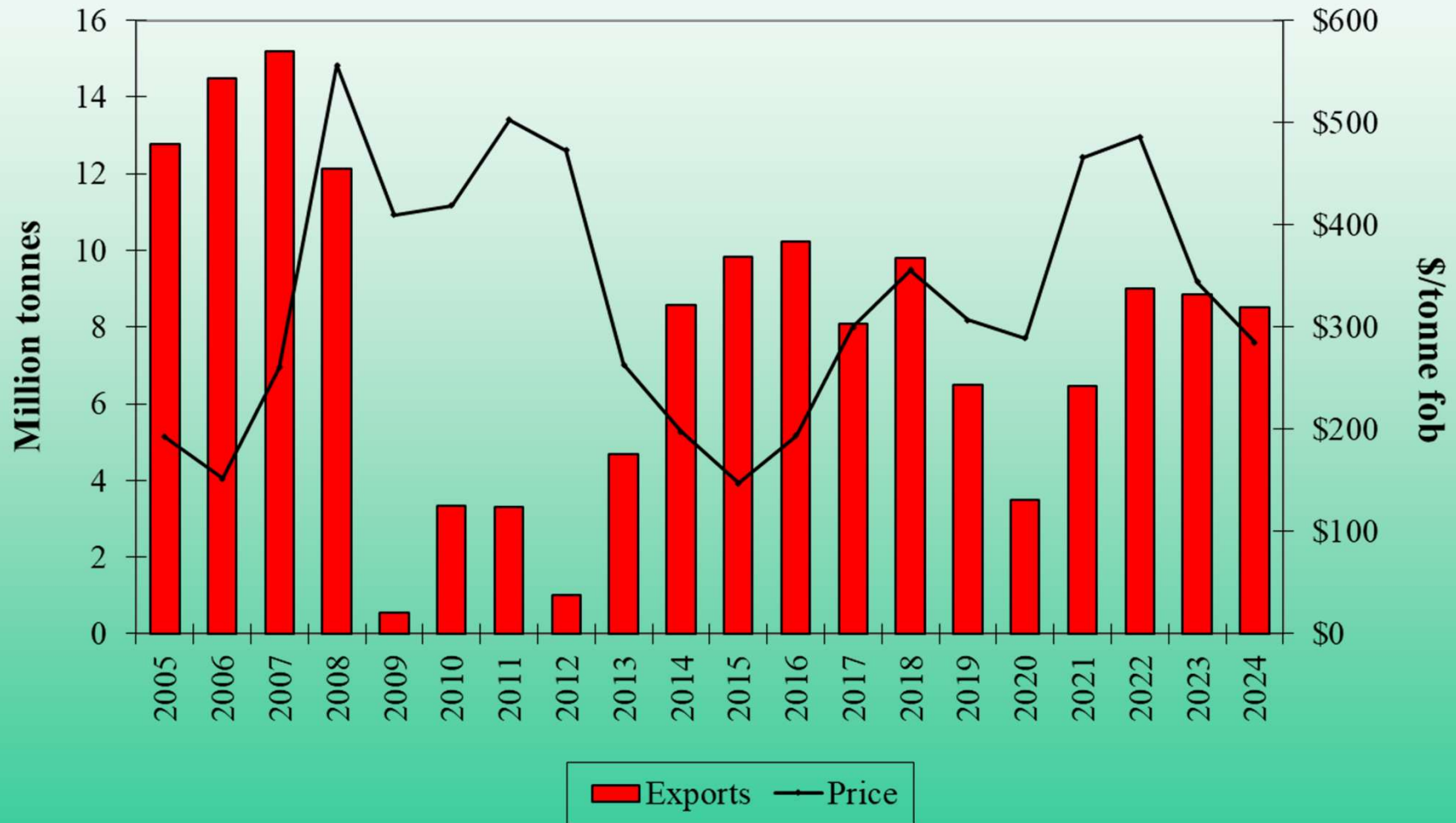
- Shown are the annual averages of the blast furnace coke prices produced each month by “Resource-Net”.
- For the second year running, coke prices were lower in 2024. Chinese export pricing averaged around \$285/tonne fob, \$200/tonne below the 2022 level.
- Over-supply from Indonesia has been the primary negative factor for world coke pricing in 2024. The collapse of the steel market has further undermined coke prices. Physical demand for coke outwardly remains quite strong.

# World Coke Production

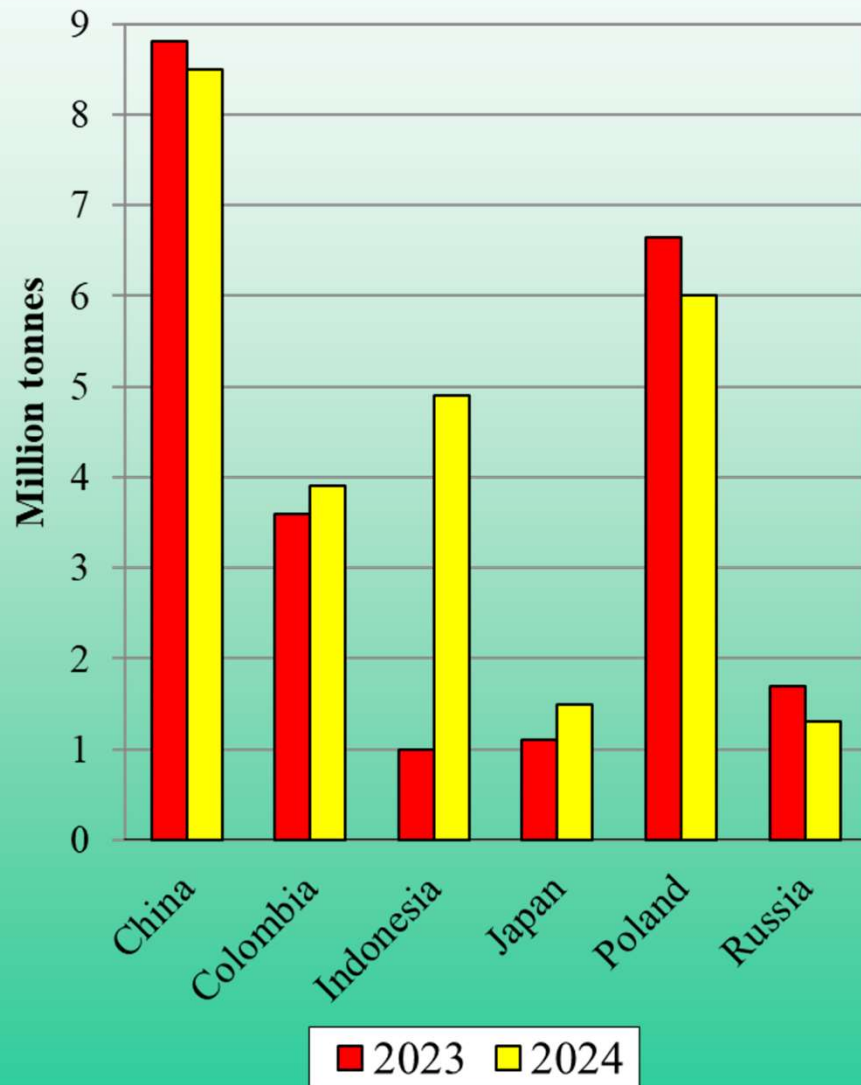




# Chinese Blast Furnace Coke Price & Exports

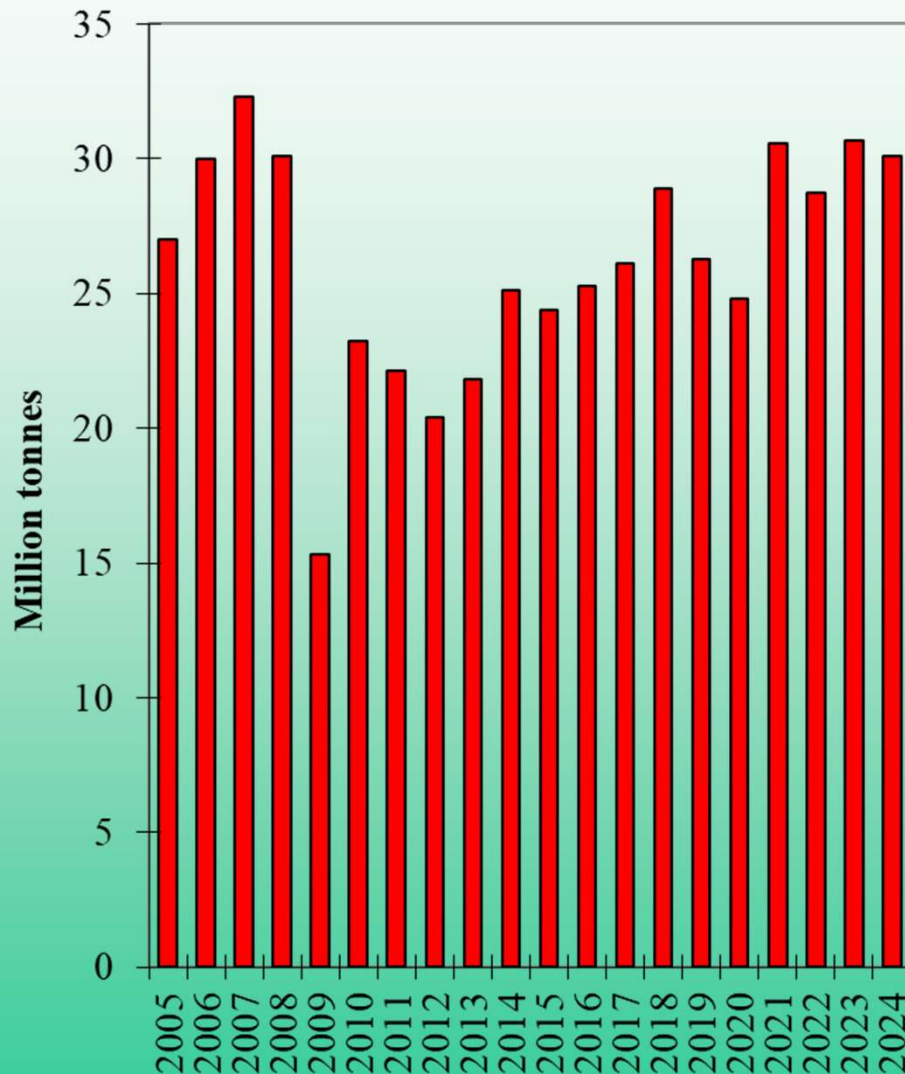


# Leading Coke Exporters



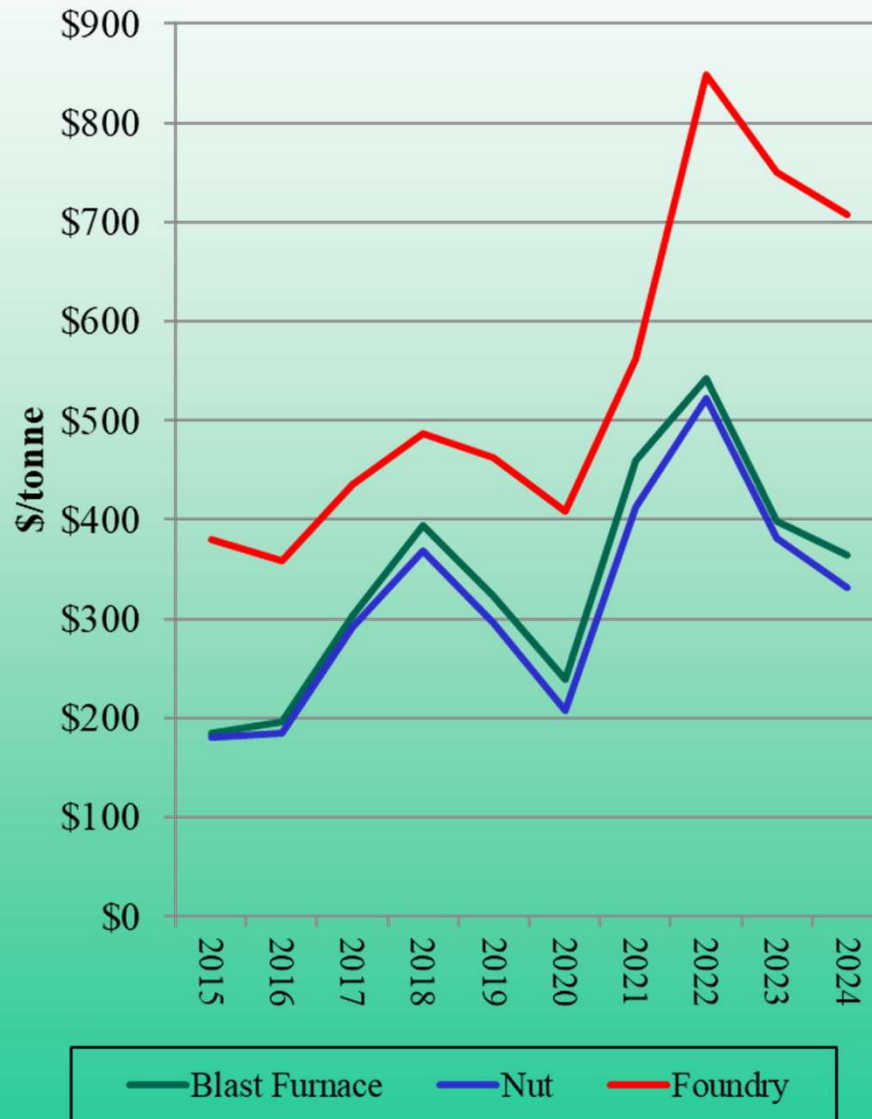
- **China:** Exports in 2024 are marginally down from the previous year, but China remains leading coke exporter.
- **Colombia:** After a decline in 2023, last year's exports were up.
- **Indonesia:** Last year's exports are likely to have been five times that of 2023.
- **Japan:** A small rise in exports in 2024, but the overall trend is down.
- **Poland:** A small decline last year, due to low European demand.
- **Russia:** Sanctions from EU reduced exports in last few years. Data estimated as official data not available.

# World Cross-Border Coke Trade



- By summing imports of the world economies, we obtain the figures for global coke trade over the past 20 years.
- Following the economic crisis of 2009, coke trade volumes have steadily risen. Last year it seemed to be around 30m tonnes.
- Despite the slowing world economy, coke trade has remained on a high level. Factors in this include the low price of coke versus that coking coal, and the closure of some coke plants.

# European Coke Pricing



- The blast furnace coke market is set primarily by Poland and to some extent by other sources such as China, Colombia and Indonesia.
- Following two years of increases, European coke prices have been lower in the last two years.
- Foundry coke has retained its premium over blast furnace coke.

# Permanent Coke Battery Closures in 2023-24

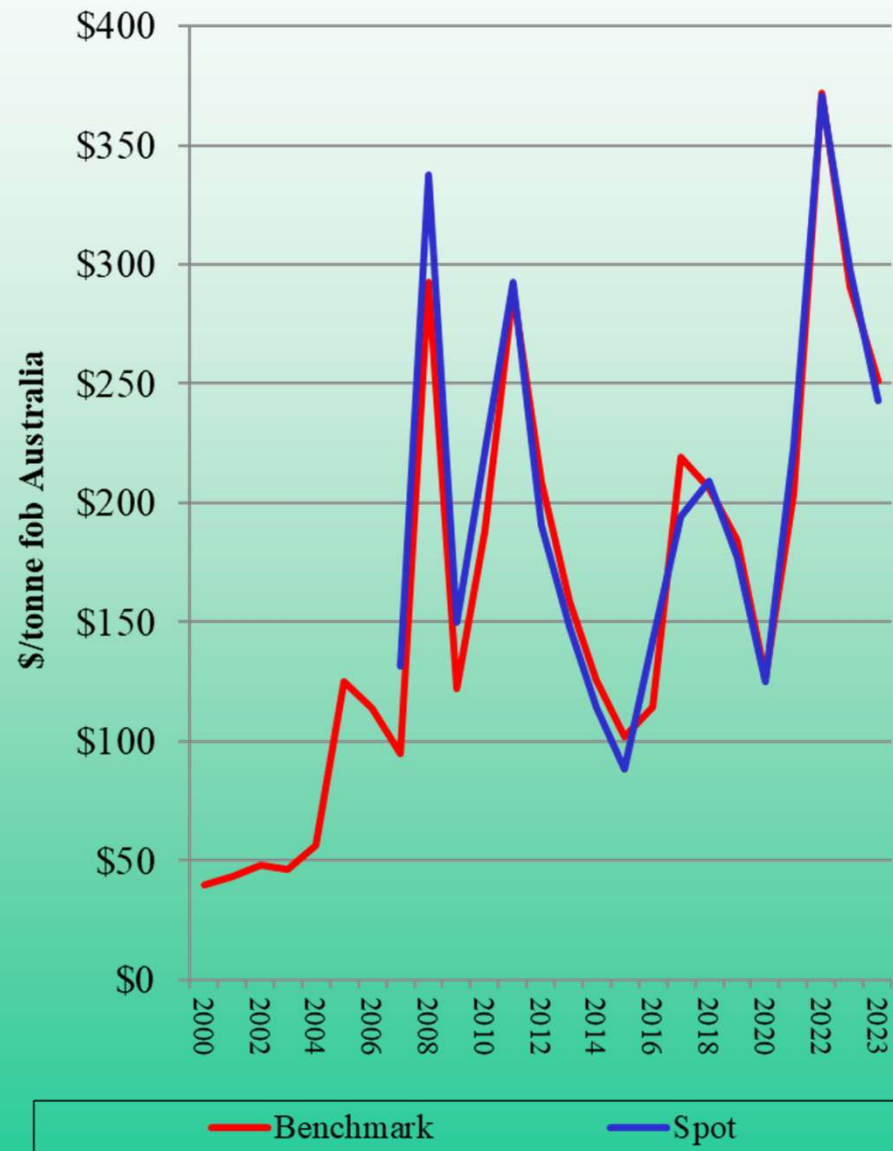
<i>Plant</i>	<i>Location</i>	<i>Total, M tpy</i>
Ahmsa	Monclova, Mexico	1.60
ArcelorMittal	Krakow, Poland	0.70
ArcelorMittal	Zenica, Bosnia & Herzegovina	0.50
ArcelorMittal	Vanderbijlpark (Batteries #6, #7), South Africa	0.35
British Steel	Scunthorpe, UK	0.60
CAP Acero	Talcahuano, Chile	0.40
Liberty Steel	Ostrava, Czech Republic	1.10
Liberty Steel	Dunaujvaros, Hungary	1.00
Liberty Steel	Whyalla, Australia	0.65
Mitsubishi Chemical	Kagawa (Batteries #2A, #2B, Japan	1.00
Nippon Steel	Kashima (Batteries #2A-2D), Japan	1.20
Tata Steel	Port Talbot, UK	0.90
US Steel	Clairton (PA) (Batteries #1-3, #15), USA	1.00
Usiminas	Ipatinga (MG) (Batteries #5-6), Brazil	0.80
<b>Total</b>		<b>11.80</b>

# Coke Battery Additions in 2023-24

<i>Plant</i>	<i>Location</i>	<i>Total, M tpy</i>
Carbones Andinos	Boyaca, Colombia	0.22
Detian Coking	Sulawesi, Indonesia	2.80
Dexin Steel	Sulawesi, Indonesia	1.50
Dinson Colliery	Hwange, Zimbabwe	0.20
Jinrui Coke	Sulawesi, Indonesia	2.60
Jinxiang	Sulawesi, Indonesia	3.90
JSW Steel	Karnataka, India	3.00
Kirloskar Ferrous	Karnataka, India	0.20
NMDC	Chhattisgarh, India	1.60
Posco	Pohang, South Korea	1.50
Risun Wei Shan	Sulawesi, Indonesia	3.20
Shyam Metalics	West Bengal, India	0.30
Tata Steel	Odisha, India	1.50
ZZCC	Hwange, Zimbabwe	0.18
<b>Total</b>		<b>22.07</b>

# **Coking Coal Market Overview**

# Coking Coal Pricing - Annual



- Shown are annual averages premium hard coking coal “\$/tonne fob Australia”, quarterly benchmark and spot.
- In the past 20 years or so, there have been four price “spikes”, the latest in 2021-22. But over the long term, prices have generally kept rising.
- Last year’s spot price averaged \$243/tonne fob, more than \$50/tonne down from the previous year.

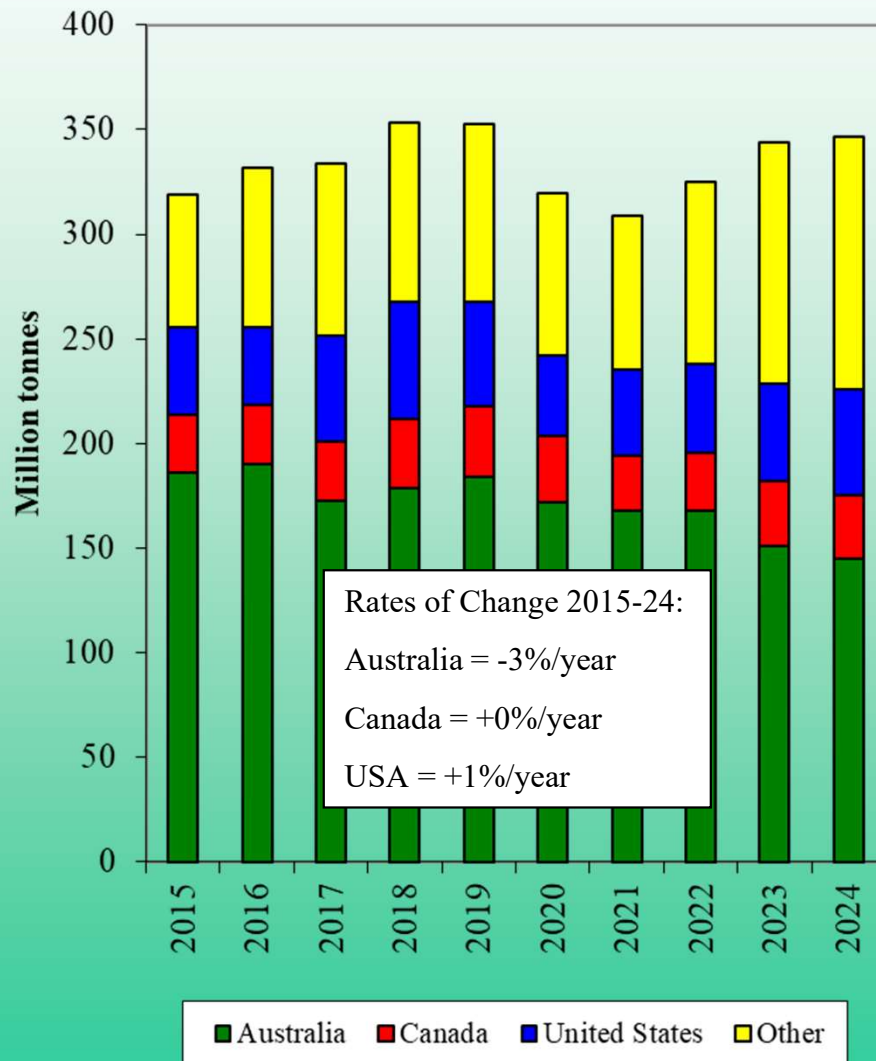


# Coke versus Coal Pricing – By Quarter from 2022



- The chart shows the coke price (cfr India) against hard coking coal price.
- In the past year, the coking coal price (Australia fob) has been abnormally higher versus the coke price.
- As a result, it has become more economic to import coke than produce it from coal in many countries.

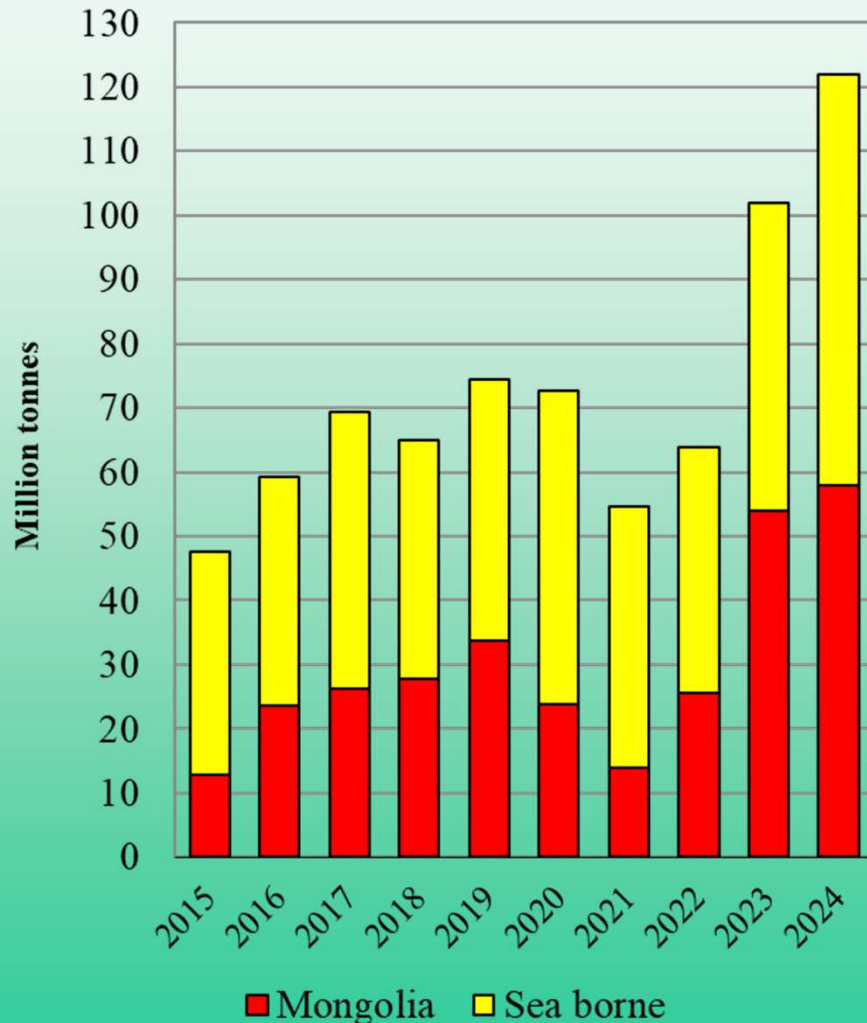
# Metallurgical Coal Exports



➤ Australia, Canada and the US collectively account for almost 70% of world metallurgical coal trade. Total trade has seen a steady increase over the past three years, the rise in exports from Mongolia being a key factor. Exports from the three primary suppliers have generally been in decline.

➤ We estimate that world trade in metallurgical coal was around 346m tonnes in 2024, 1% up from previous year.

# China's Metallurgical Coal Imports



- There has been a substantial increase in Chinese coal imports in the past two years. Part of the reason is an improvement in logistics of moving coal from neighbouring Mongolia into China.
- Another factor is low-priced coal from Russia, kept out of other markets by embargo. Very low shipments from primary sea-borne suppliers, notably Australia.
- Chinese imports of metallurgical are likely to have reached almost 120m tonnes in 2024.

# Market Outlook for 2025

Prices for coke and coking coal stabilized in the past few months, but the outlook for this year is far from positive. Further falls are a possibility. For the coke market, the build-up of Indonesian coke exports is a de-stabilizing factor. The Indian import protection measures may push Indonesian coke into other markets.

Closures of coke capacity are ongoing in the developed economies as steelmakers transition away from carbon-intensive processes. Capacity additions continue in less developed economies, most notably in Indonesia. In fact, our data suggests that capacity additions were double the level of closures in the past two years.