



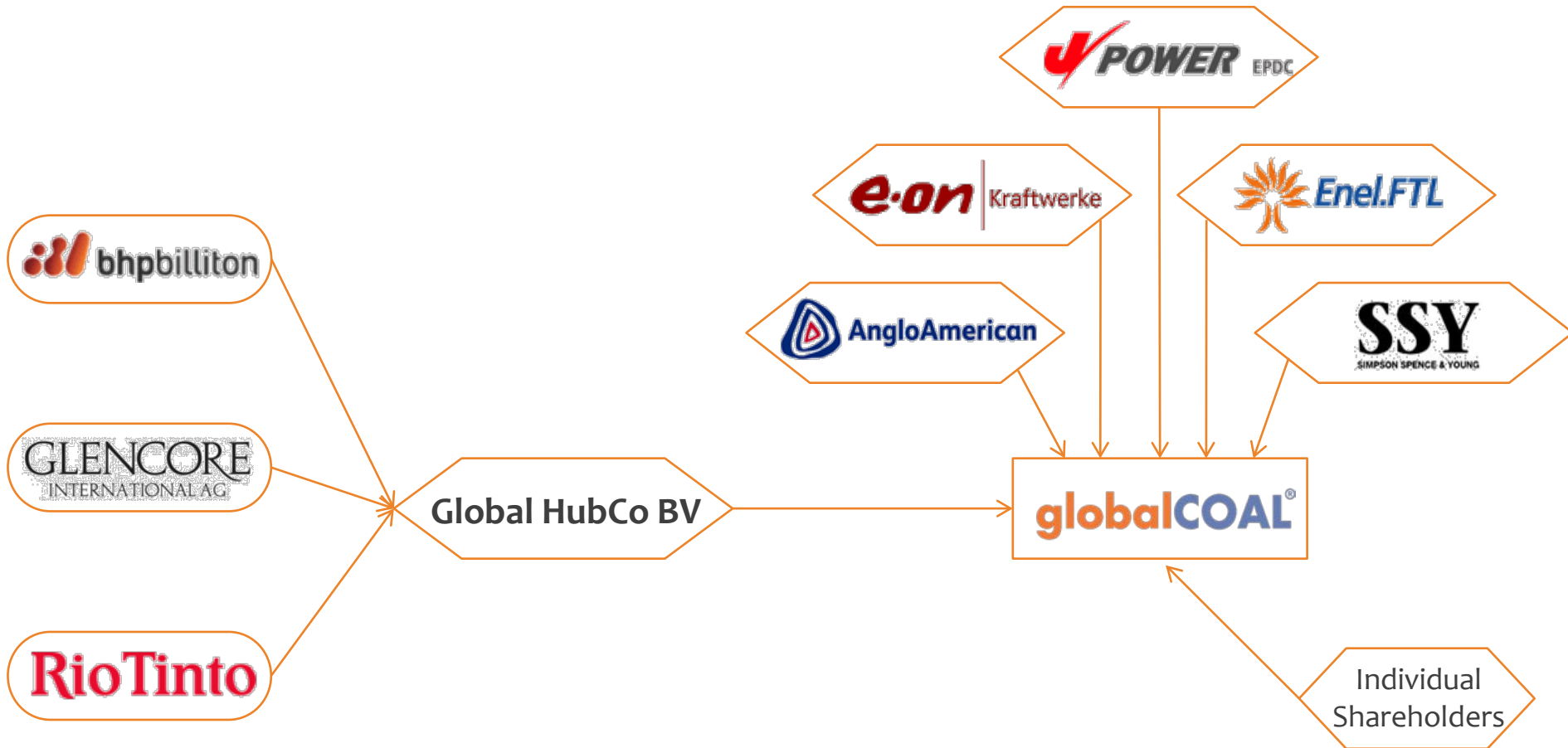
Trade patterns in the coal market

Ajay Baral, globalCOAL

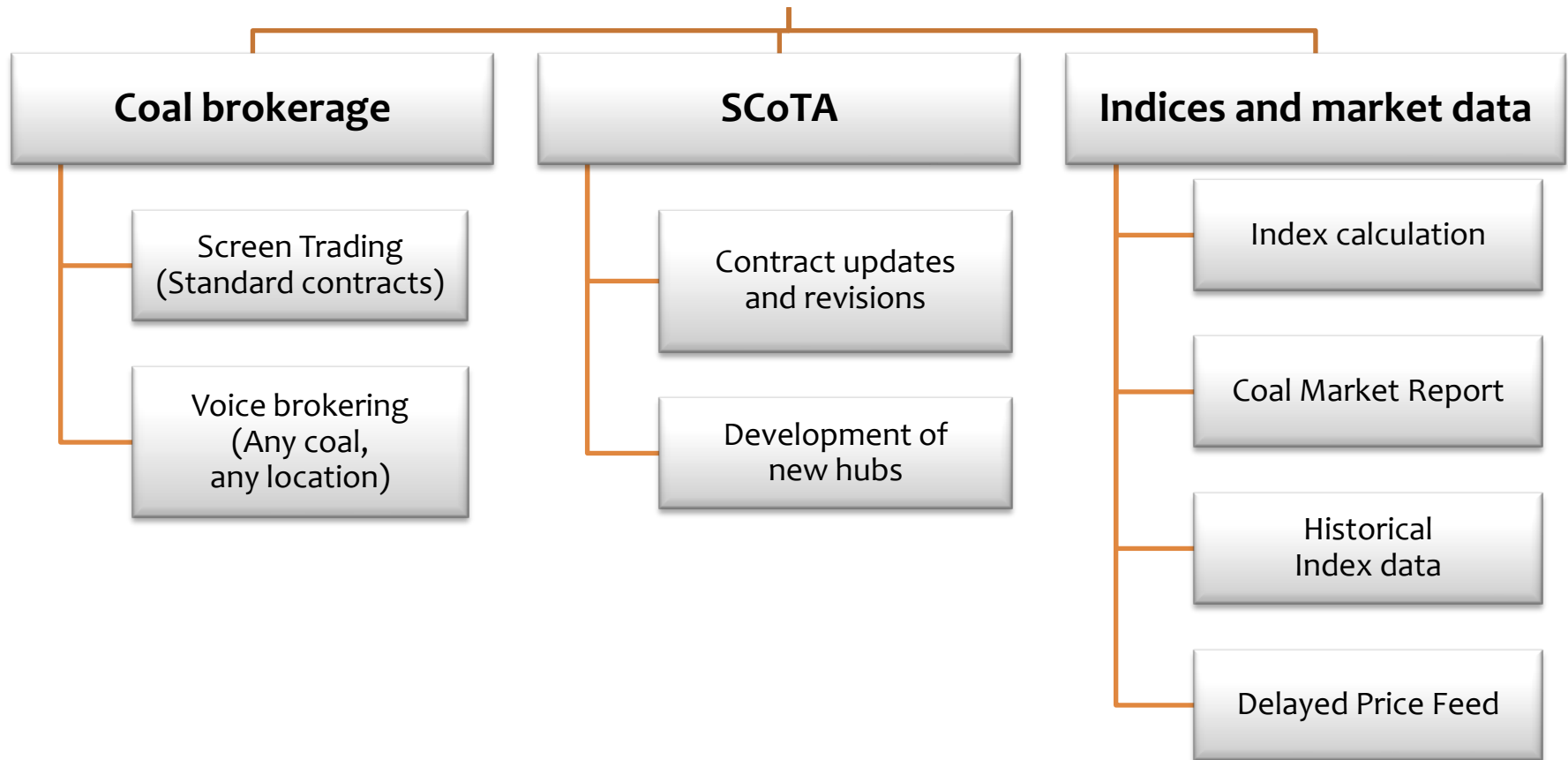
For today's discussion...

- Changes in trade flows
- Price trends in the thermal coal market
- The derivatives market
- SCoTA Overview
- The NEWC index – Asia's price benchmark
- Conclusions

globalCOAL ownership



What does globalCOAL do?

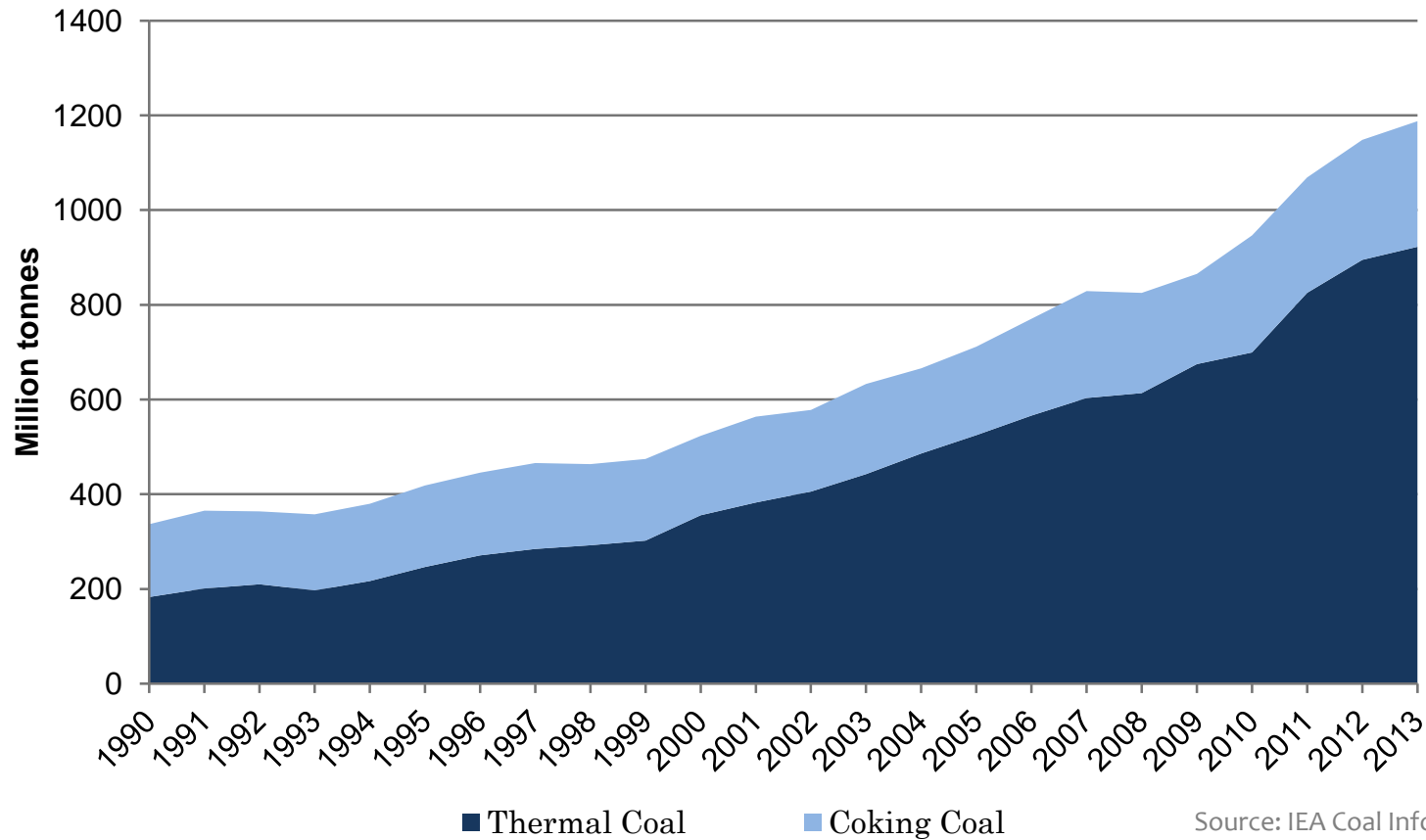




Changes in Trade Flows: The Exporters

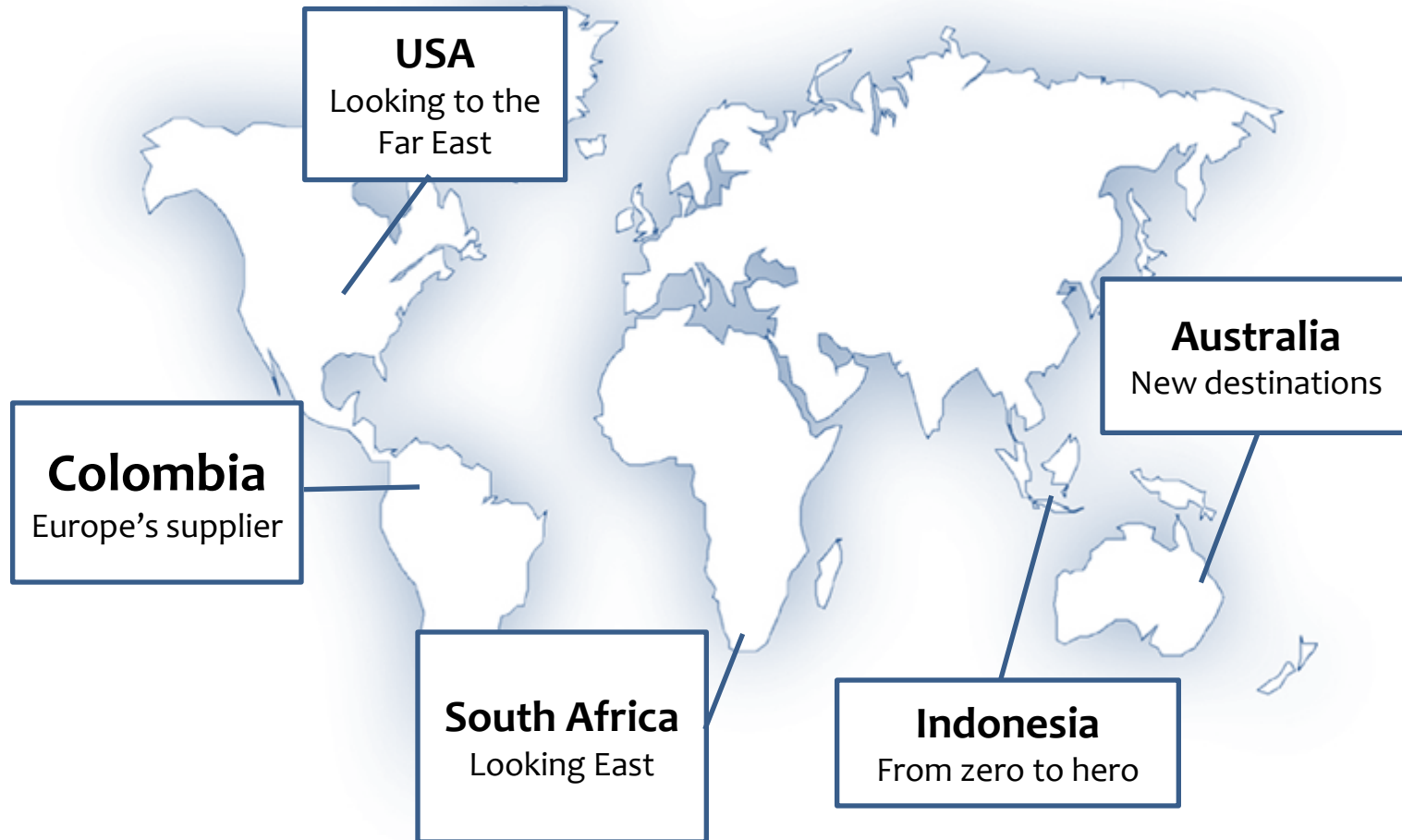
The Seaborne Coal Market

Seaborne Coal Volumes 1990-2013 (Mt)



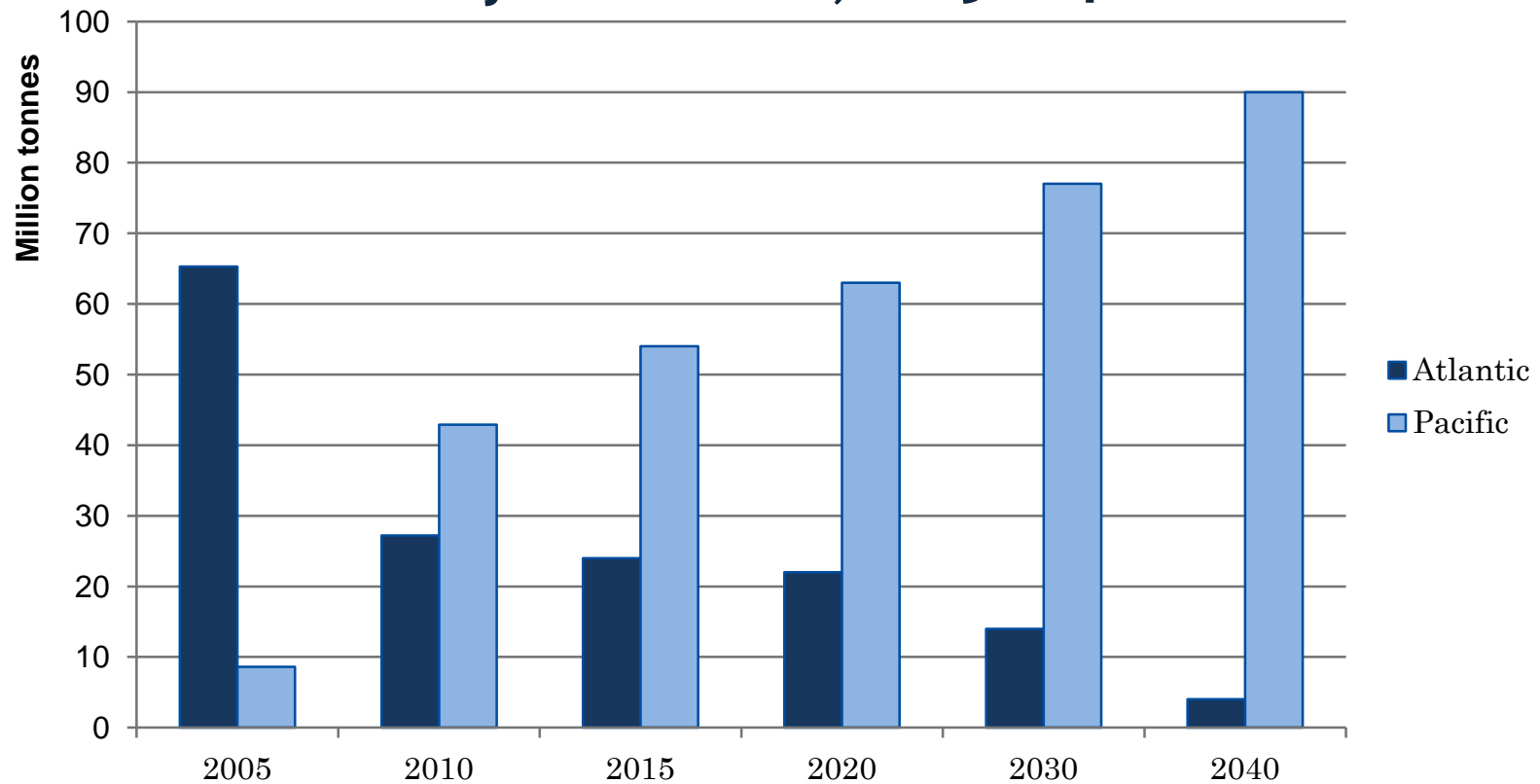
Source: IEA Coal Information (2014)

Major Exporters



South Africa turns to the East

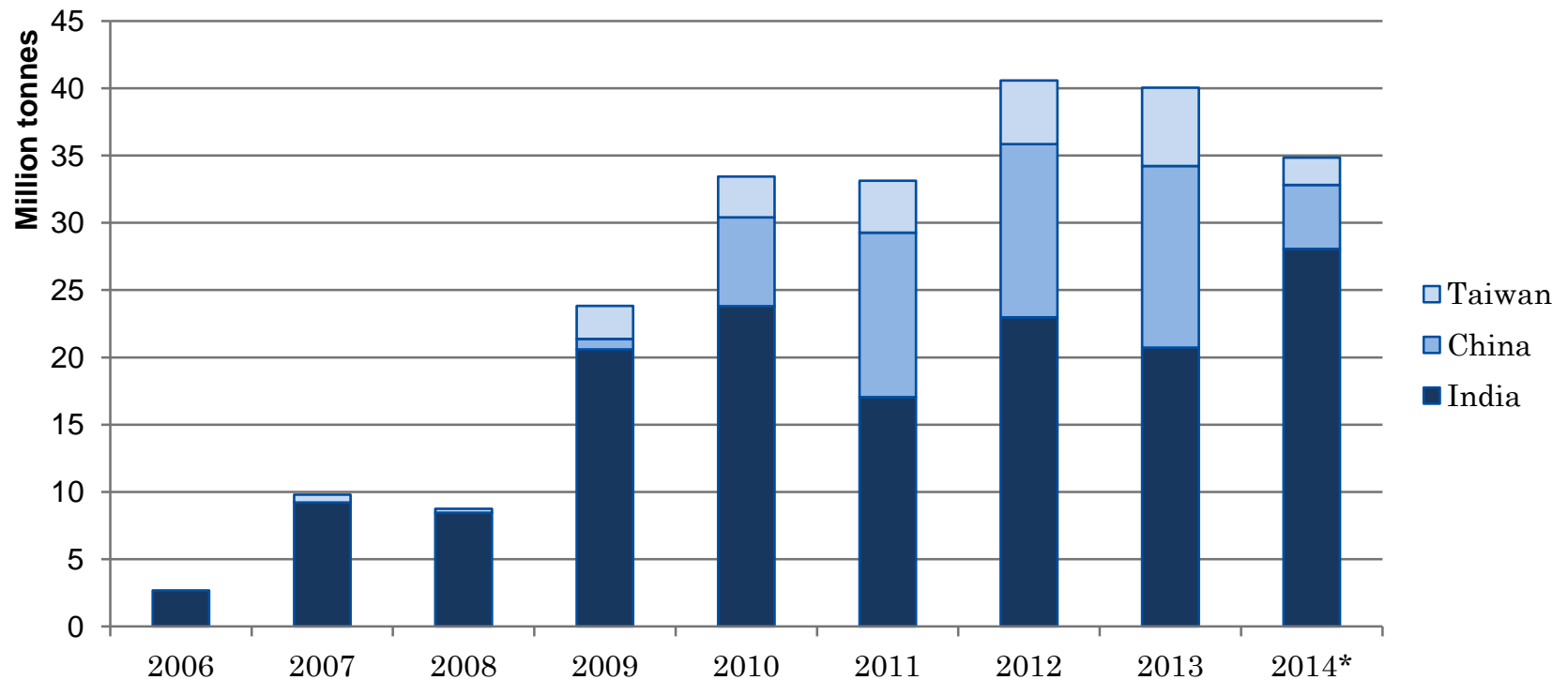
Forecasted RBCT Thermal Coal Exports by Destination, 2005-2040



Sources: globalCOAL, IHS McCloskey

South Africa turns to the East

RBCT Thermal Coal Exports to Key Asian Destinations, 2006-2014

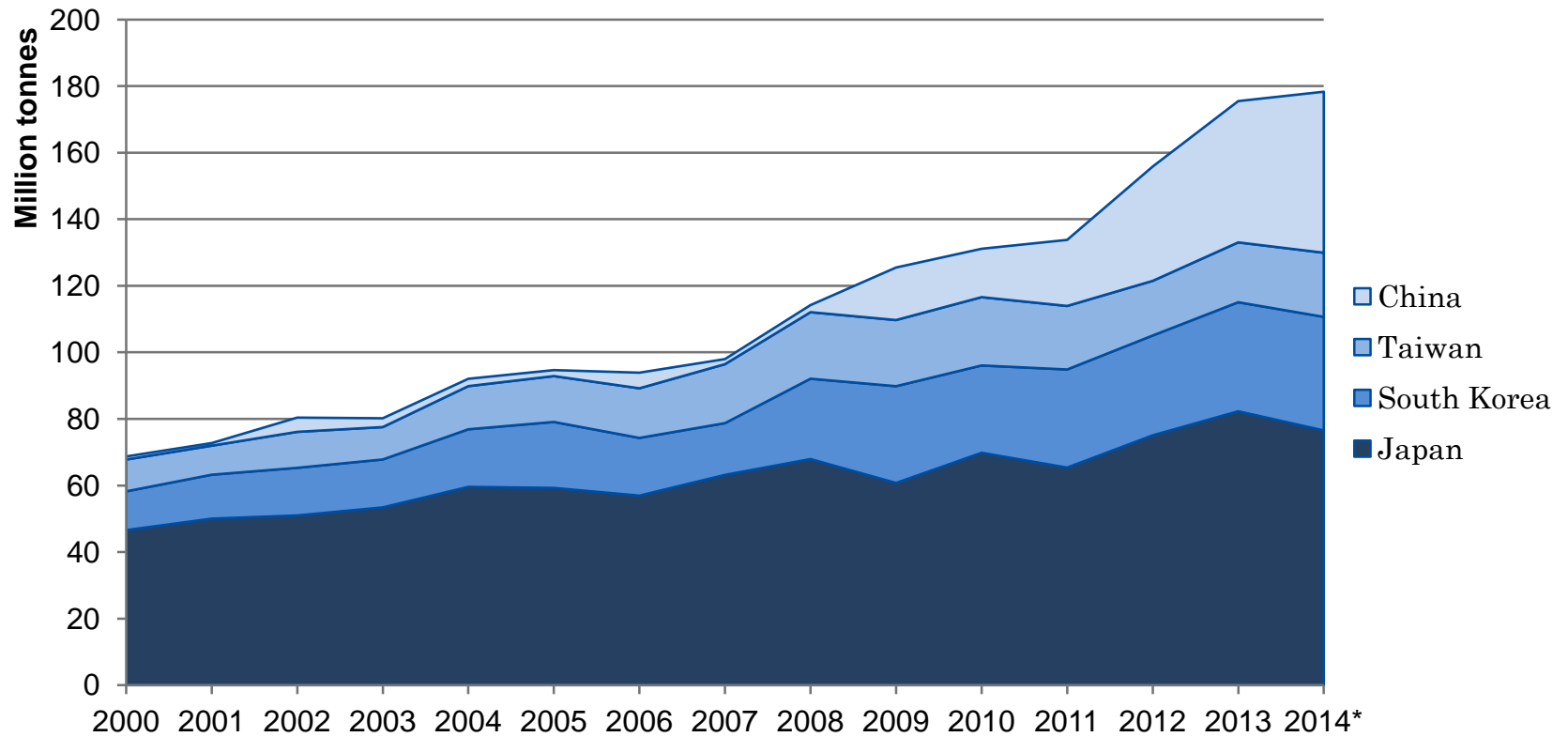


*2014 annualised from Aug'14

Sources: globalCOAL, IHS McCloskey

Australia Diversifies

Australian Thermal Coal Exports by Major Asian Destination, 2000-2014

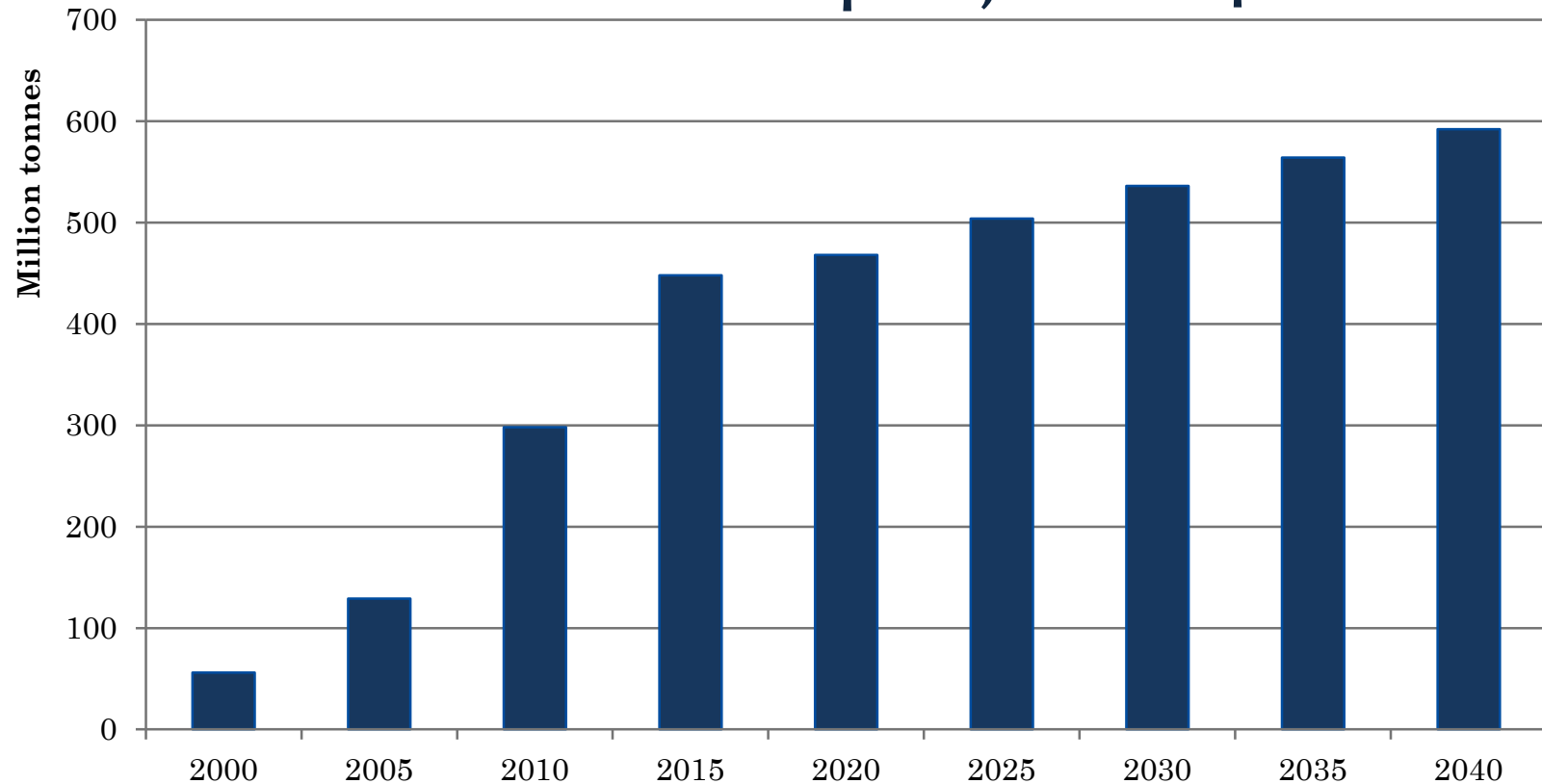


*2014 annualised from Aug'14

Sources: globalCOAL, IHS McCloskey

Where to for Indonesia?

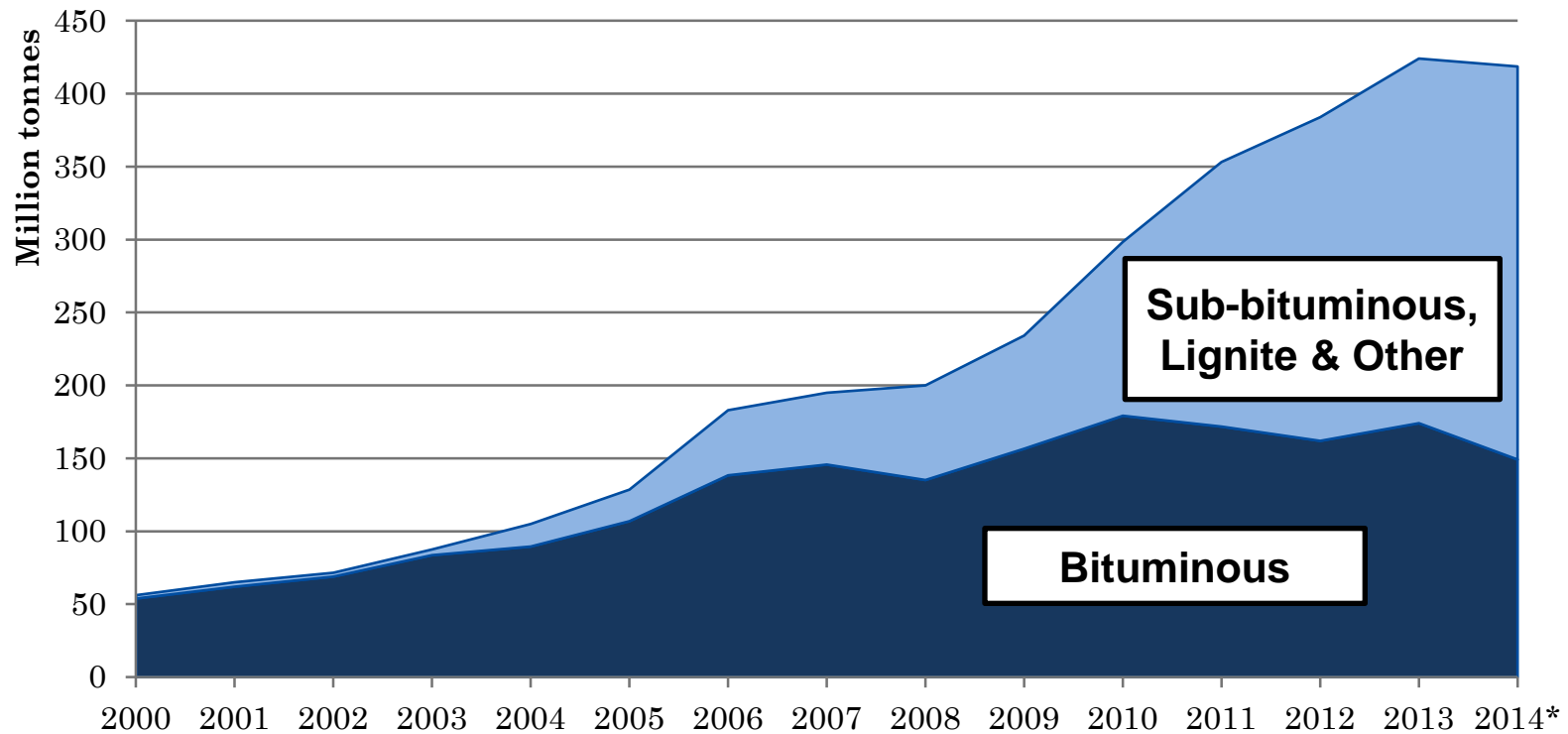
Forecasted Growth of Total Indonesian Coal Exports, 2000-2040



Sources: globalCOAL, IHS McCloskey

Where to for Indonesia?

Indonesian Coal Exports by Product, 2000-2014

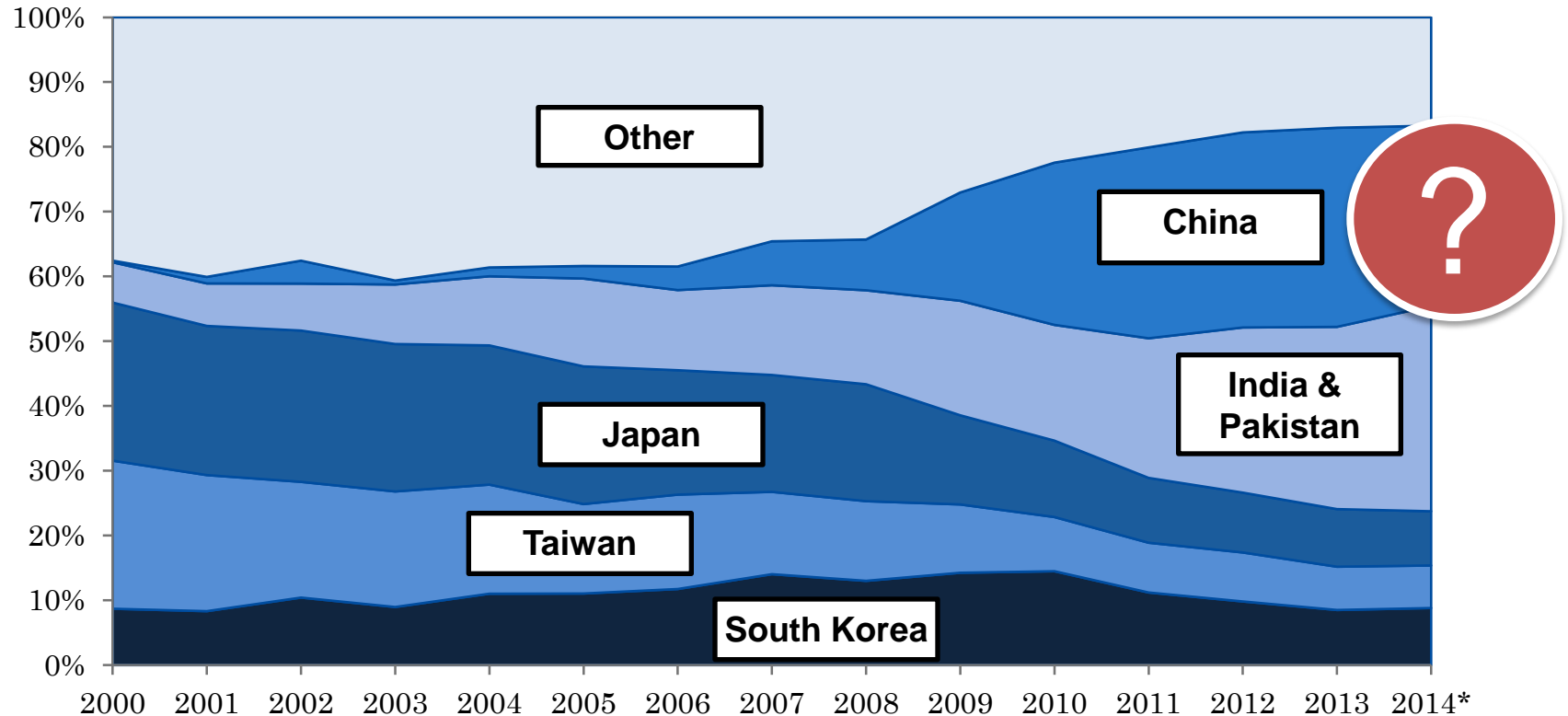


*2014 annualised from Jun'14

Sources: globalCOAL, IHS McCloskey

Where to for Indonesia?

Indonesian Coal Exports by destination, 2000-2014



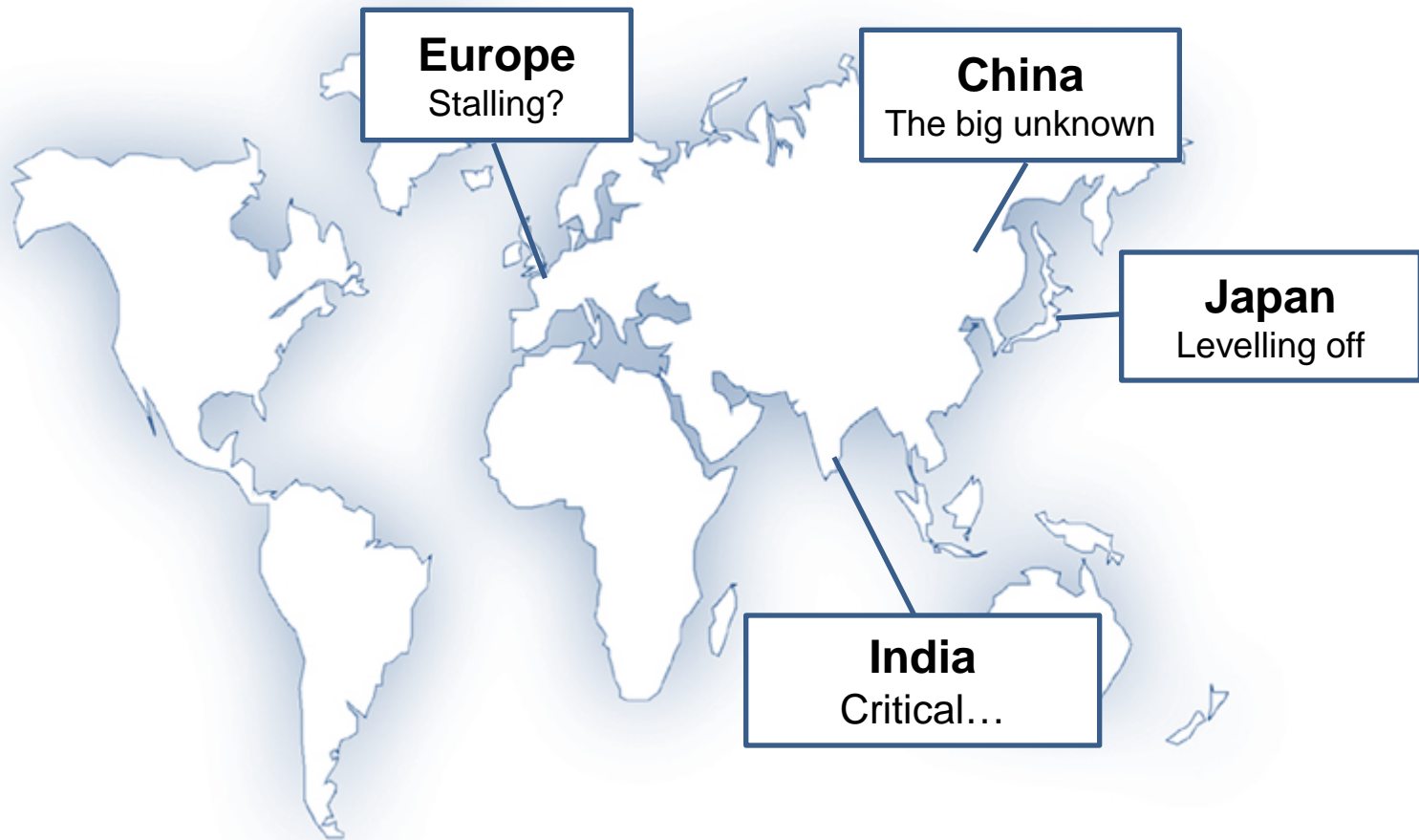
*2014 annualised from Jun'14

Sources: globalCOAL, IHS McCloskey



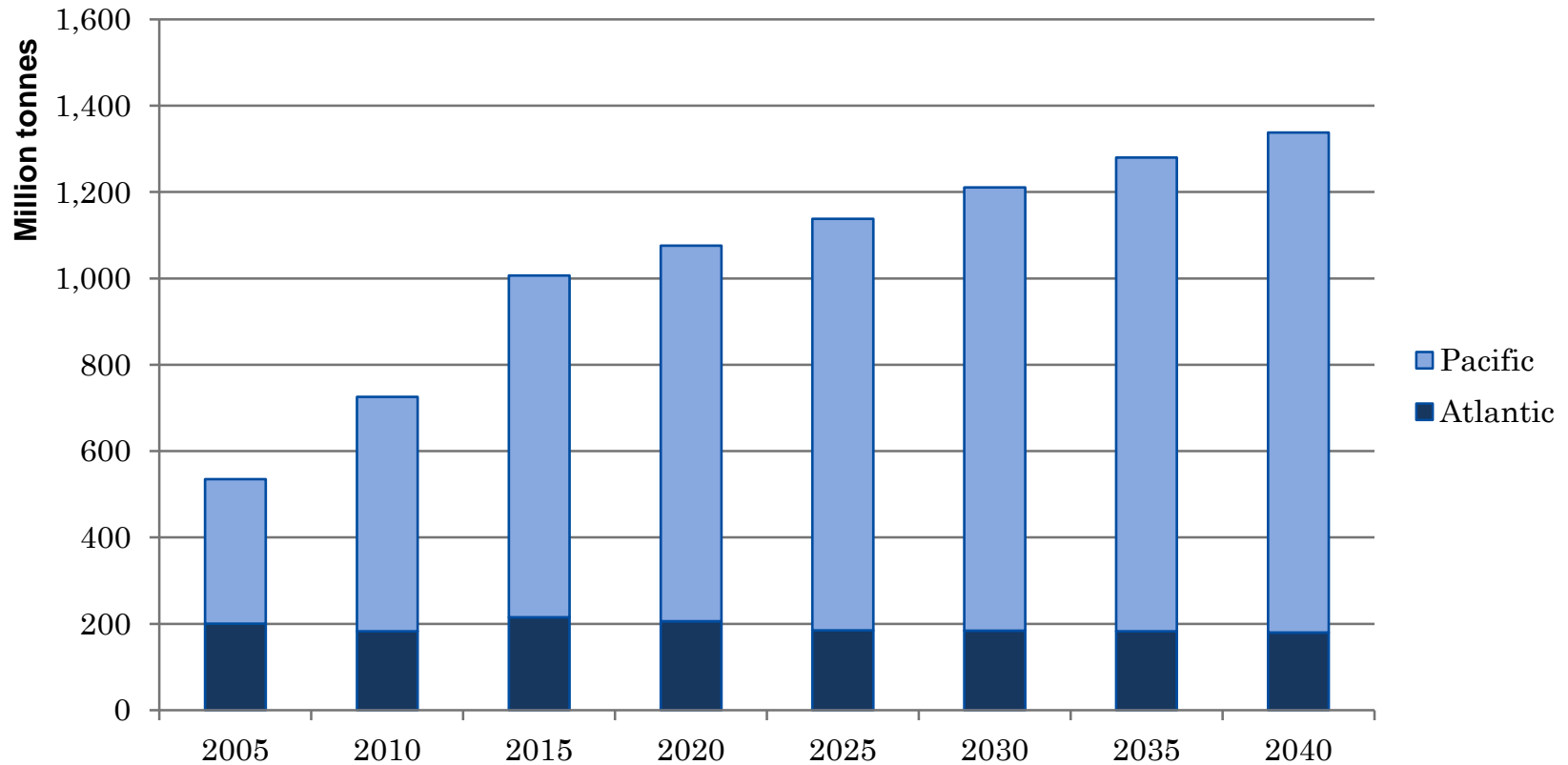
Changes in Trade Flows: The Importers

Major Importers



Europe Stalls

Atlantic vs Pacific Steam Coal Imports, 2005-2040



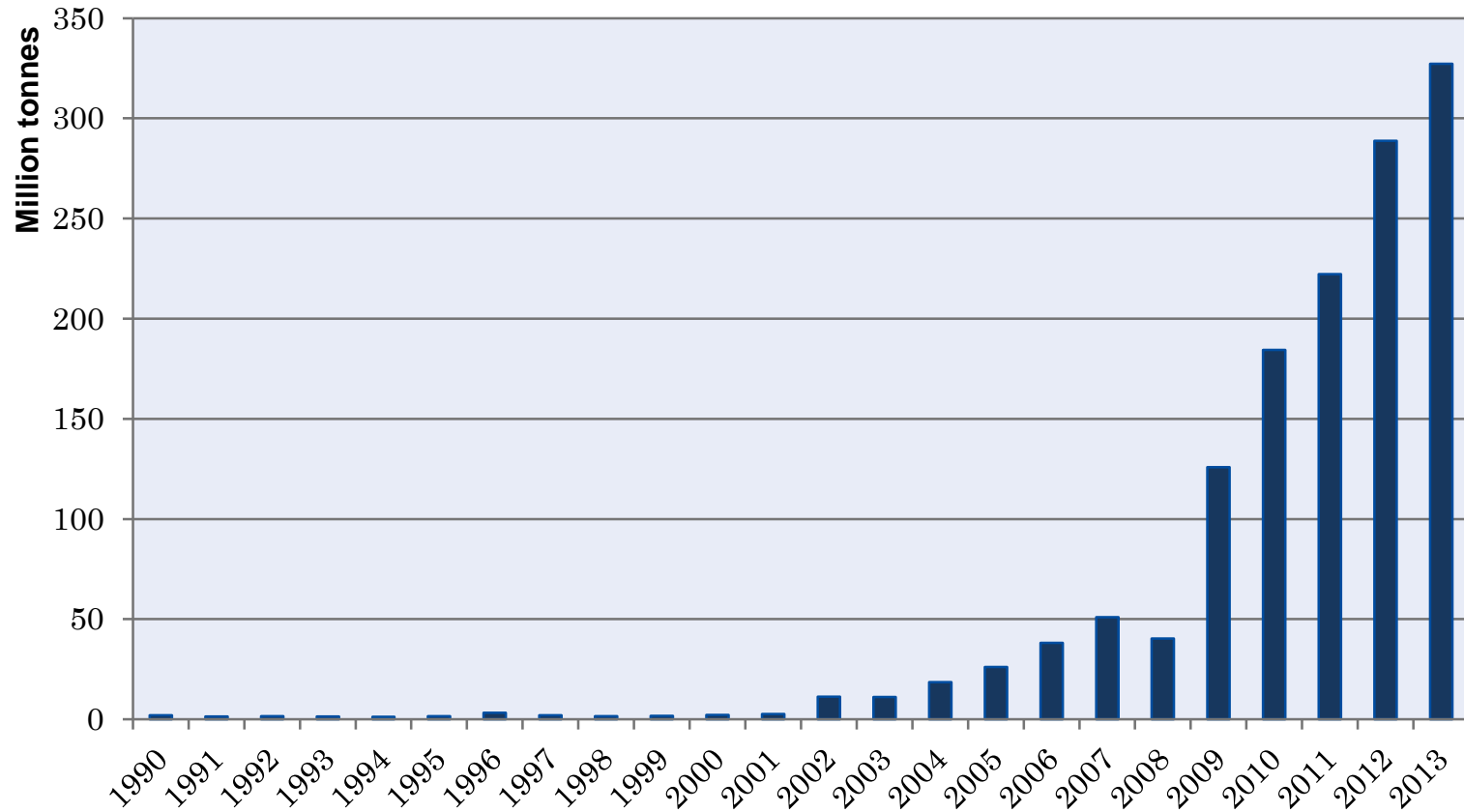
Sources: globalCOAL, Euracoal, IHS McCloskey

China

- The largest producer of coal
- The largest consumer of coal
- Imports are marginal compared to consumption (7.6% in 2013) but have huge impact on international market
- Unlike India, China doesn't have a coal deficit
- Imports to arbitrage prices between domestic and international coal

China's Coal Imports

All Coals, 1990-2013 (Mt)



Source: IEA Coal Information (2014)

The Future for Chinese Coal Imports

- Ever changing landscape
- Uncertainty over new regulations affecting imported coal
- Likely that China will impose strict limits on trace elements in imported coal
- Major exemptions (eg. Indonesia)
- Uncertain impact



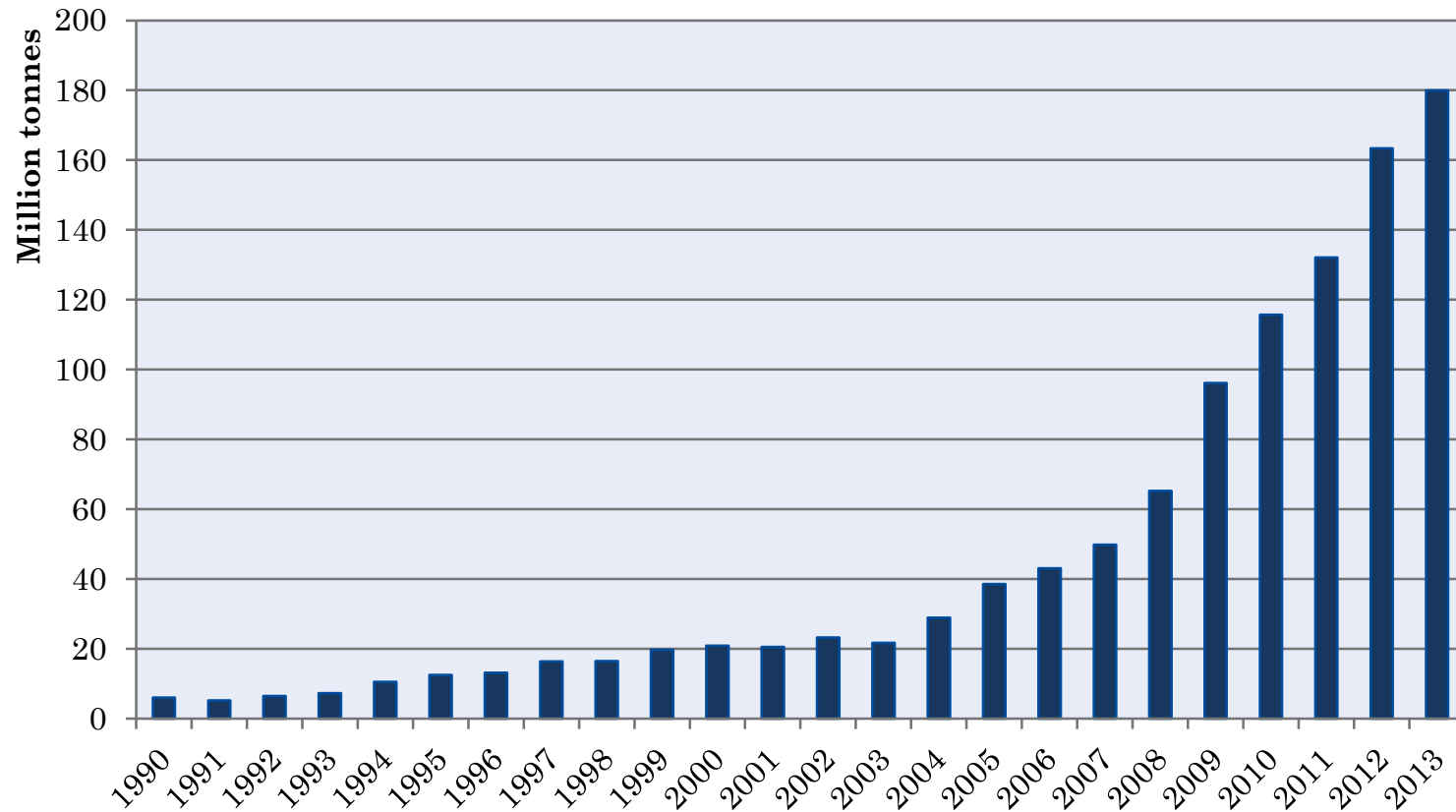
<https://www.wisdemprouducts.com/images/products/legacy/large/70270.jpg>

India

- Large resources, large production but limited growth in extractive capacity
- Indigenous resource also tends to be far from demand centres
- Coal imports are critical to make up shortfall
- Assuming GDP growth rate of 8%, imports will top 350Mt/annum within 20 years

India

All Coal Imports, 1990-2013 (Mt)



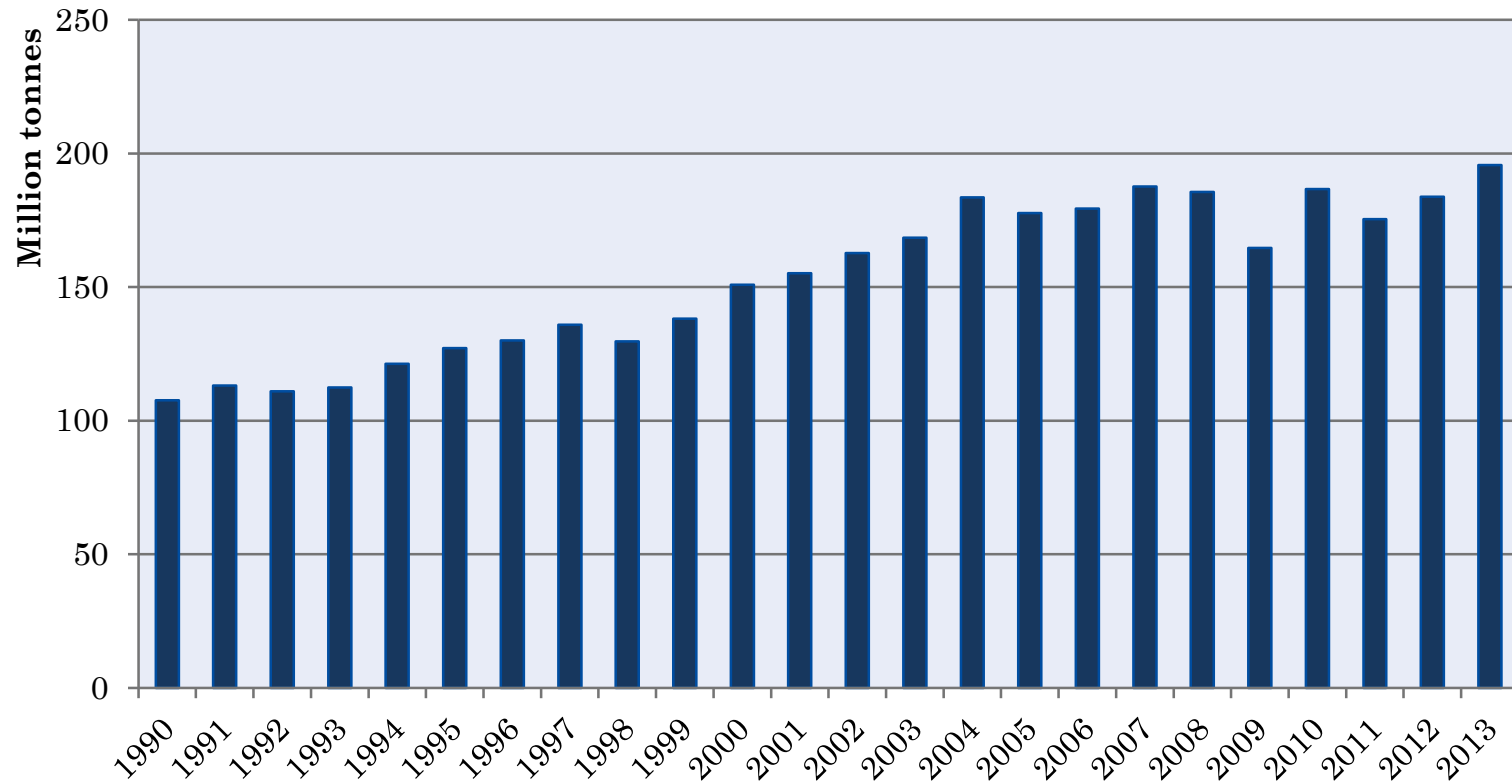
Source: IEA Coal Information (2014)

Japan's Coal Imports

- Historically the largest thermal coal importer
- Surpassed by China in 2010
- Moving away from nuclear power after Fukushima disaster of 2011
- Coal demand expected to level out

Japan

All Coal Imports, 1990-2013 (Mt)



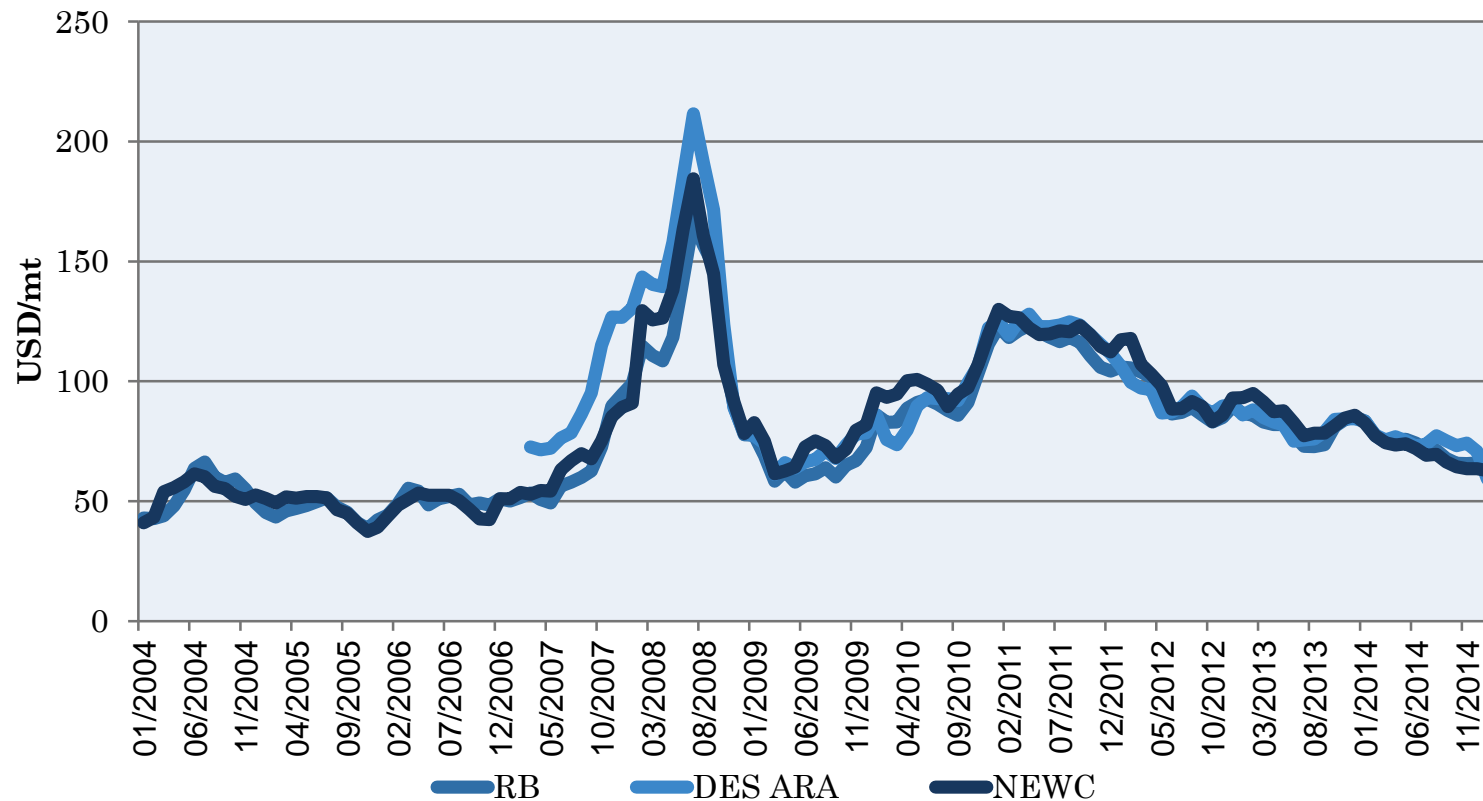
Source: IEA Coal Information (2014)



Price Trends in Seaborne Markets

Price Trend – Last Decade

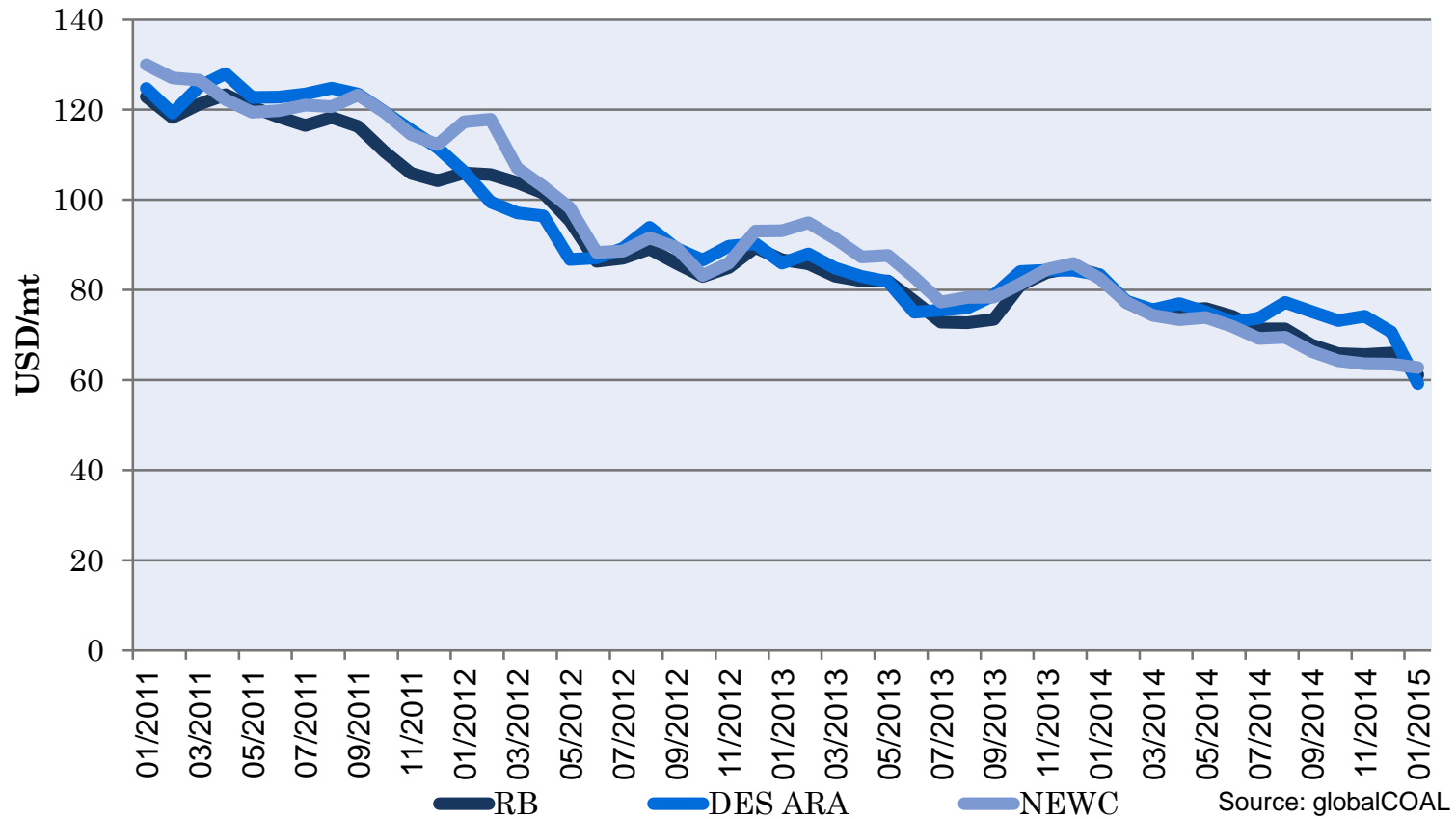
globalCOAL Indices, 2004-2014 (USD/mt)

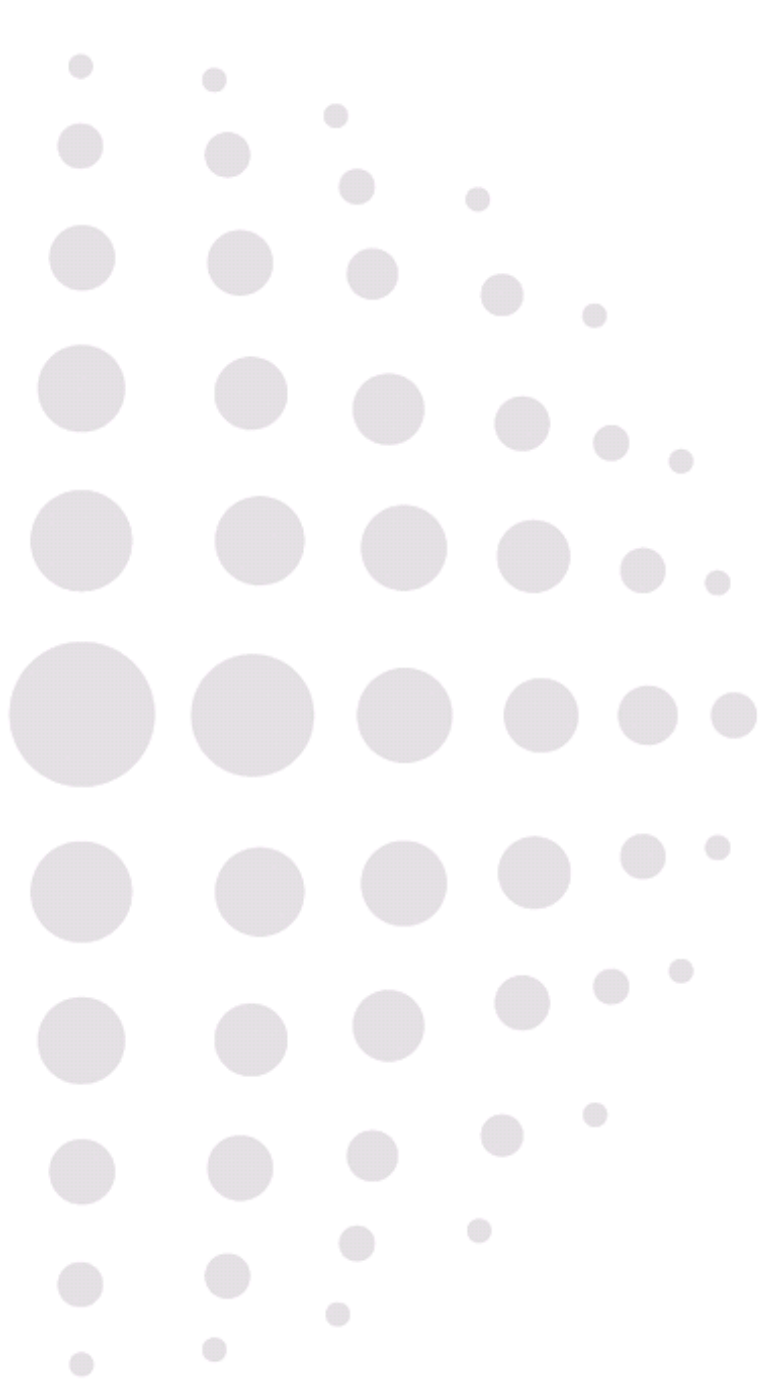


Source: globalCOAL

Price Trend – Last 3 years

globalCOAL Indices, 2011-2014 (USD/mt)





The Derivatives Market

Building Blocks of a Derivative Market

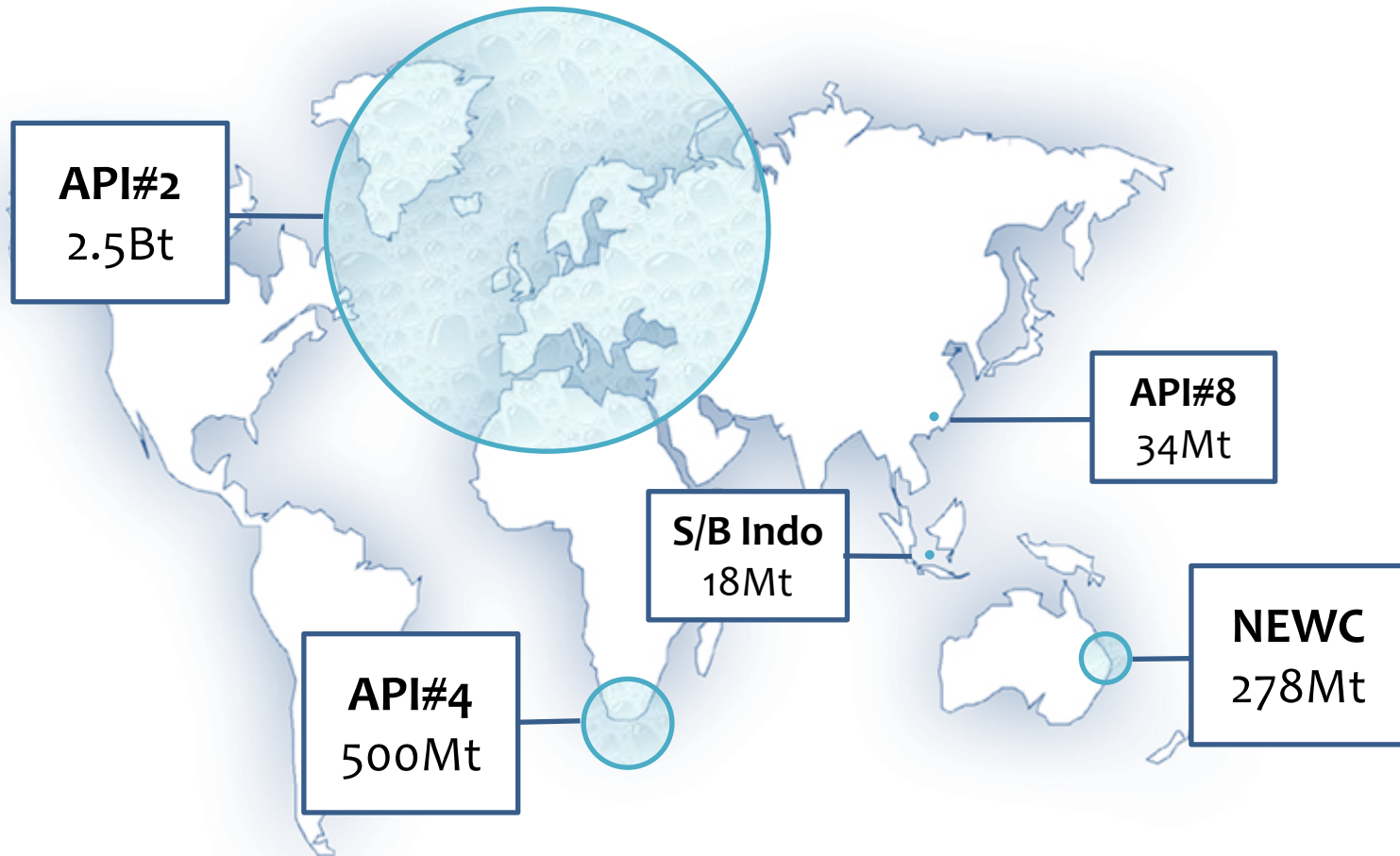
Standard Contract

Screen Trading

Market Data

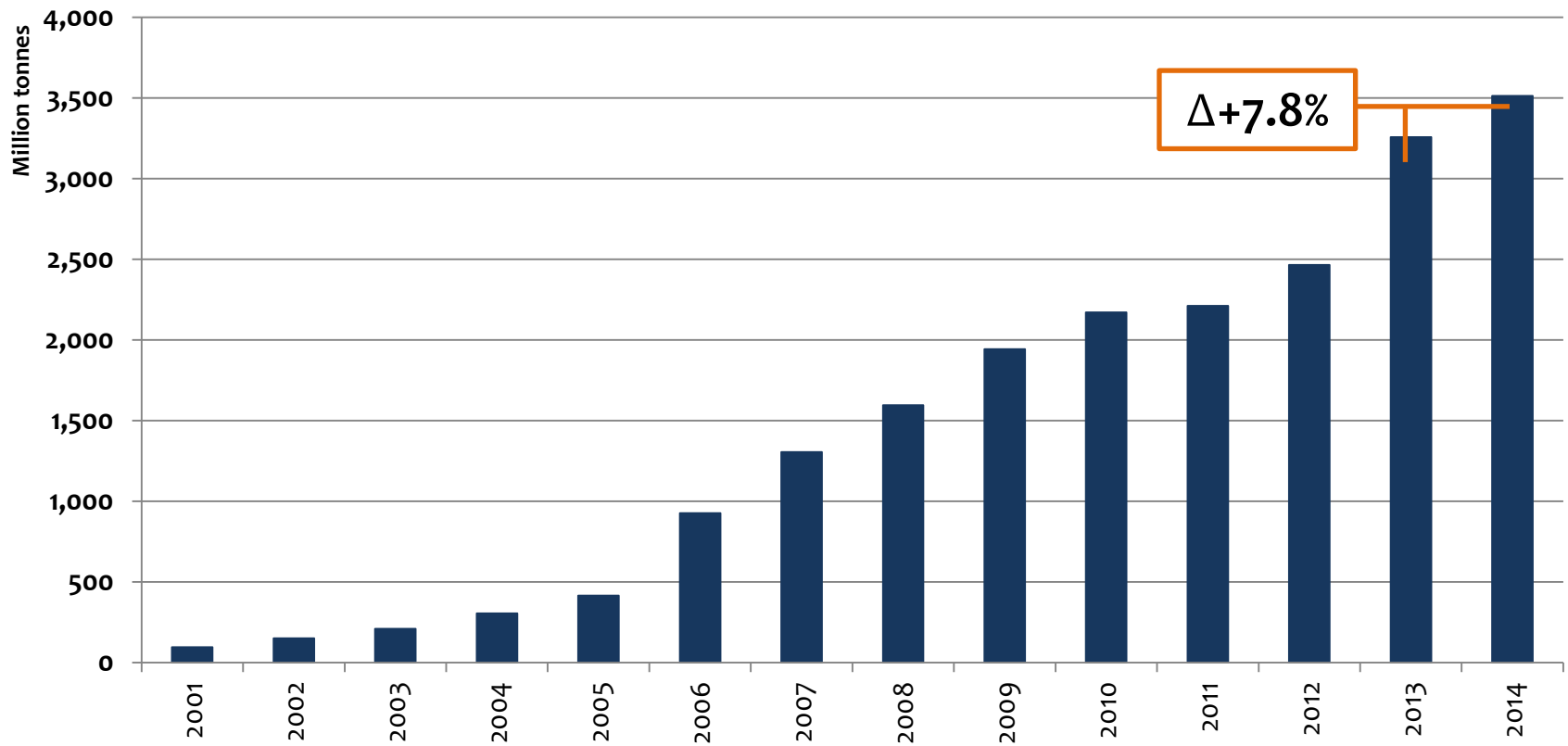
Market Liquidity & Transparency

2014 Derivatives Market Snapshot



Significant growth in recent years

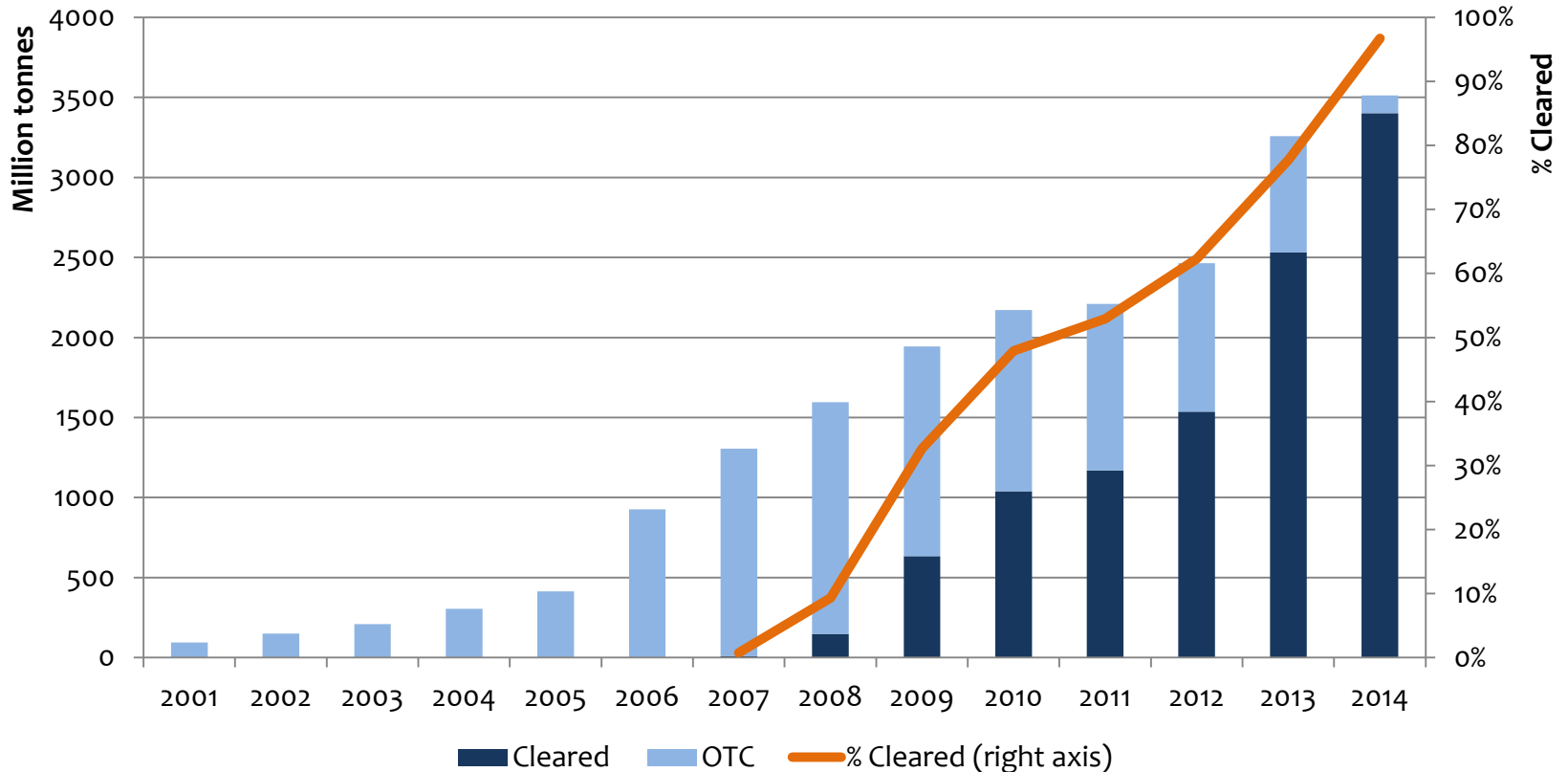
Growth in Coal Derivatives Volume, 2001-2014



Sources: globalCOAL, ICE, CME, SGX, EEX, FSA, LEBA

Growth in clearing vs OTC

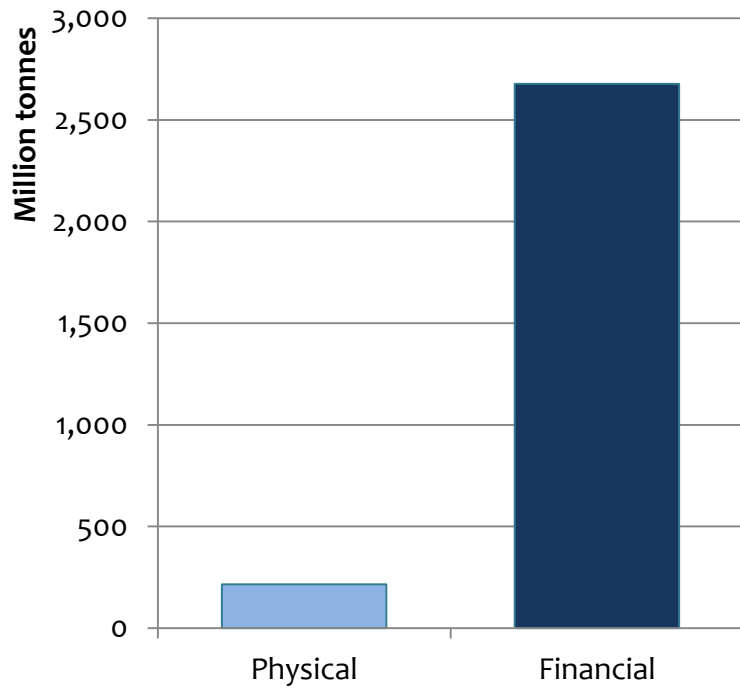
Cleared and OTC Derivatives Volumes Growth, 2001-2014



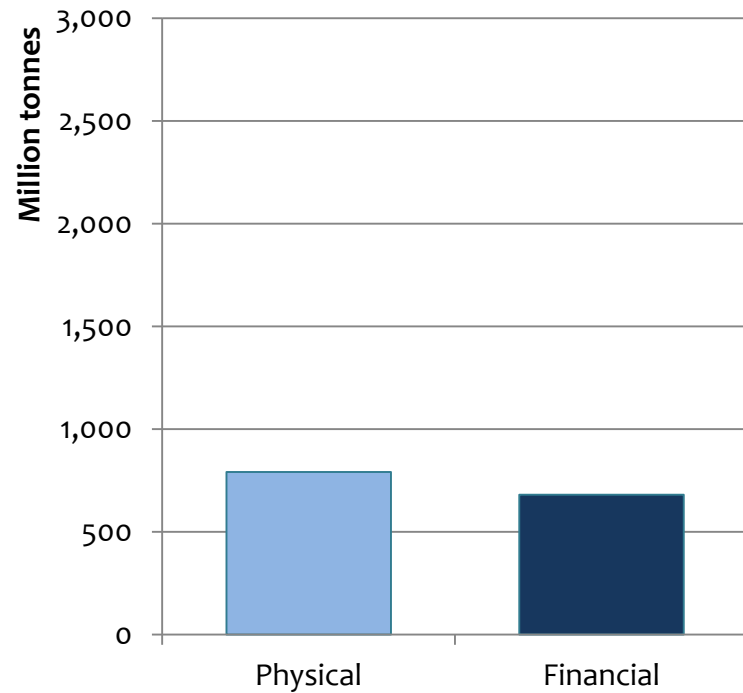
Sources: globalCOAL, ICE, CME, SGX, EEX, FSA, LEBA

Pacific lag

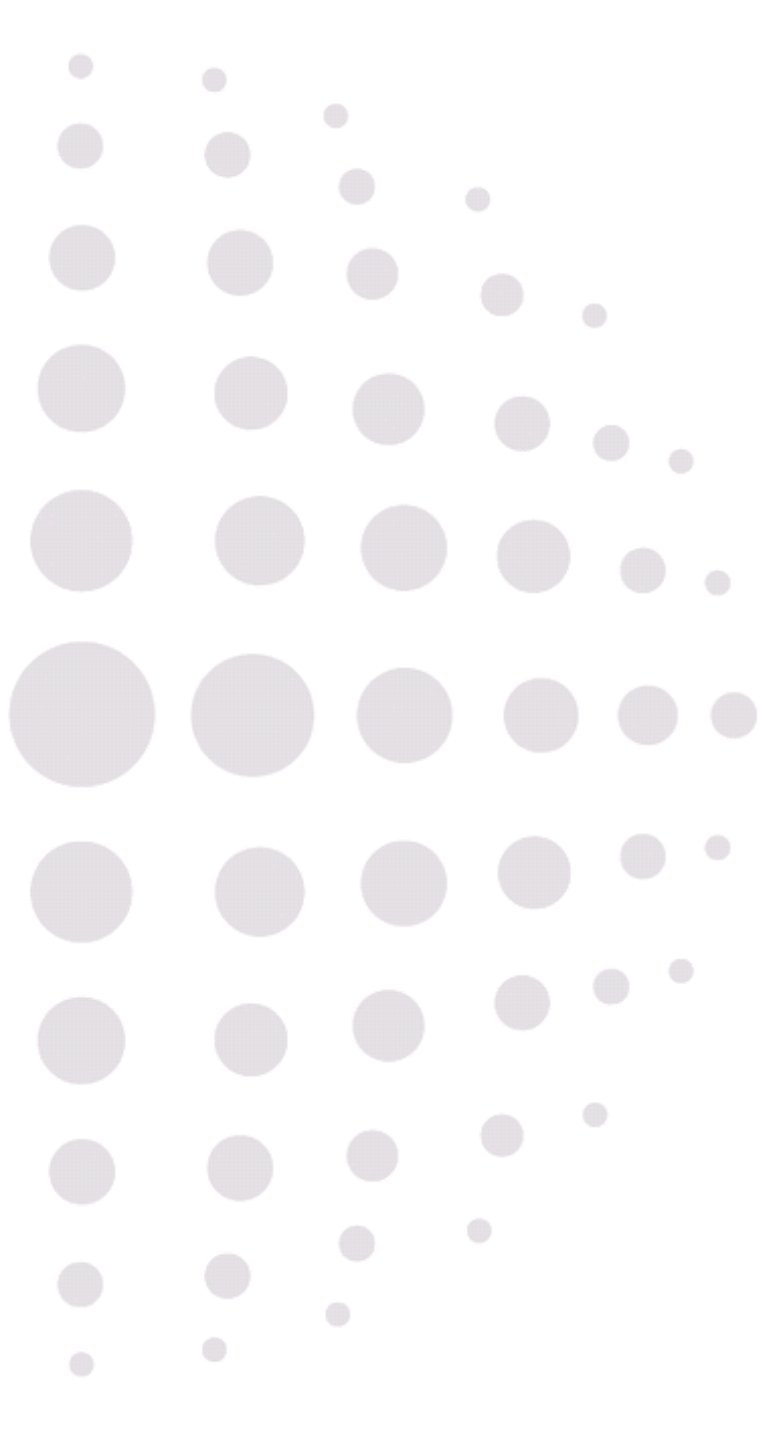
Atlantic Market



Pacific Market



Sources: globalCOAL, ICE, CME, SGX, LCH, Euracoal

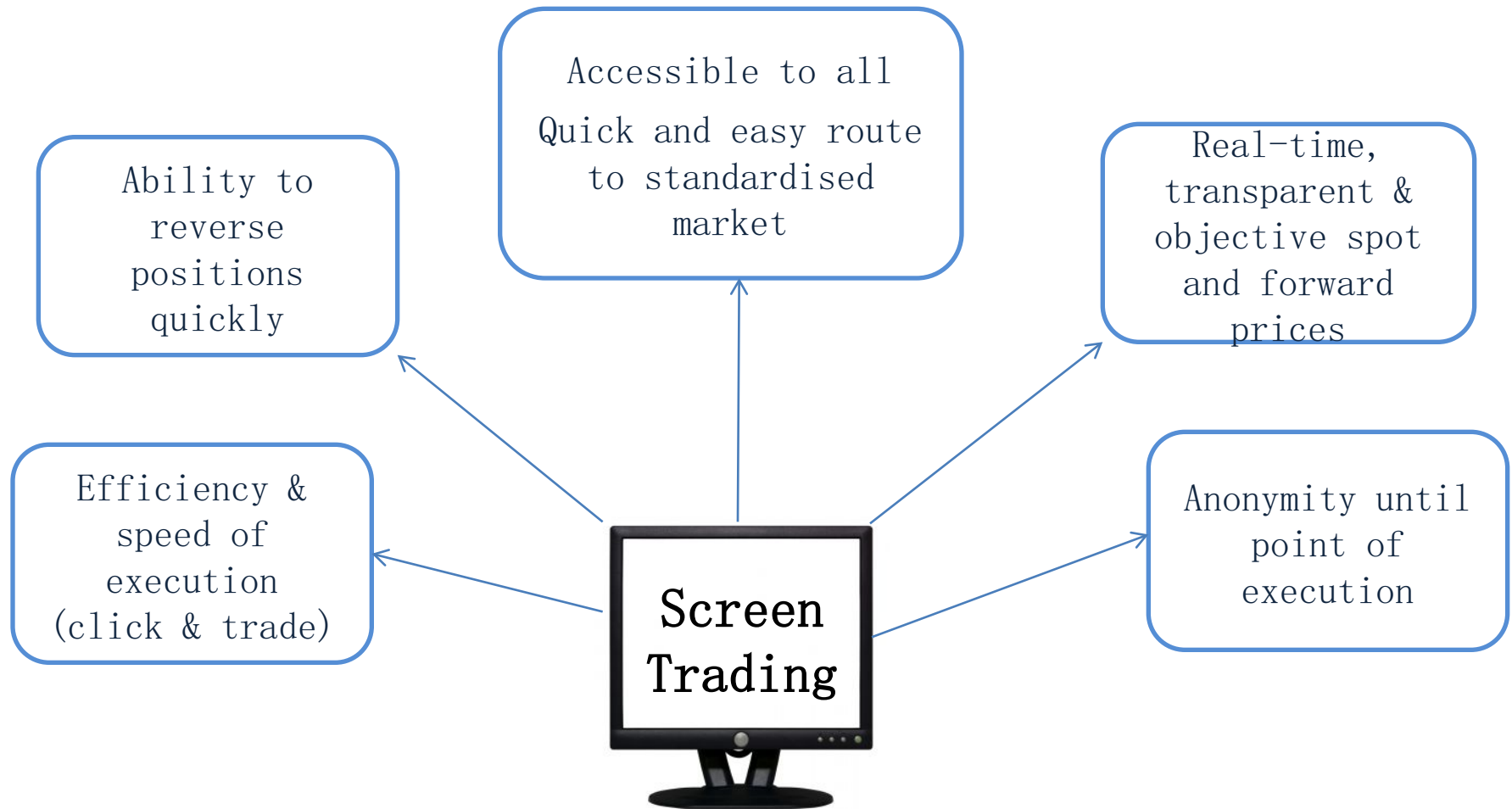


SCoTA Overview

A brief history of SCoTA...

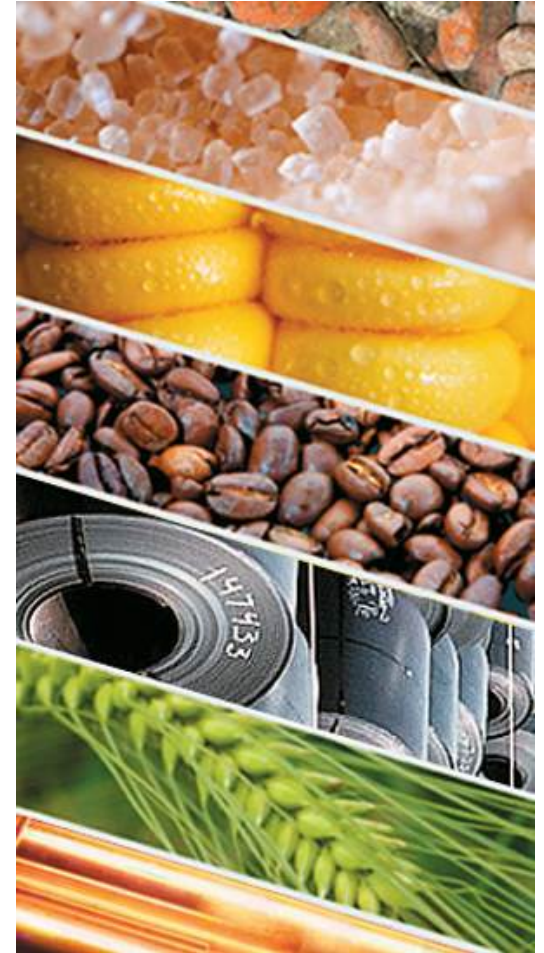
- Following the collapse of ENRON in 2001, the thermal coal market demanded reliable, transparent thermal coal pricing
- globalCOAL was established in 2001 by coal market producers, consumers and traders to establish a standardised coal market:
 - Introduced a standardised coal trading agreement: SCoTA
 - Online trading platform to facilitate the trade of standardised seaborne thermal coal, with all trades underlied by SCoTA
 - Pricing data derived from the platform provided objective, transparent price points to the market for the first time

Benefits of Standardised Screen Trading



What defines a commodity market?

- The product is traded without qualitative differentiation
- Negotiations are focussed on price rather than quality
- The price is international and fluctuates on global supply / demand
- The product is traded in a transparent market
- There is an active spot and risk management market



Is coal a commodity?

- **Is it traded without qualitative differentiation?**
 - ✓ Yes; SCoTA defines standard quality parameters => pools of liquidity form around most commonly traded hubs
- **Are negotiations focussed on price rather than quality?**
 - ✓ Yes; Indices for the main hubs NEWC, RB & ARA give clear price markers
- **Is the price international and fluctuating on supply/demand?**
 - ✓ Yes; market participants trade coal globally
- **Is the product traded in a transparent market?**
 - ✓ Yes; bids, offers and trades on gC are communicated to the market
- **Is there an active spot and risk management market?**

Who uses SCoTA?

Principals

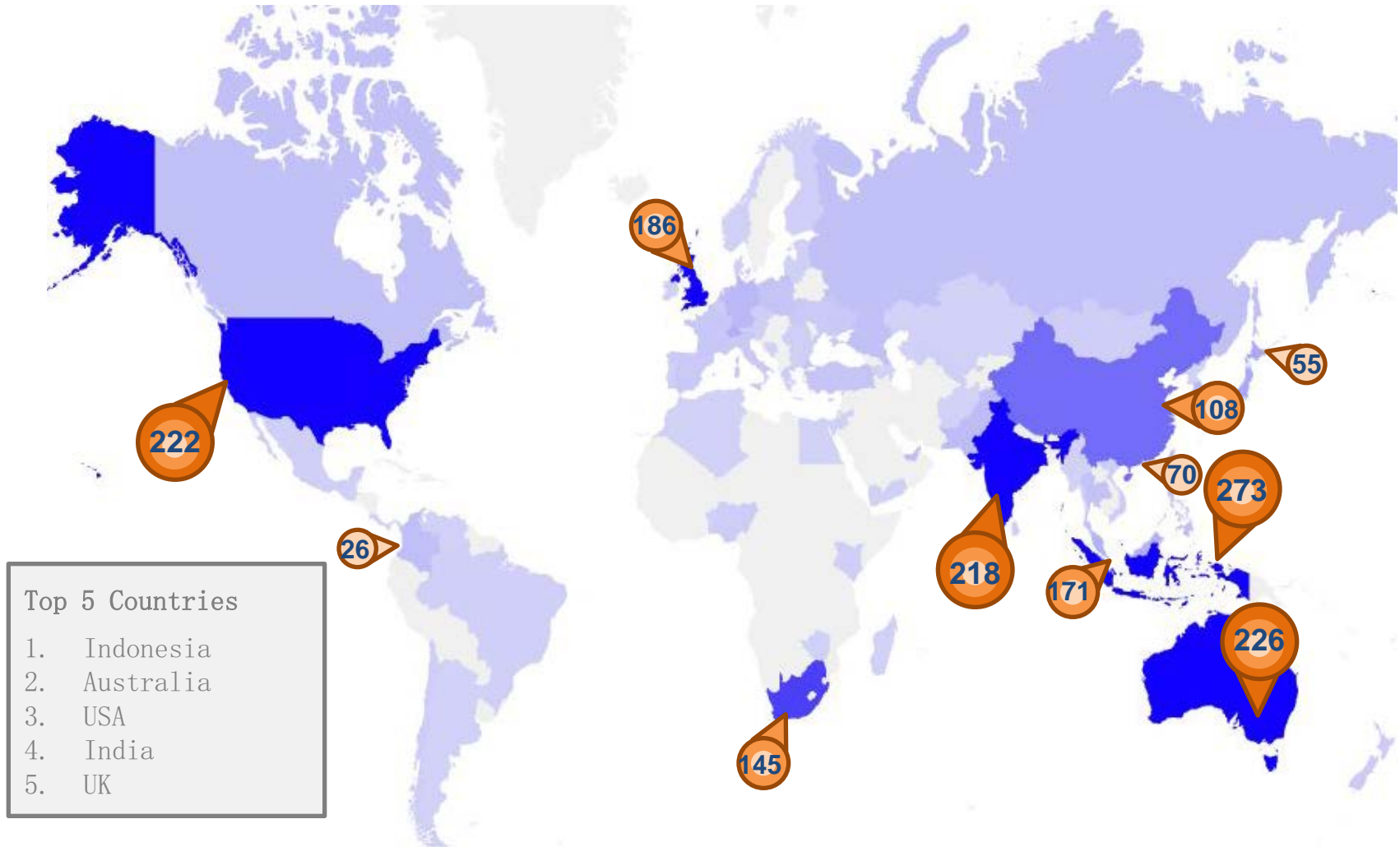
- Utilities
- Miners
- Physical coal traders
- Financial institutions

OTC Brokers

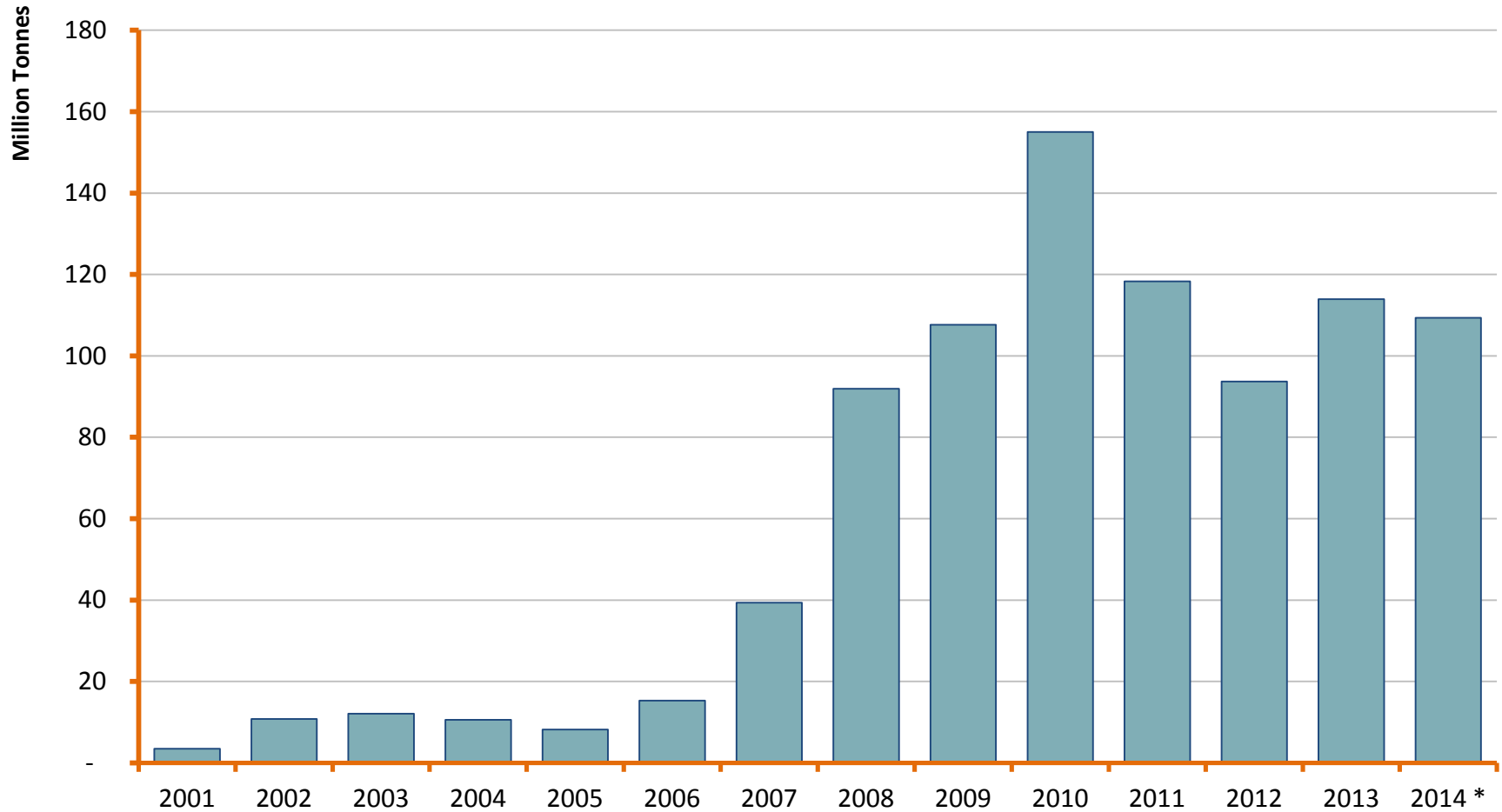
- globalCOAL
- Other brokers:
 - LCB
 - GFI
 - Ginga
 - ICAP

There are 2,300+ companies licensed to use SCoTA worldwide
and 161 globalCOAL Market Members

Geographic spread of SCoTA users



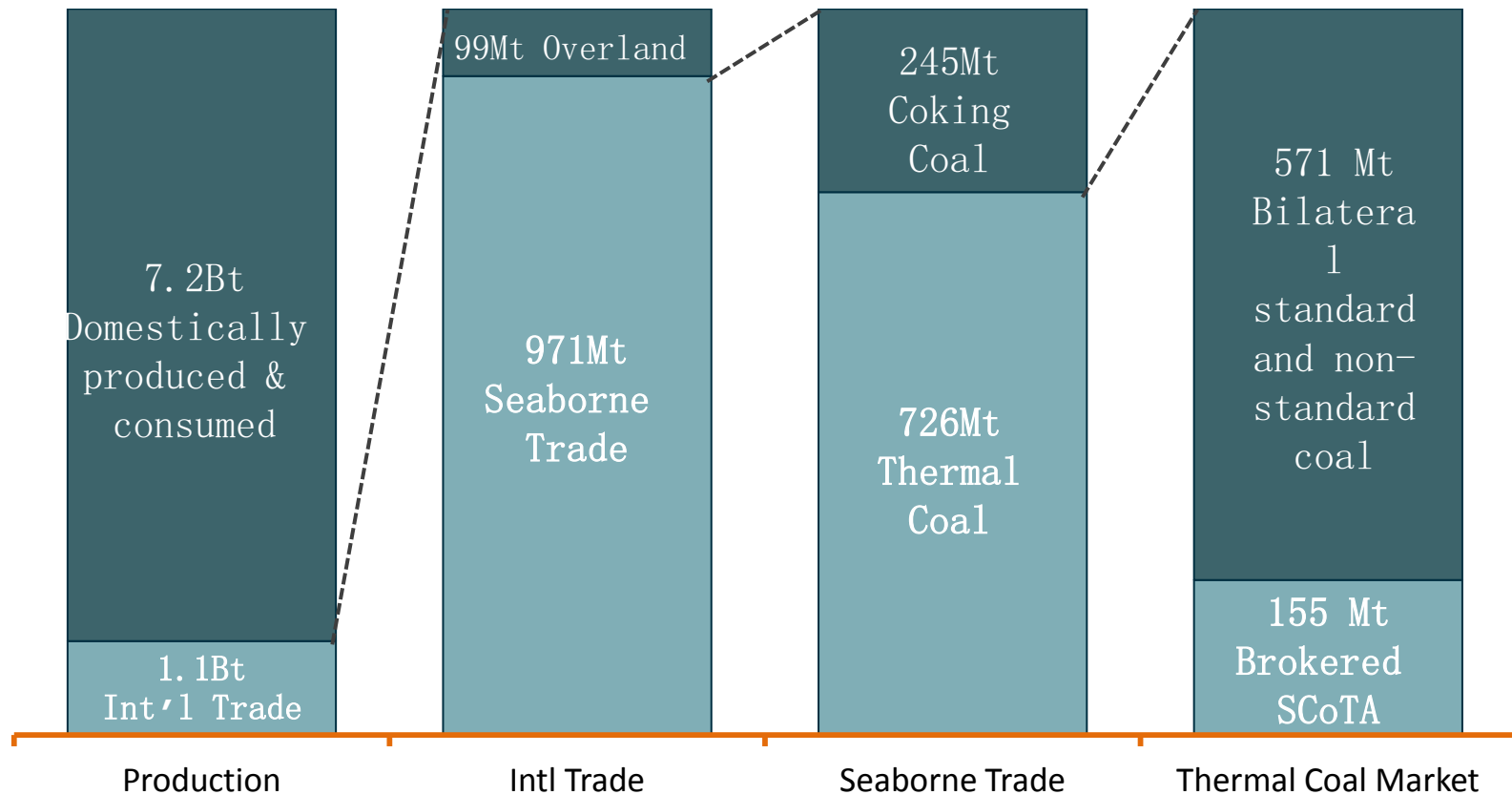
Total brokered physical SCoTA volumes



Source: globalCOAL & other brokers

* 2014 - estimate

The SCoTA market in perspective

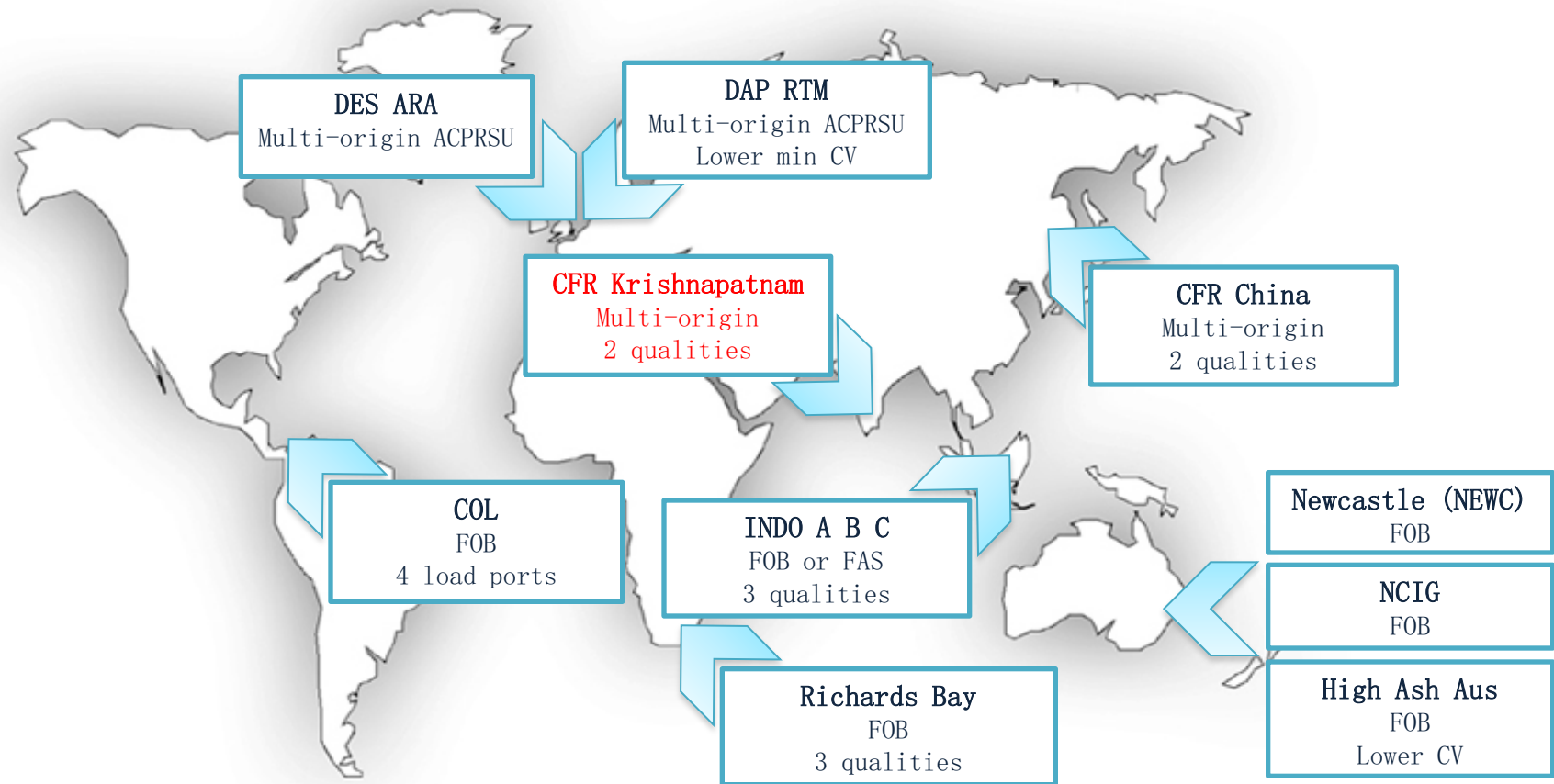


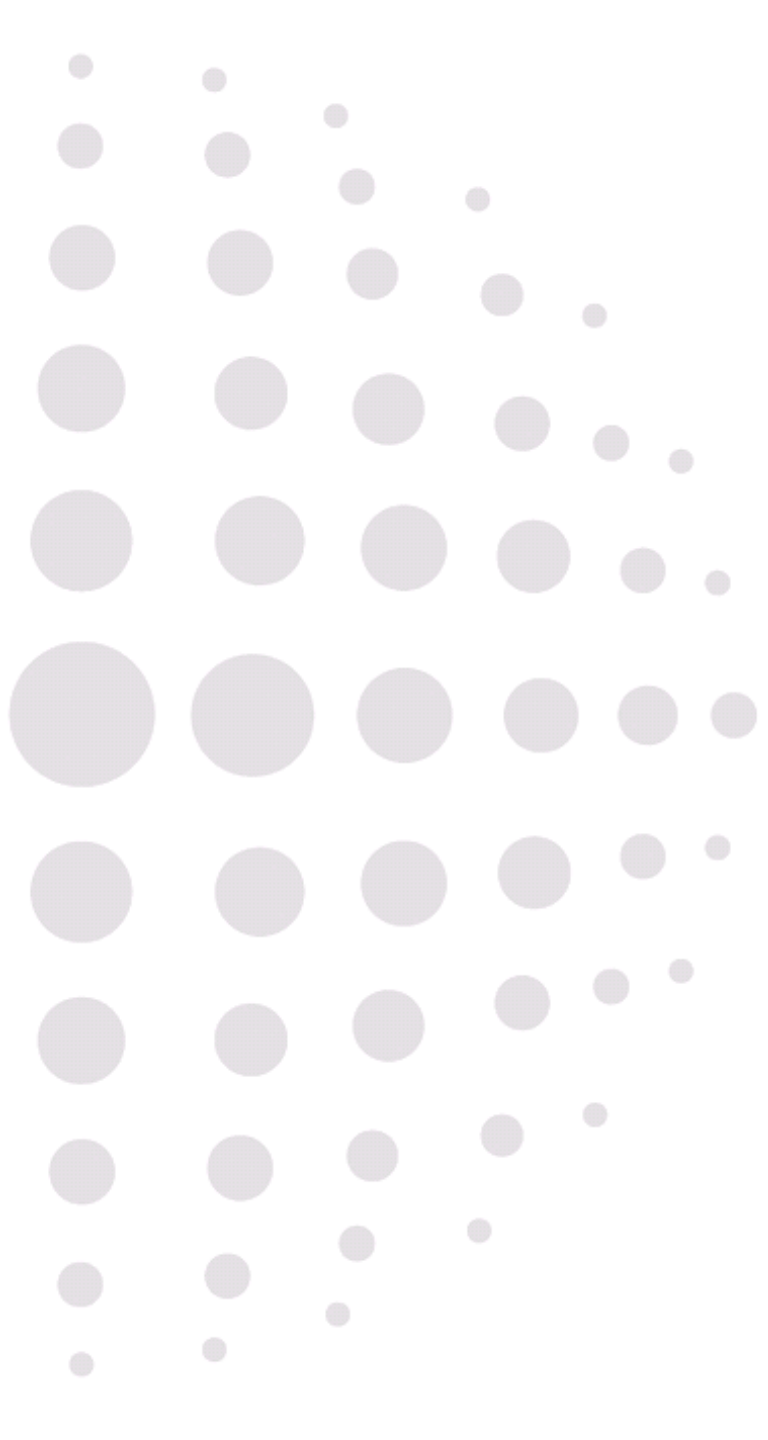
Source: VdKI, Euracoal, globalCOAL & other brokers (2010 data)

SCoTA today...

- SCoTA v8
- Master Agreement (v8 MA)
- SCoTA v8 General Terms and Conditions (v8 GTC)
- 15 RSSs on a range of INCO delivery terms
- Build your own RSS
- SCoTA-based transactions underpin 99% of API#2 and 100% of API#4 and gC NEWC Index
- Indonesian and Indian governments use NEWC as a component of their price assessment for coal and power

Standard hubs covered by SCoTA





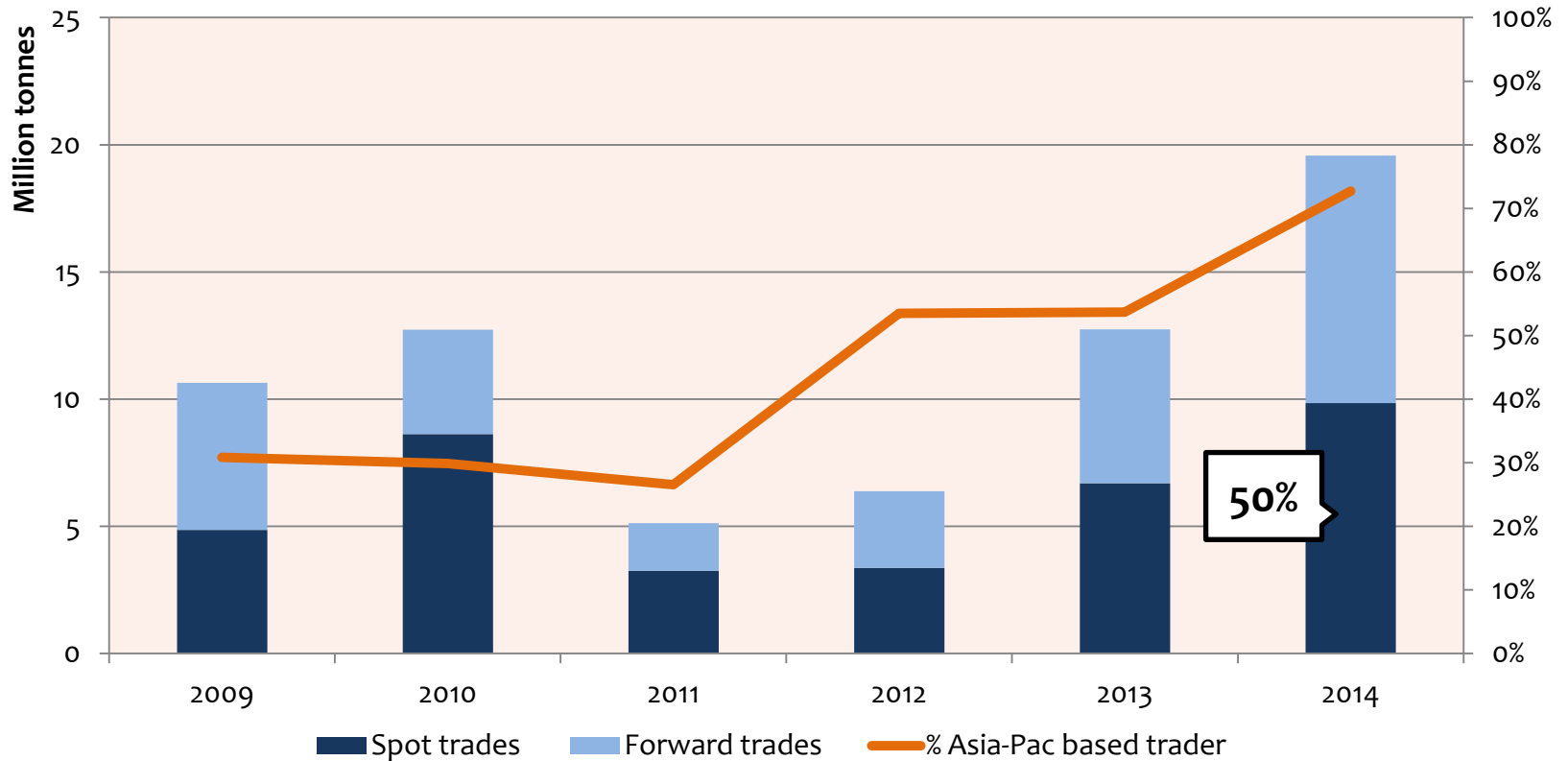
The gC NEWC Index

The globalCOAL NEWC index

- The benchmark price for coal in Asia Pacific
- Used by governmental agencies around Asia:
 - 25% component of HBA in Indonesia (25% NEX, 25% FOB Kalimantan, 25% ICI)
 - 25% component of CERC in India (25% API4, 50% Indonesian Coal)
 - Chinese government is considering the use of international indices (including gC NEWC) in its forward planning for pricing electricity
- Coaltrans Bali survey in 2011:
 - 64% of respondents stated the NEWC Index is the most trusted Index by Indonesian producers, end users & traders
 - 64% stated that the NEWC Index is the most suitable to establish end-user prices for Indonesian coal (versus 18% for the Argus-ICI)

More spot trading in NEWC

Spot vs forward NEWC volume on the globalCOAL screen
and % of NEWC tonnage traded from APAC



Source: globalCOAL



**Some
conclusions
&
your questions?**



globalCOAL[®]

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