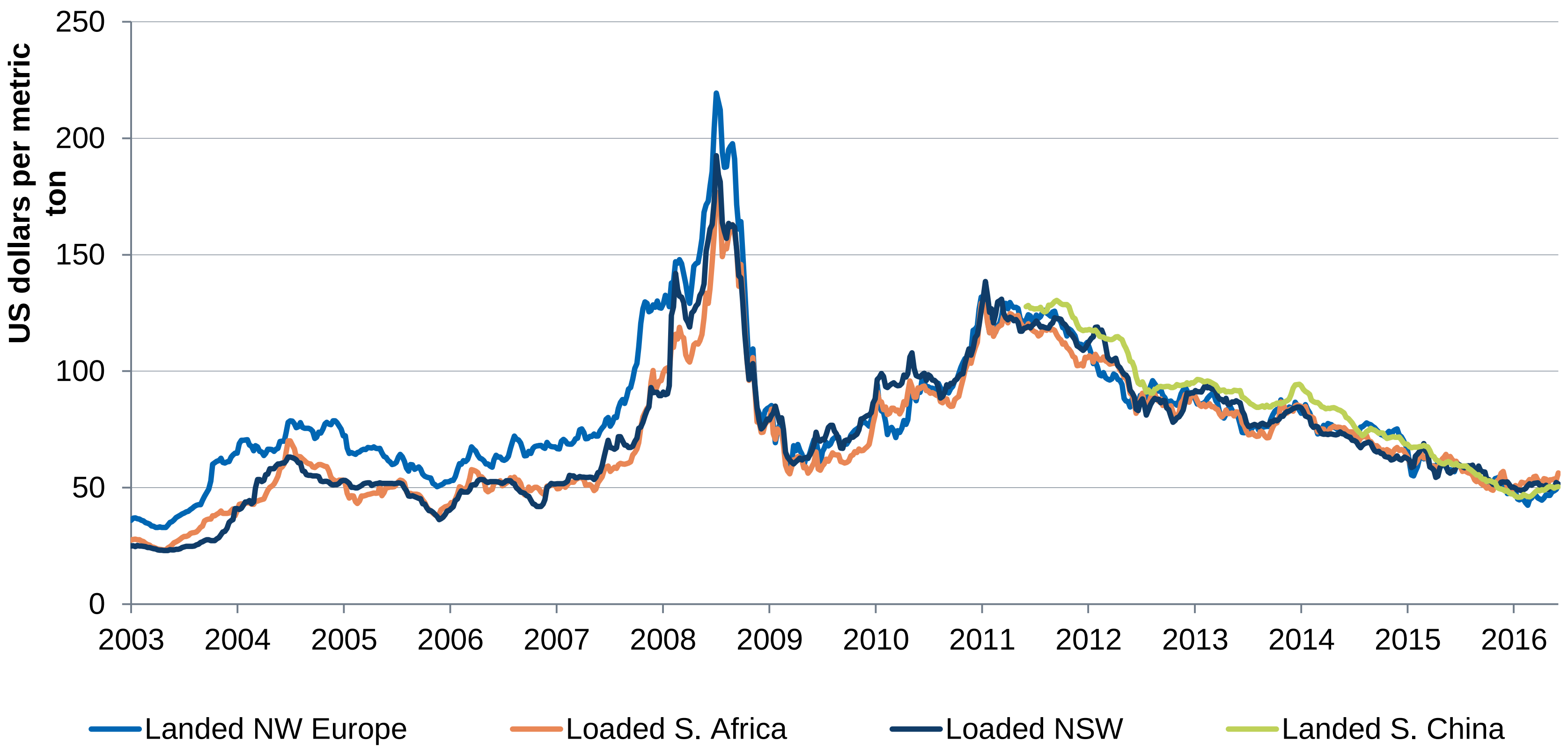
GLOBAL STEAM COAL:
How far away from the upturn?

Today’s coal market overview—Grim, but some light at the end of the tunnel?

- Global oversupply beyond expectations, but narrowing, possibly faster than currently projected
- Global steam coal demand has been weak, and for the first time this millennium declined in 2015, by 6%, further declines likely in 2016
- Prices, at c. $45/t CIF ARA early this year, were the lowest since 2003
- Producers are really beginning to feel the pressure of today’s low coal prices – foreign exchange and oil price movements have helped but there remains a need for real cost cuts – some cannot do more
- Mine closures and divestitures increasingly becoming the norm
- Low gas prices and raised carbon floor price are already displacing coal in the UK and the rest of Europe is catching on, but spreads remain in favour of coal in most of Europe and in Asia.
- Potential for LNG glut later in the decade should be focusing minds further – can coal compete on a variable cost basis?

Prices – have we found a floor yet? - Possibly

Steam Coal Marker Prices



Source: IHS Energy

Lowest on record - $25.86 ($1.09/mBtu) for NW Europe in August 2002

So has anything changed since Christmas?

- Prices aren’t falling – three months in the mid-$40s delivered NW Europe and, the most recent movement has been upward tom around $50
- Big supplier adjustments are continuing and spreading
  - The growth has gone, across the board, Indonesian exports still falling
  - Colombian suppliers shipping to Asia – market rebalancing has begun?
- Foreign exchange rates have steadied, after the commodity economy depreciations of 2015
- Oil is up, albeit only by a little
- Freights have remained lower than expected and recovery is still at least a year away
- Gas oversupply is now hitting the market
- After El Nino comes . . . . . . La Nina . . . . . Brace yourselves for supply side disruptions

Production is falling – and accelerating downwards

- Chinese production is estimated to have fallen by 3.2% in 2015, to 3.76bnt, and is expected to fall to 3.6bnt in 2016, another 4.2% down
  - There's more coming with new capacity closing measures promising much for 2017 and 2018
- USA is entering its sixth year of production cuts – and how
  - Down from 1,002bnst in 2014 to 899mst in 2015 and then <600mst in 2016 – 40% in two years – a massive readjustment in a year
- Indonesia shed approximately 60-80mt of production in 2015 – more to come in 2016?
- Ukraine lost half its output last year – for obvious reasons
- And . . .
- We are beginning to see signs that even major exporters, who were still expanding output in 2015, are now reining back

On the export side – all are adjusting today

- Exports have stopped growing across the board this year
- Colombia – Jan-Apr exports slightly down thanks to lost European demand, offset by a sharp rise in shipments to India
- Russia – Early year figures suggest increased eastbound shipments but westbound down slightly
- South Africa – Big fall in exports to Europe partly offset by increased shipments to Asia. Overall down 1mt
- Australia – Slightly down (1mt) in January-March
- Indonesia – Still falling steadily (5.5mt lost in Jan-Feb alone) and shipments of 28-30mt a month point to 300-360mt in 2016 (365mt in 2015
- But . . . .
- Look at China – Q1 exports up 1mt (987%) - Gulp

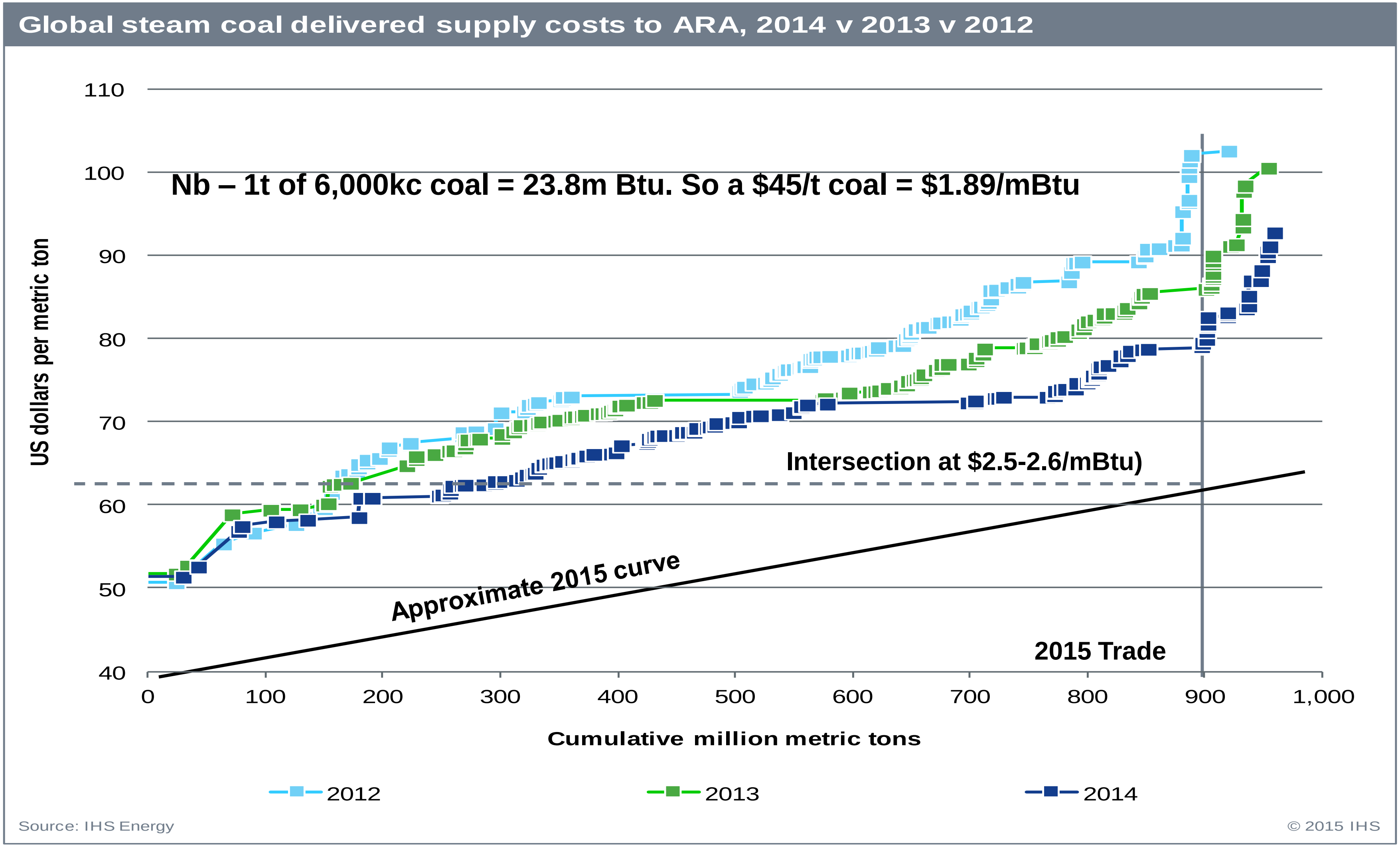
Where is the demand growth?

- India – despite setback in 2015, the outlook remains bright in the mid-term
  - Steady in 2016 but still 5-10mt/yr growth every year for imports
- Also Bangladesh, Pakistan and Sri Lanka to add volume, especially post-2020
- South East Asia – Malaysia, Philippines and Thailand all adding 1-2mt each year
  - Vietnam providing spectacular growth
- Korea/Taiwan – new power stations driving growth through the 2010s
- Japan – small annual increments for now but more to come in the 2020s
- Middle East – Dubai, UAE and Egypt all looking at Indian Ocean growth
- Turkey – Steady growth through the next two decades
- Some North African growth as well

Costs are still falling

- Cost cutting started among higher cost suppliers in 2012/13
- Approximately 20% costs savings made across the board in 2014 – largely through FOREX changes
- In 2015 the majors started cost cutting in earnest
- Costs estimated to have fallen another 10-20%
  - Miners have become leaner
  - Gas Oil costs have come down substantially, roughly a 40% cut in Indonesian mine gas oil costs has yielded a 15% cut in mining costs
  - FOREX gains continued for all bar US suppliers – **through 2015**
  - Cost cutting will continue into 2016
  - Take-or-Pay remains a major problem in some countries, but the first signs of weakening in the system are emerging

Costs delivered to ARA – 2012-15



FOREX has changed the game – who loses?

Supplier	Q1 2014 price	2014 cost LCU	2014 cost $ In the black	Q1 15 price—roughly 17-19% down	2015 cost, adjusted for $ depreciation In the black	Q1 2016 price – Roughly 19-22% down	2016 cost, adjusted for $ depreciation In the black?
Australia	77.43	52.5-70.0	47.5-60.0	63	40.7-54.3	51.09	37.2-49.6
Colombia	68.61	90,360-106,424	45.0-53.0	56.4	37.7-44.4	44.68	27.4-32.2
S. Africa	78.72	541-666	48.0-59.0	61.53	46.7-57.5	48.33	33.6-41.4
Indonesia*	59.38	501,266-745,786	41.0-61.0	50.5	39.7-59.1	42.24	36.2-53.9
E. Russia	81.24	1,938-2,293	55.0-65.0	68.02	23.8-33.7	47.8	25.0-29.6

- Most of the majors have stayed in the black thanks to FOREX and oil
- Players at the high cost end of the curve remain in trouble
- Indonesia's fringe suppliers have been particularly hard-pressed
- The buy side may yet be able to squeeze more downside from prices

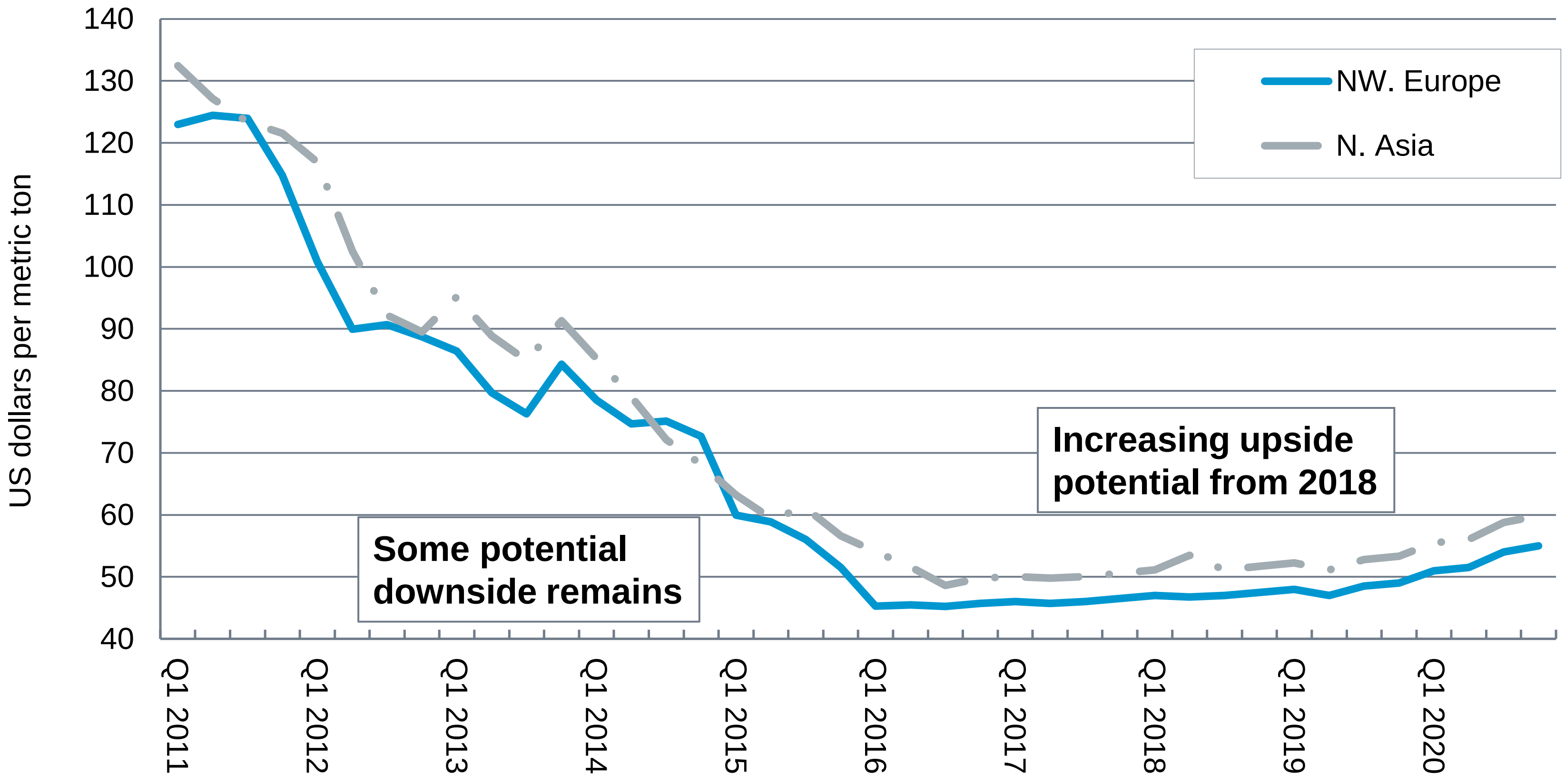
Source: IHS Energy – Global Steam Coal Service

Mine sales and disposals are accelerating

- The majors are shedding assets globally to trim costs
- In the US, we have seen some significant Chapter XI filings
  - Arch
  - Peabody
- But who is buying assets?
  - Minor players looking to expand by taking on significant assets with minimal capex
  - Hedge/Investment funds are looking for plays
  - Big Money is beginning to look for assets it can pick up during the trough
  - But don’t forget steam coal is low in the asset value rankings, so it won’t be at the front of minds
- Mine sales and bankruptcies are helping to break down Take-or-Pay

Prices should stay low through 2017

Prices to remain weak in short term



Source: IHS – Global Steam Coal Service

Long-term Prices: The next coal upturn has been locked in

- After over a year of apparently unending growth in oversupply, there are signs we are at last turning back towards shortage – these will increase
  - Very little new mining capacity still to commission
- Conflicting demand signals but still plenty of growth, 5-20mt/yr from 2016 through 2020 – Things begin to look tight from 2018
  - Will low gas prices cap coal to the 2020s?
- More coal will be called from 2017 on, but will it come forward at today's prices? – Increasingly unlikely the longer low prices are sustained
- Costs are still falling, so the long-term marginal cost must come down as well – current estimate is c. $60-65 but further checks to come
- The longer we go without higher prices, the higher the chances of a significant price spike
- But . . . India and China are exceptionally price sensitive, will lose interest if prices are too high
  - Indonesian suppliers used to be able to ramp up quickly if prices rise. Can they still?

COP-21 - lots of good intentions at Paris but did they achieve anything?

- Strip away the rhetoric and there's not much meat but . . .
- It's backed up by 185+ new national climate goals. These will be binding targets
- The developed World has pledged serious money to support the developing World to achieve the new goals – will it be forthcoming?
- These goals and the efforts being made will be reviewed every five years.
  - Negotiations are under way for how to police targets
  - And how to punish those not meeting targets
- The World has committed unanimously to keeping temperature increase to no more than 2 degrees Centigrade – a commitment that looks on the impossible side of very difficult
- COP-21 is no real threat to coal before the 2020s, but will become increasingly so, so it is a long-term threat to coal
- There has been a change in the global Zeitgeist on coal
- Big Oil & Gas ganging up on "Dirty" Coal and the politicians are listening
  - Ultimately a shot in the foot for the "clean" fuel?

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