Coal

Presentation

International market hinges on uncertainty around Chinese policy

January 2019

Sareena Patel, Principal Analyst, +44 203 159 3372, sareena.patel@ihsmarkit.com

Fundamentals confronting coal point to increased uncertainty today, and a greater chance of shortages in the 2020s

Short term

- **Price relativities changed dramatically in 2018, with plentiful lower-CV coals heavily discounted against the increasingly rare higher-CV coals that feed into the main reported price indices;**
  - High Indonesian low-CV exports have brought the whole market down.
  - Are we seeing the end of 6,000kc coal?
- **All eyes should still be on China and India this year;**
  - China's demand strengthened first half 2018, but slackened in the second, while 2019 looks deeply uncertain.
  - India's market appears on the verge of a rebound? Neither looks a safe bet.
- **Plenty of growth elsewhere, especially in Indian Ocean and South East Asian markets.**

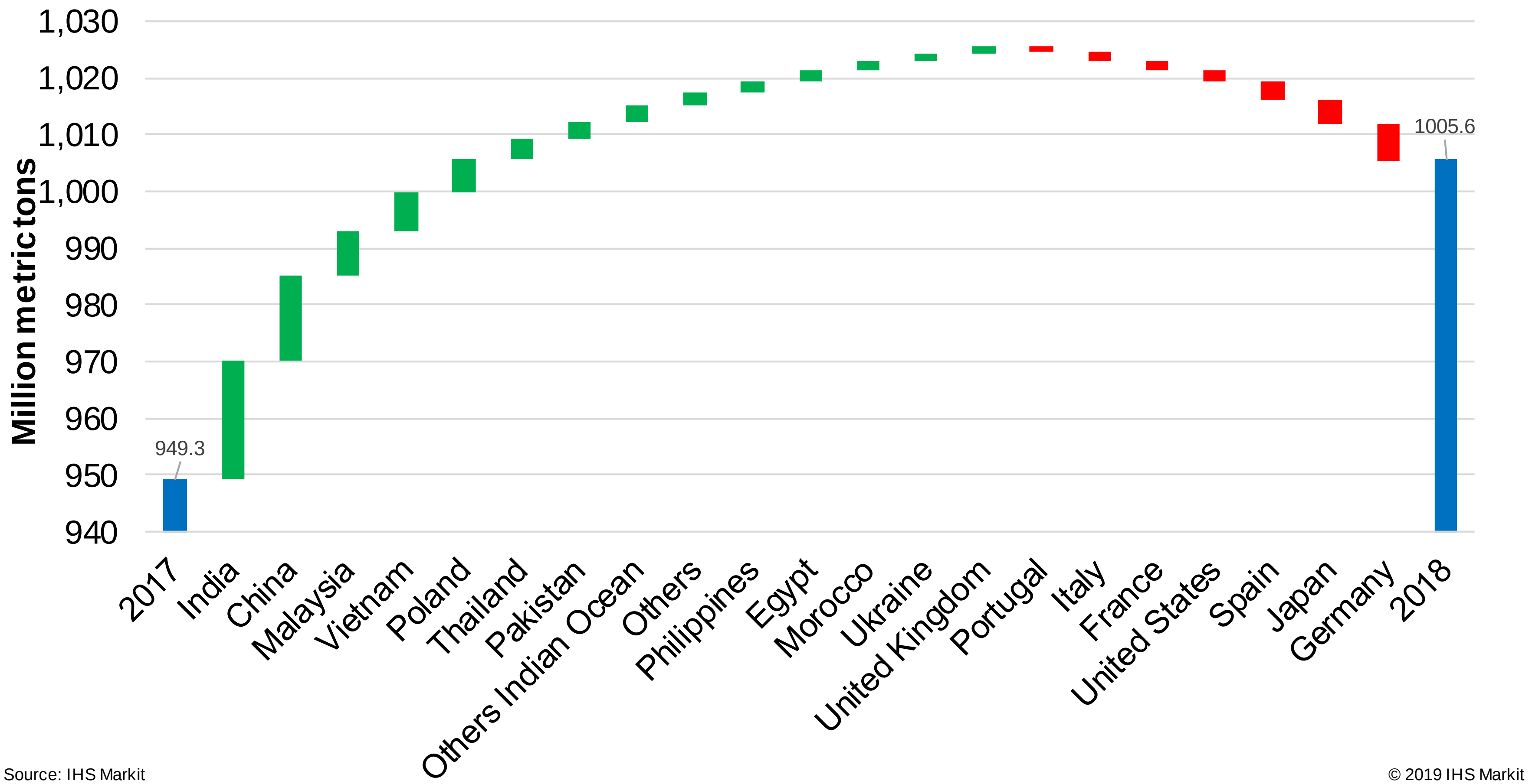
Long term:

- **The likelihood of increasingly frequent supply shocks is growing**
  - Long-term investment drought means that major capital is needed to open up new reserves but finance houses are increasingly disassociating themselves from coal
- **Countries moving up the development curve will drop coal – the EU today, Japan and Korea, where next?**
- **Environmental curbs on high sulphur fuel oils will drive freight costs up in the mid-term**

A quick look back at 2018

Demand growth in 2018 led by China and India

Seaborne thermal coal demand growth, 2017 to 2018

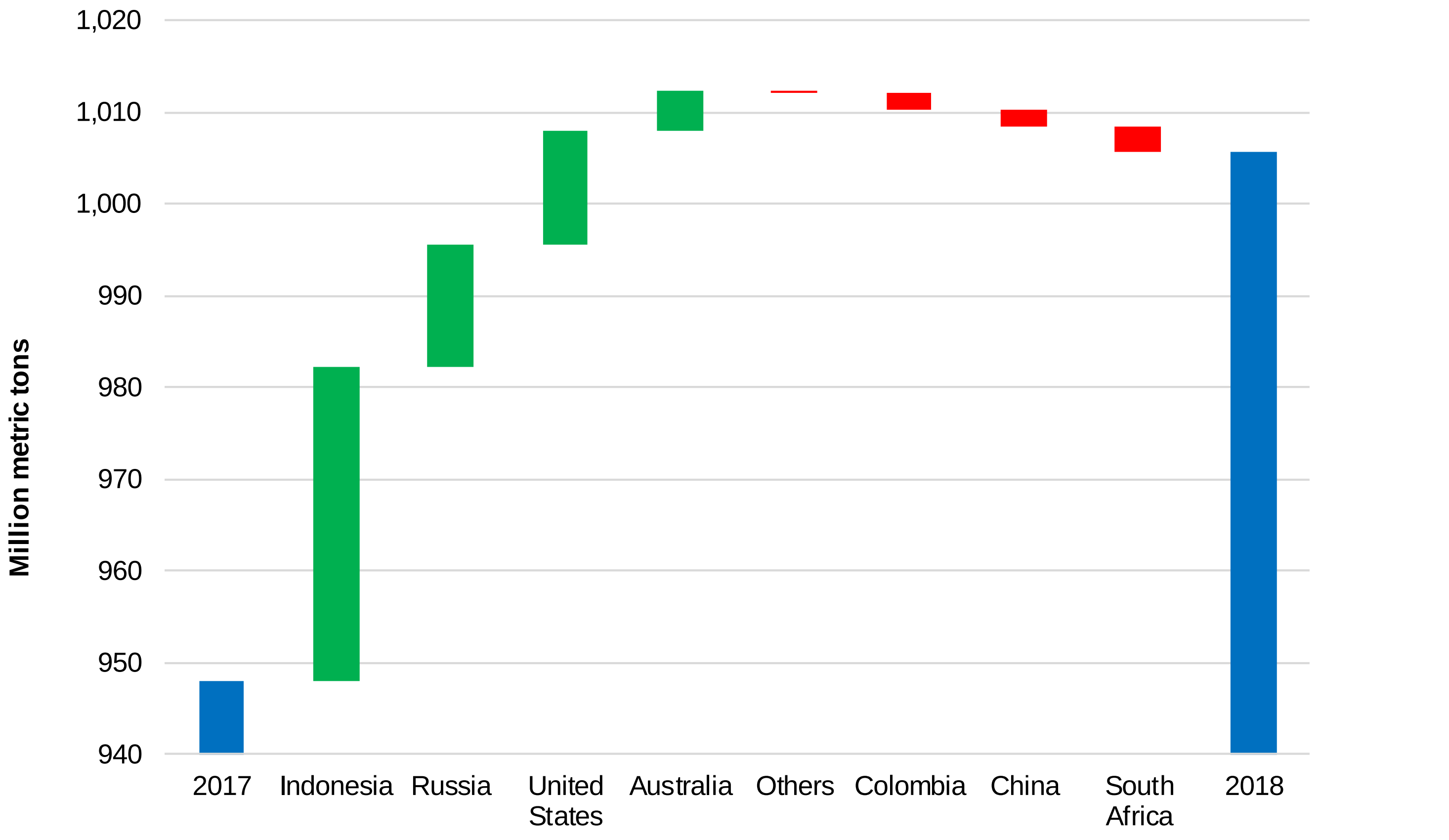


Source: IHS Markit

- Coal demand soared in 2018, lead by low CV coal demand (<5,000 kcal/kg, NAR)
- Bulk of low CV demand growth came from India, China, and southeast Asia
- By contrast, demand for higher CV coal (5,600-6,200 kcal/kg, NAR) grew little
- High CV coal demand grew in Asia, the Mediterranean and parts of the Americas, but was offset by declines primarily in Europe

Supply growth in 2018 led by a boom in Indonesian volumes

Seaborne thermal coal supply growth, 2017 to 2018

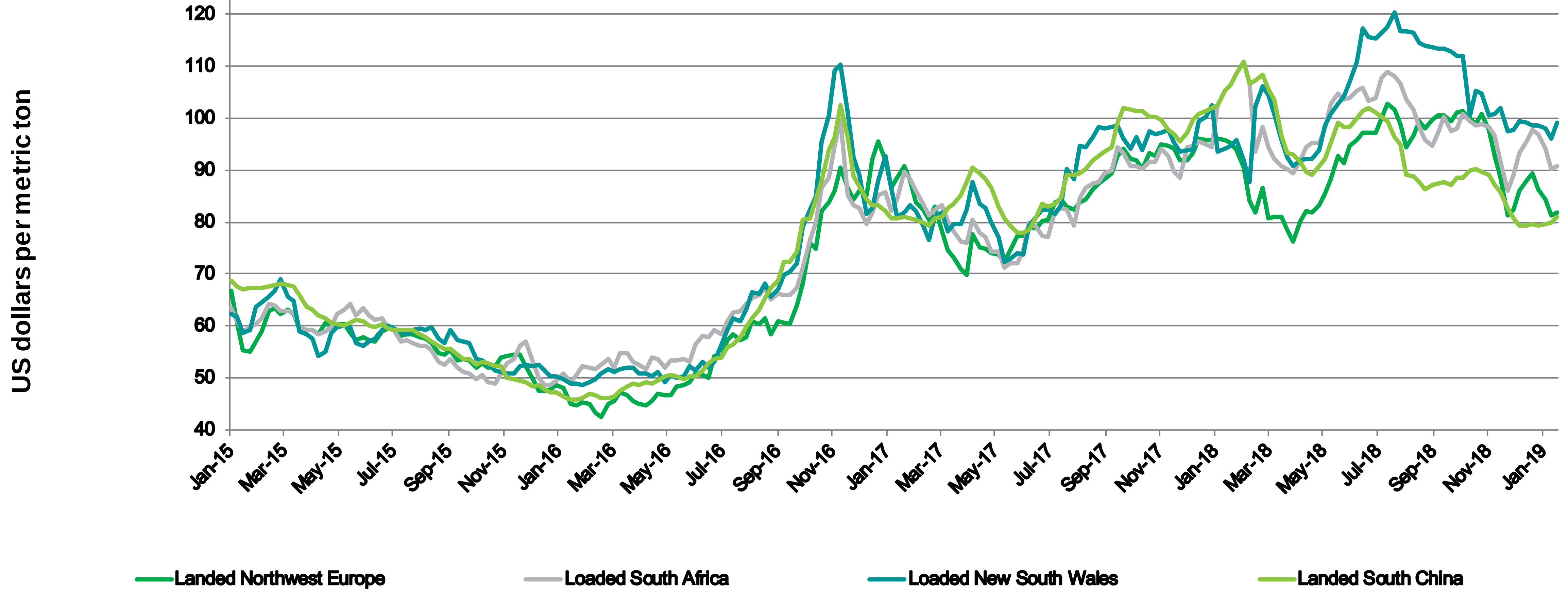


Source: IHS Markit

- But supply was a different story
- Indonesia met the greatly increased low CV demand growth fairly effortlessly. Prices were fairly healthy early in the year, but declined later—especially once Chinese import restrictions kicked in—slashing late year Chinese imports well below expectations.
- By contrast, supplies of genuine 6,000 kcal/kg, NAR coal tightened, owing to fewer and few suppliers being able to meet the quality, supply issues and the increased market power of a declining number of producers. High CV prices stayed strong before declining late in the year as supplies improved and the demand outlook became more questionable.

Steam coal price volatility has been increasing since 2017

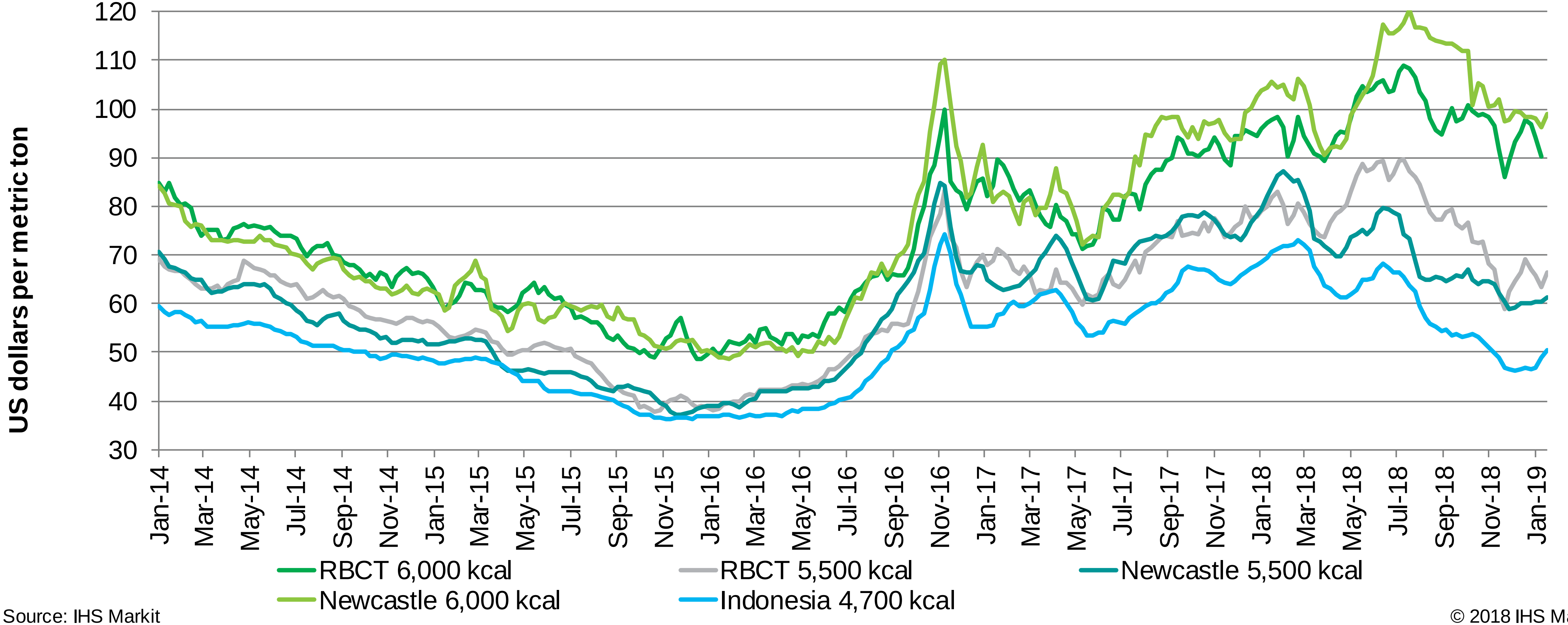
Steam coal price markers



Source: IHS Markit

Lower quality differentials have widened

The differentials for lower quality coals have widened



Source: IHS Markit

Market players are beginning to respond to widening differentials

- **On the buy side:**
  - Increasingly, **buyers are testing lower-CV coals** – even some more conservative Japanese purchasers
  - **In NW Europe, buyers have largely abandoned in-spec coals,** choosing instead to burn a heavily discounted blend of low-sulphur low-CV coal (normally Russian) and high sulphur high CV US coal. The same trick could be played with higher CV low sulphur coals and Illinois Basin material
  - Elsewhere, buying lower-CV coals has been standard practice in Korea since the early 2000s, while **most new boilers have the ability to use a wide range of CVs globally** – 6,000kc coal is no longer key.
- **On the sell side:**
  - Producing 6,000kc coals involves a degree of washing, and thus cost, therefore **reducing washing delivers a less costly product**. Many have done this to serve burgeoning lower-CV markets.
  - **Others simply can't produce a 6,000kc spec anymore**, particularly many in Australia, Colombia and South Africa, while Indonesia was pretty well always a low-spec producer
  - With a much bigger lower-CV customer base and lower production costs, **the supply side is focusing more and more on producing a lower-CV coal for export**

2019 looks to be a very different market

2019 looks to be a very different market, with China creating huge uncertainty

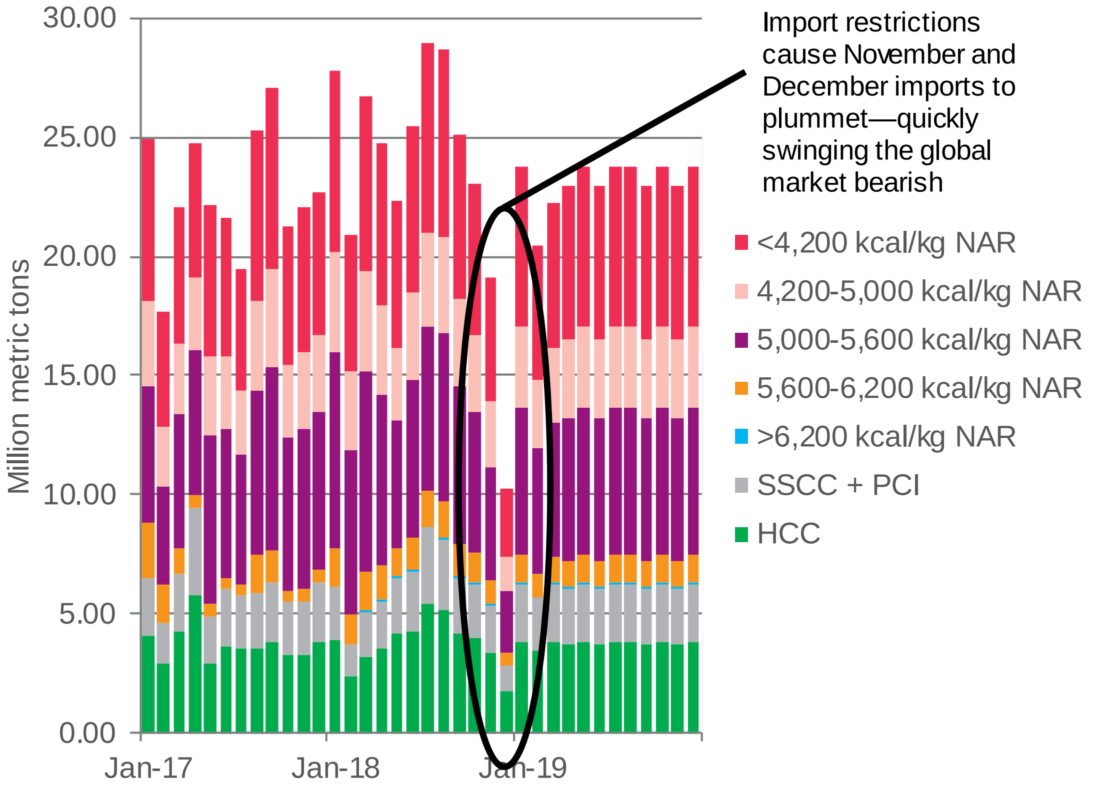
- Chinese imports surged in 2018, rising 18 MMt year on year.
- However, import restrictions had a massive impact from mid-November—without them, imports would likely have risen more than 30 MMt year-on-year.
- The possibility of import restrictions in 2019, and their degree of enforcement, is applying a huge amount of risk around the size of the global coal market in 2019.

→Currently it appears that Chinese imports will be limited to the 2018 value of ~201 MMt (thermal and lignite)

→The cap on imports will likely be applied on a quarterly basis – potential for increased volatility?

→2018 has exhibited how quickly aggressive Chinese government action can quickly swing the market.

China imports, monthly



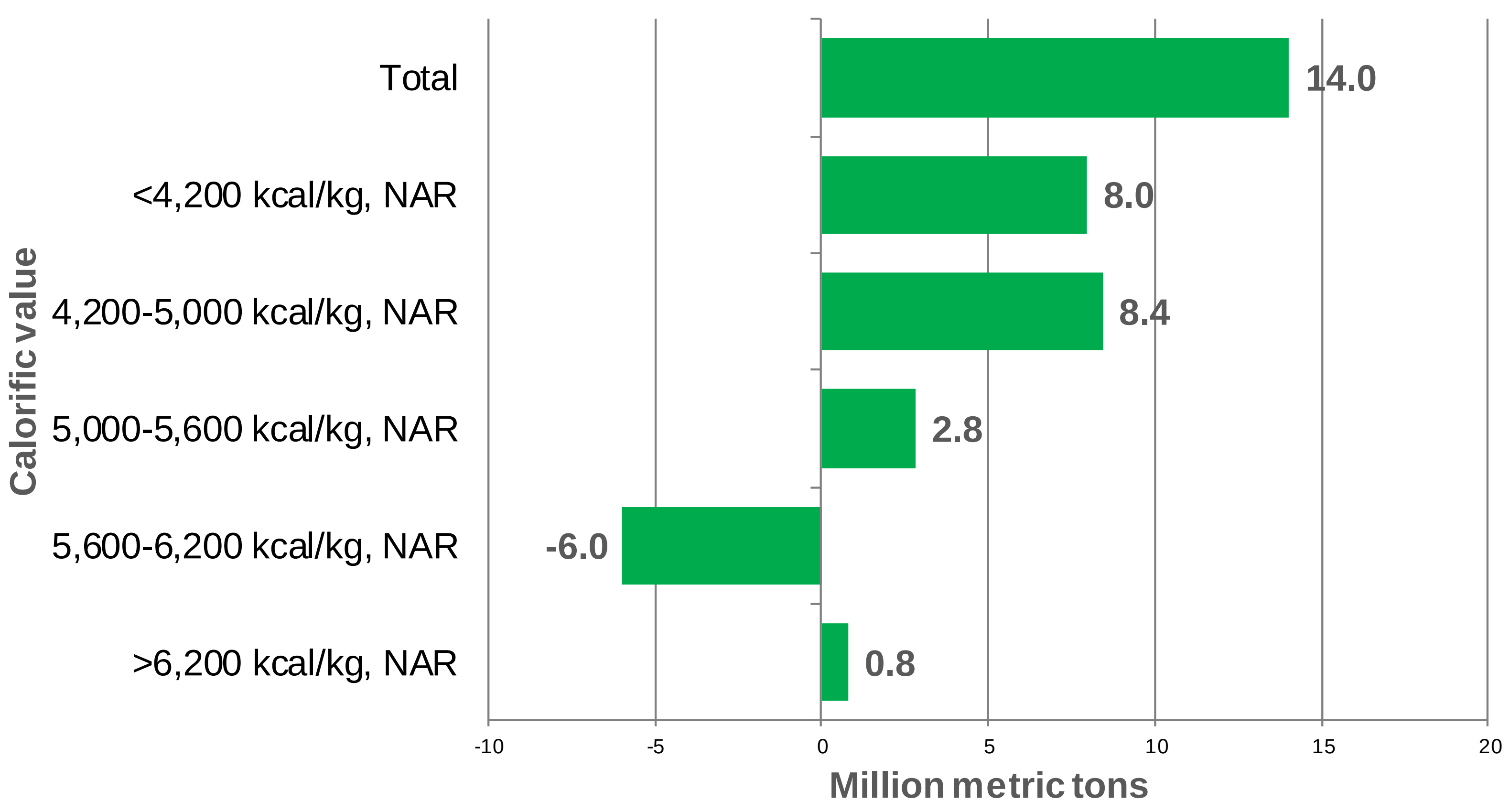
Source: IHS Markit

© 2017 IHS Markit

Even if Chinese buying shrinks, the global market will still likely grow in 2019

- However, growth will again be primarily in low CV coal, as growth in SE Asia and India more than offsets losses due to reduced Chinese buying
- Mid- and high-CV coals will see little growth. Limited growth in some markets is essentially offset by declines in China and Europe.
- A little stronger growth in a few Asian countries boosts the lower two CVs relative to last time, and then the reduction of the Turkey outlook hurts the 5600-6200kc. Pretty interesting dichotomy between low and high CV. It doesn't help Japan since the Colombian that's displaced is probably not genuine 5850kc.

Year-on-year thermal import demand growth by quality, 2019

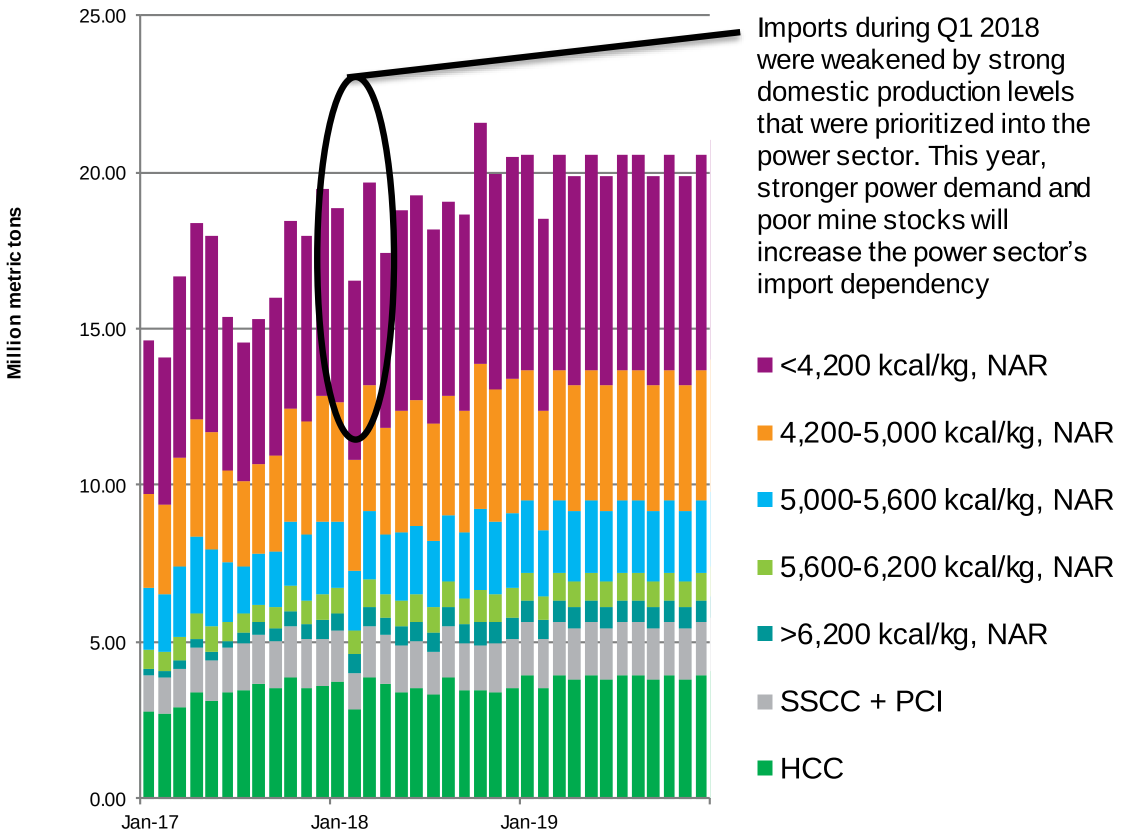


Source: IHS Markit

The outlook for India has risks too

- Strong economic growth and the quest for full electrification points to continued import growth in the short and medium term.
- Domestic coal production cannot keep apace with demand growth – mine stocks at the beginning of 2019 were about 27% behind year-ago levels, while power sector demand is growing ahead of the general election in May.
- Import demand from the industrial sector will likely weaken in 2019 following clarification around the petcoke ban, which will displace some coal tonnages with cheaper petcoke imports.
- Bottlenecks in rail transportation and power distribution have not been fully resolved,
- A change in government could stall progress made under Modi's regime.

India imports, monthly

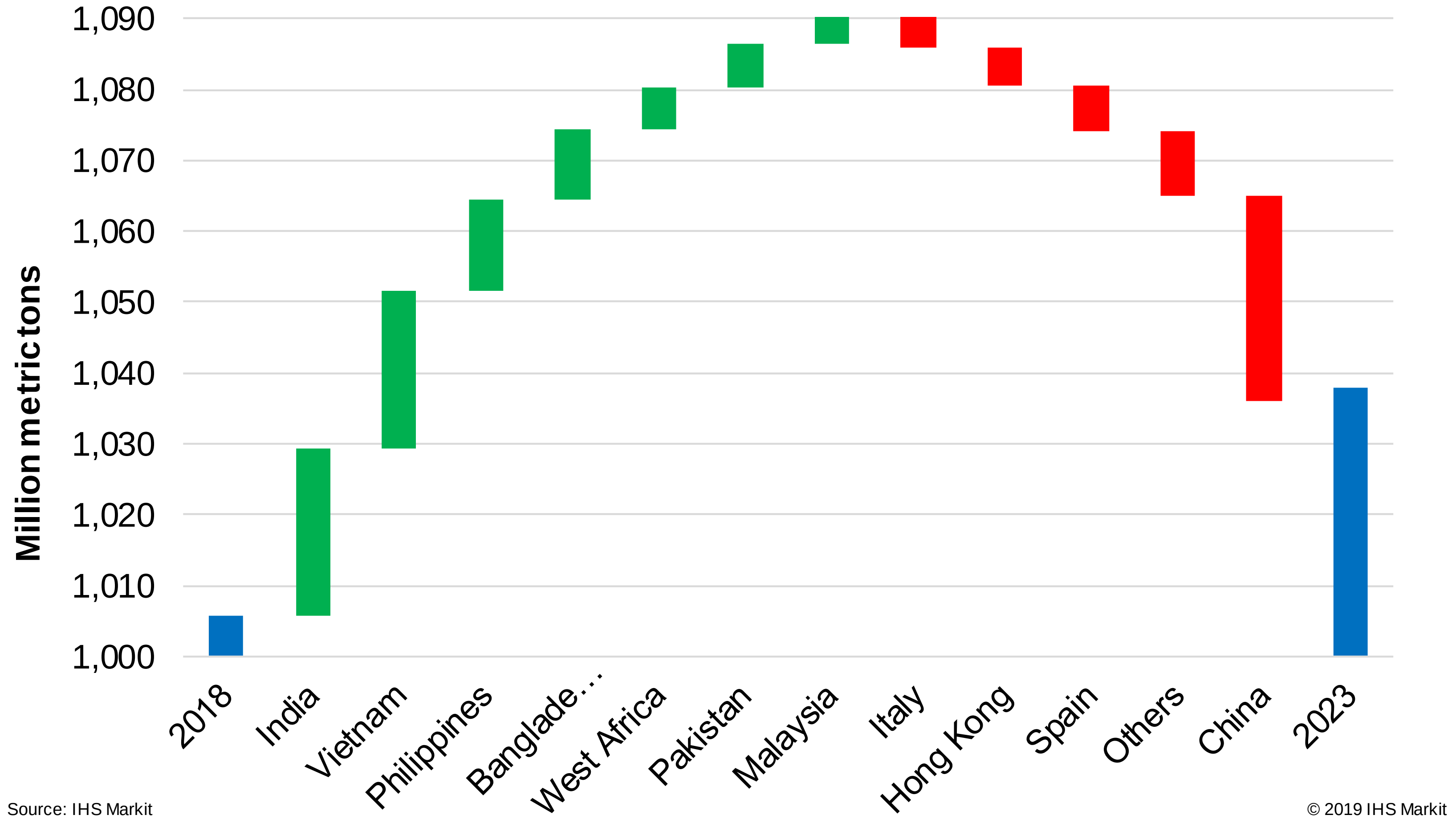


Source: IHS Markit

Short-term outlook

Plenty of growth elsewhere, but increasingly offset by shrinking demand in China and Europe

Seaborne thermal coal demand growth, 2018 to 2023



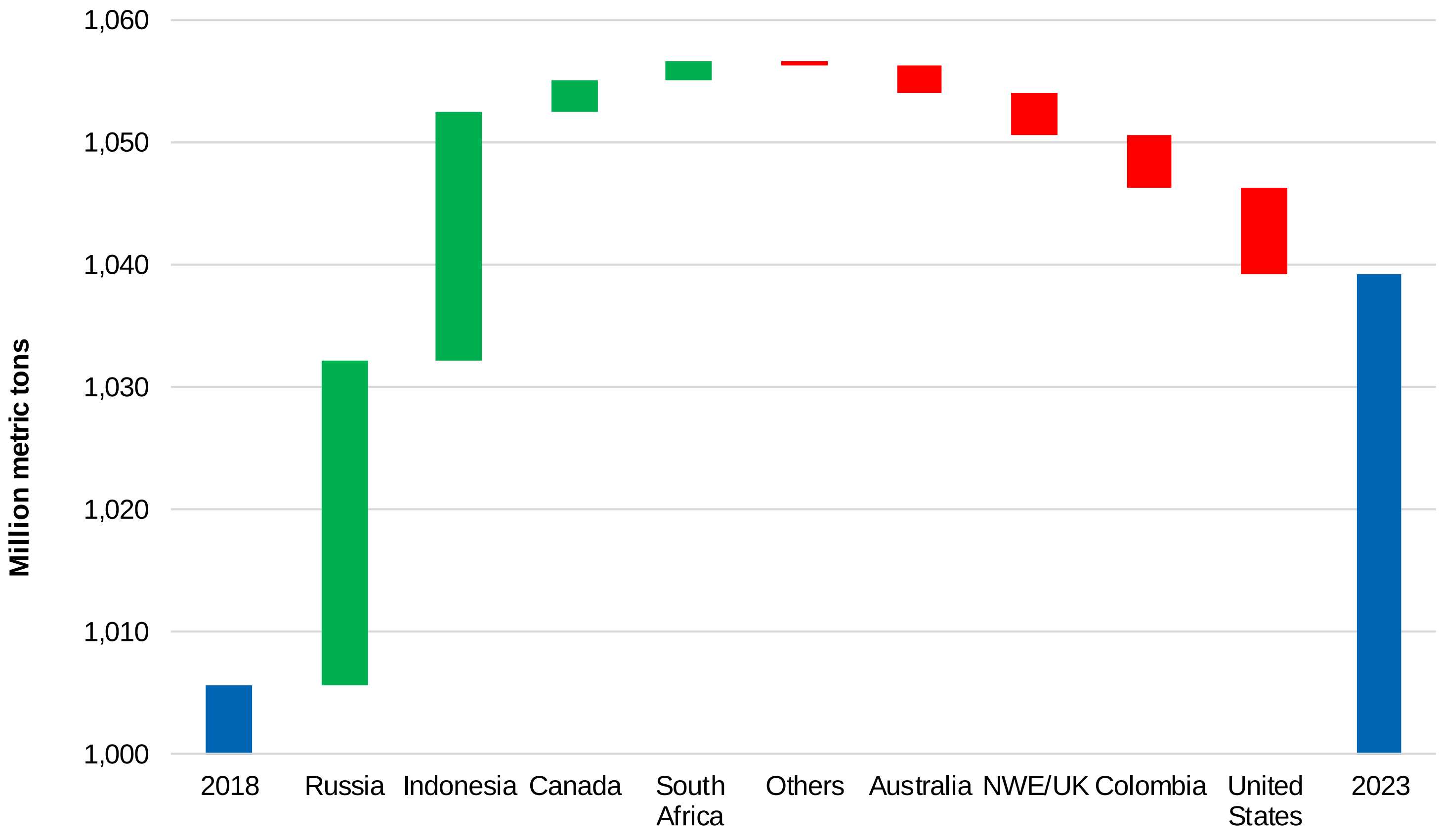
Source: IHS Markit

© 2019 IHS Markit

- Short-term import growth will continue to be led by growing demand in South and SE Asia.
- European legislation aimed at phasing out coal-fired power generation will see EU coal demand fall by more than 30% by 2023
- China's imports are set to decline from 2019
- Demand is now beginning to plateau in more developed Asian markets as the government prioritises policies relating to climate change

But supply was a different story

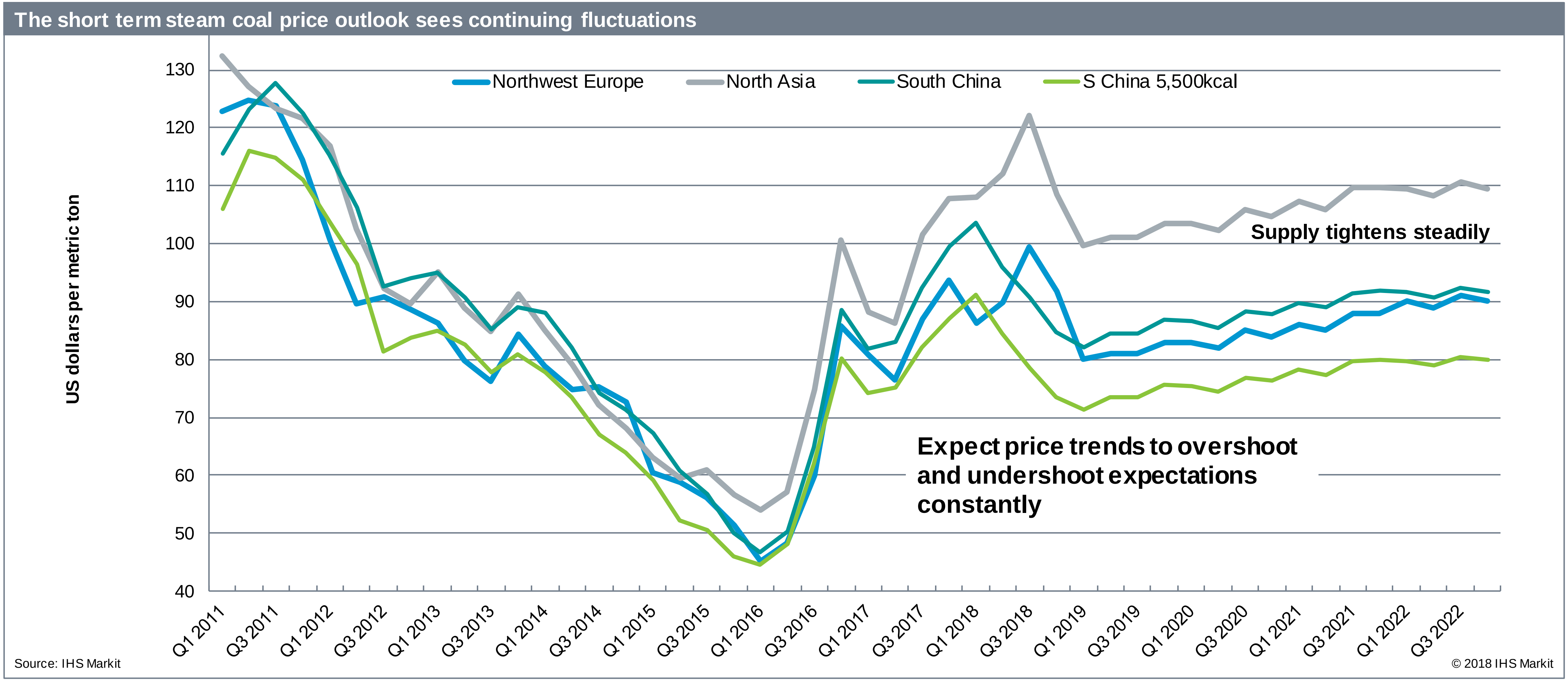
Seaborne thermal coal supply growth, 2018 – 2023



Source: IHS Markit

- Russia is the only country still with strong export growth plans
  - The collapse of the Rouble in 2015 changed the competitive position of Russia's coal exporters fundamentally
  - Major port developments are under way on the Arctic, Black Sea and Far East coasts which in theory will add 60 MMt/yr of cape-sized export capacity within the next 2-3 years
  - Rail connections are also being enhanced to improve capacity shipping out of the main coal producing base in Kemerovo to both eastern and western ports.
- Indonesia's exports have boomed in the run up to the presidential election, but government will likely return its attention to preserving supplies for the domestic market

Prices look set for a China-driven roller-coaster—today we are trending flat, tomorrow…



Thank You

IHS Markit Customer Care

CustomerCare@ihsmarkit.com

Americas: +1 800 IHS CARE (+1 800 447 2273)

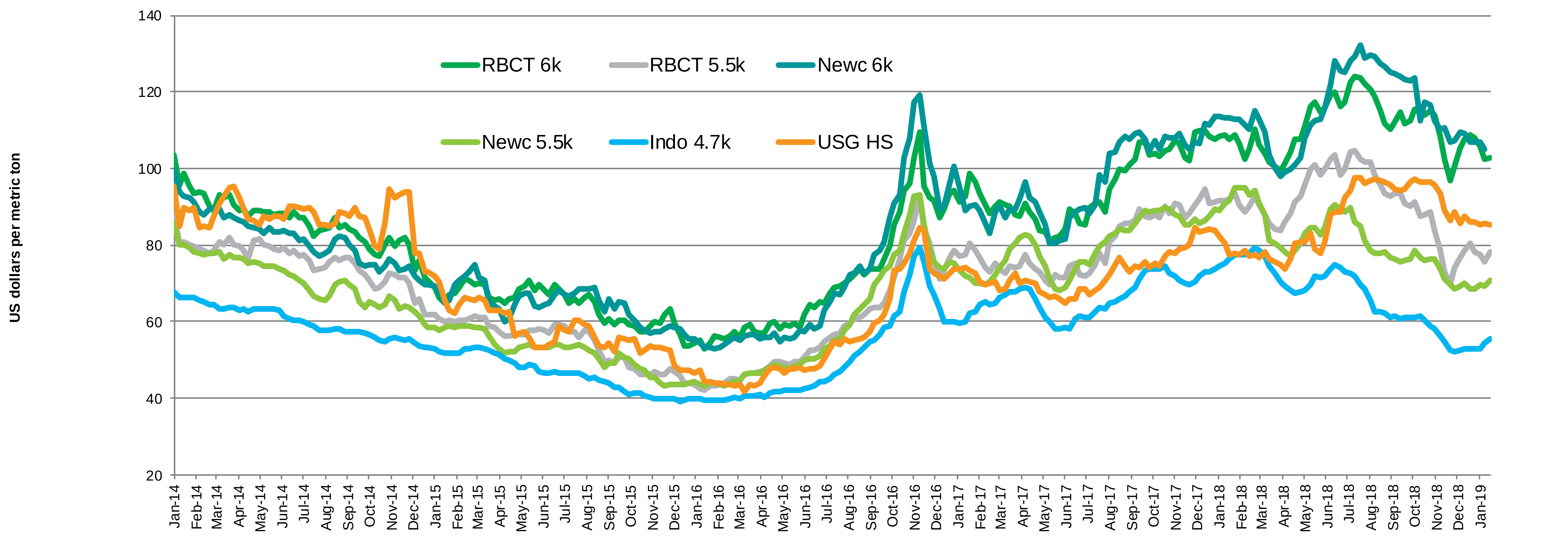
Europe, Middle East, and Africa: +44 (0) 1344 328 300

Asia and the Pacific Rim: +604 291 3600

Appendix

Are Indonesian prices compelling declines in Asia CIFs?
Are even NSW 6,000kc prices being dragged down?

Differentials in Asia are being sustained despite recent falls: Delivered prices into South China



Source: IHS Markit