



Commodity Update – What’s hot and what’s not

Junior Indaba, South Africa

Clare Hanna
CRU Group

 Clare.hanna@crugroup.com

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About CRU – Global footprint, multi-commodities, customer focussed

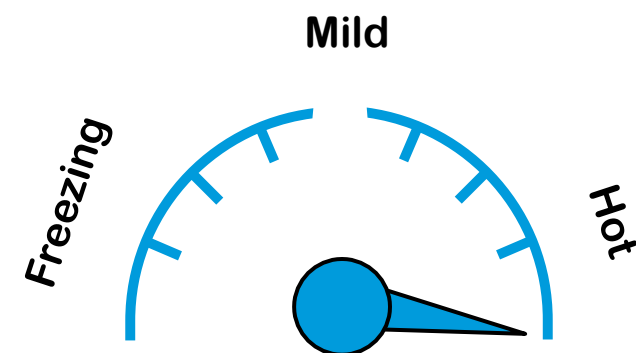


- Price Assessment, Market Analysis, Consulting & Conferences
- Primary research and robust, transparent, methodologies
- Global team of 300 analysts, consultants, experts. Key to gaining a real understanding of critical markets
- We strive to provide customers with the best service and the closest contact: flexible, personal and responsive

What is hot ? Almost everything...

CRU basket of 38 mining, metals and fertilizer price forecasts | 2021 over 2020*

Hot >15%	Sulphuric Acid Sulphur Steel HRC US Aluminium MW Ammonia Phosphate DAP Steel Scrap Pet Coke Copper Brent Crude Thermal Coal Urea Silicon Cobalt Phosphate Rock Steel HRC China Aluminium Silico-Manganese Met Coke Molybdenum Silver Ferrochrome Potash KCl Iron Ore Platinum Zinc Nickel Chrome Ore
Warm 5% to 15%	Palladium Lead Manganese Ore Coal Tar
Mild 0% to 5%	Alumina Gold Met Coal
Cool -5% to 0%	Bauxite
Cold -15% to -5%	Lithium
Freezing <-15%	

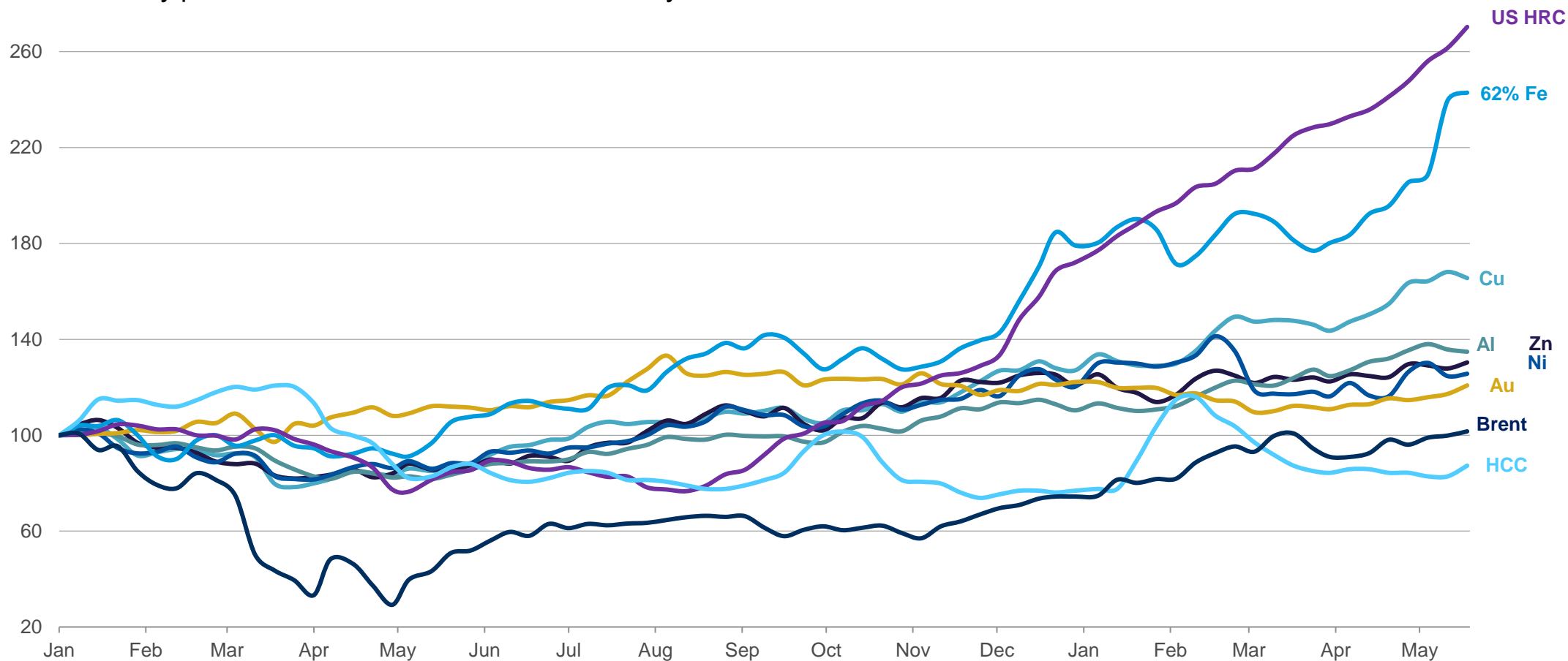


**CRU Price Expectations
2021 / 2020**

CRU Basket	36.3%
Raw Materials	21.4%
Metals	37.3%
Precious Metals	15.5%
Fertilizers	73.8%

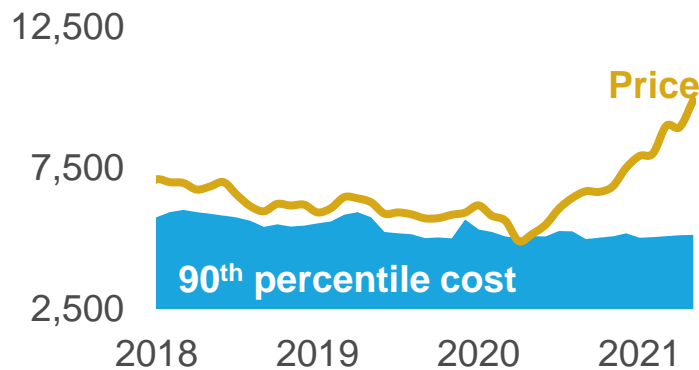
...with steel and iron ore in the lead

CRU's commodity price basket indexed to 100 on 3 January 2020

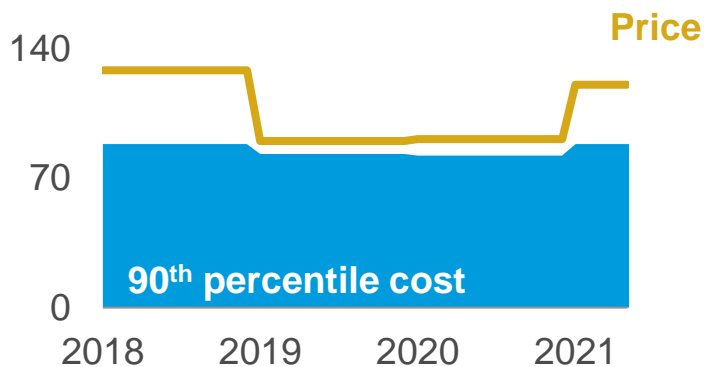


...for some the link with costs has broken in 2021, but this will not last

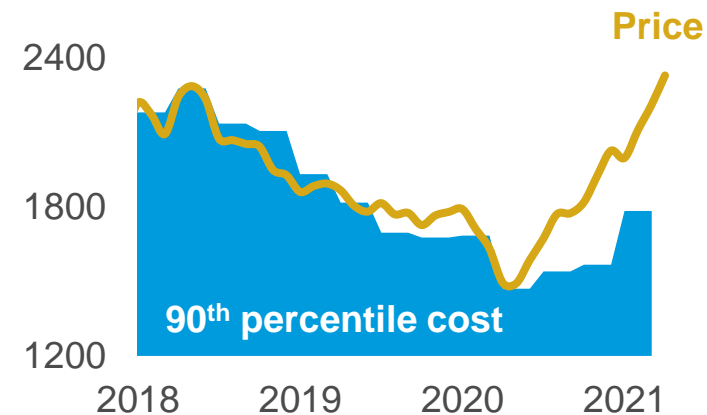
Copper, \$/t



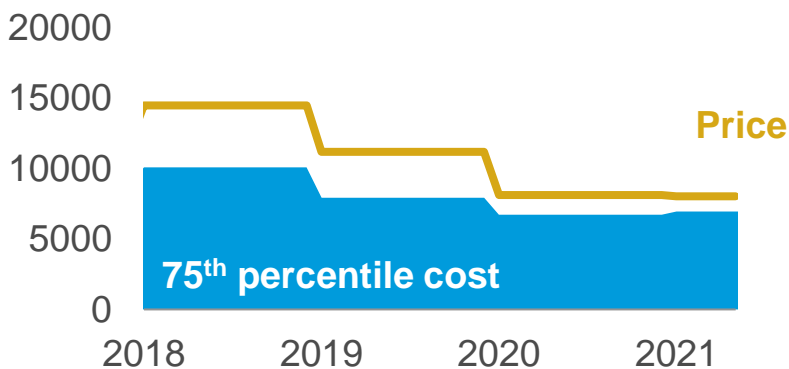
FerroChrome, \$/t



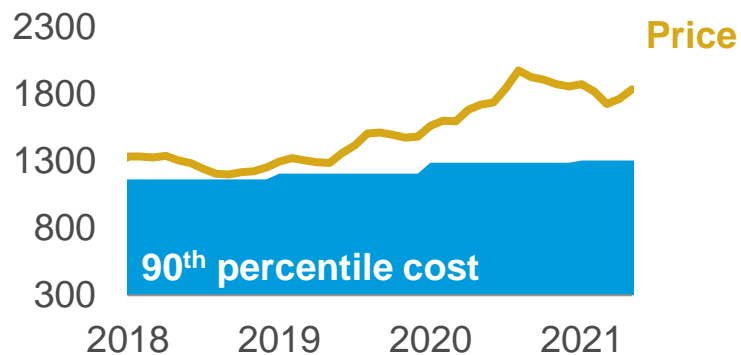
Aluminium, \$/t



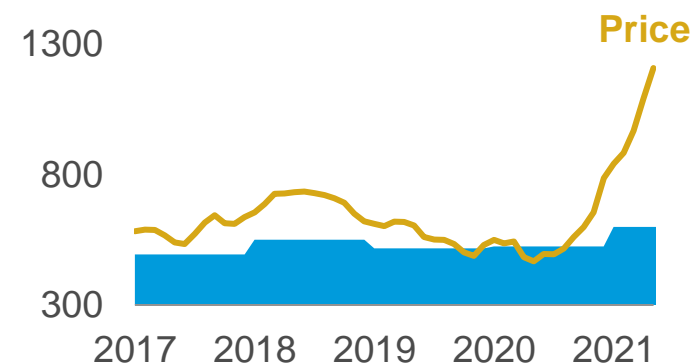
Lithium, \$/t



Gold, \$/t

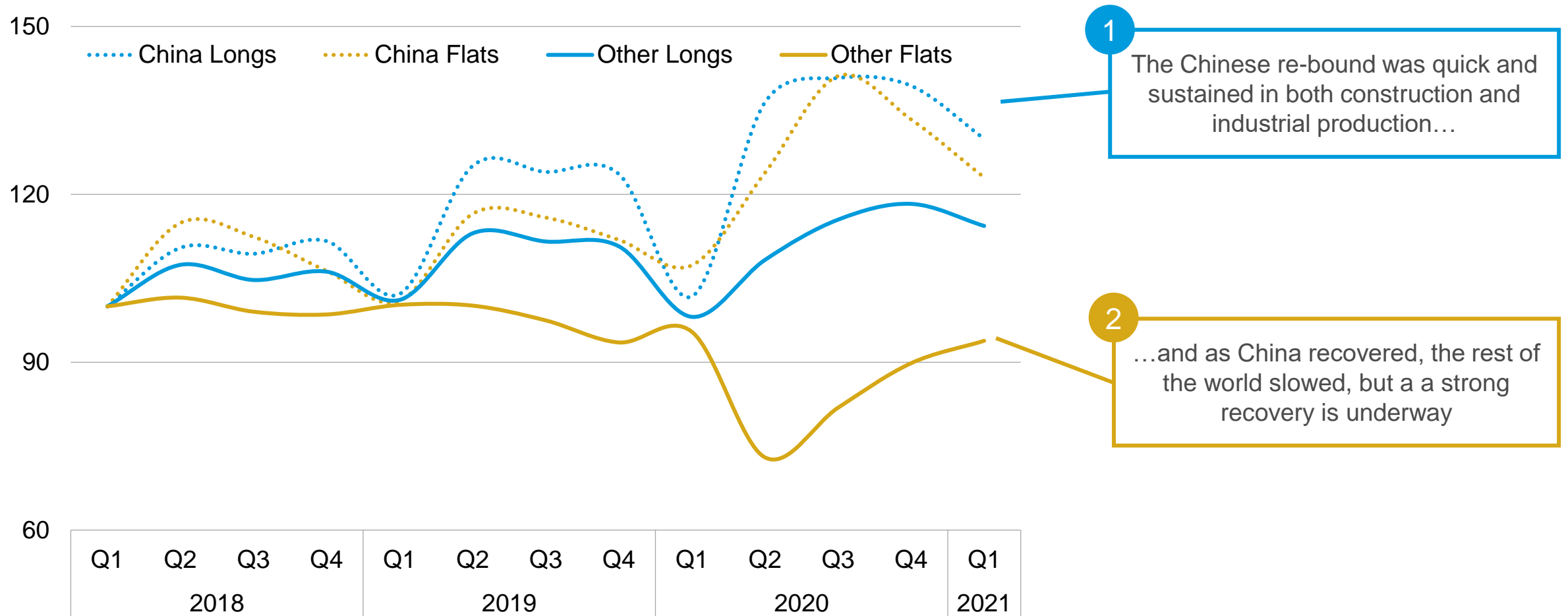


Steel, \$/t



The steel consumption picture illustrates the nature of the recovery

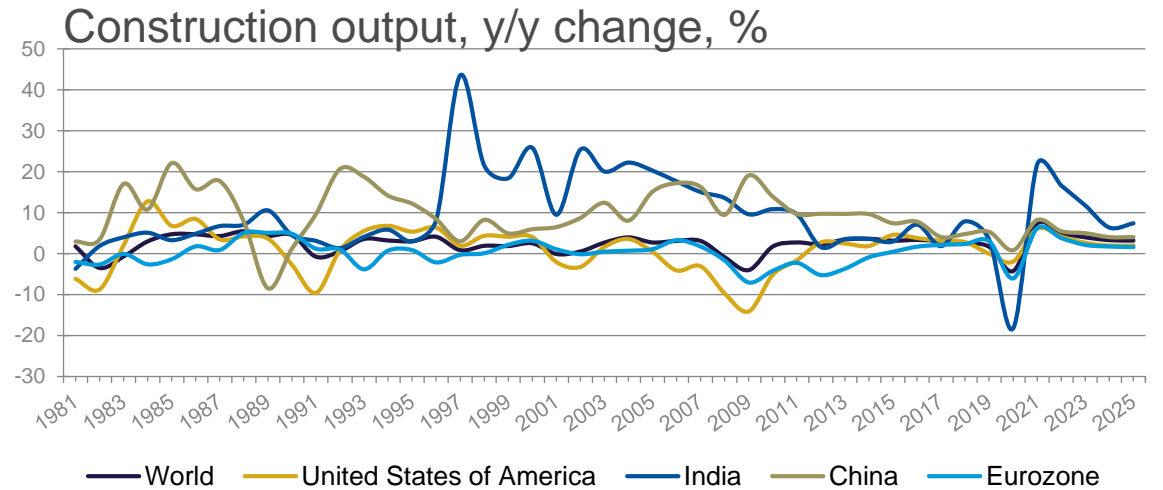
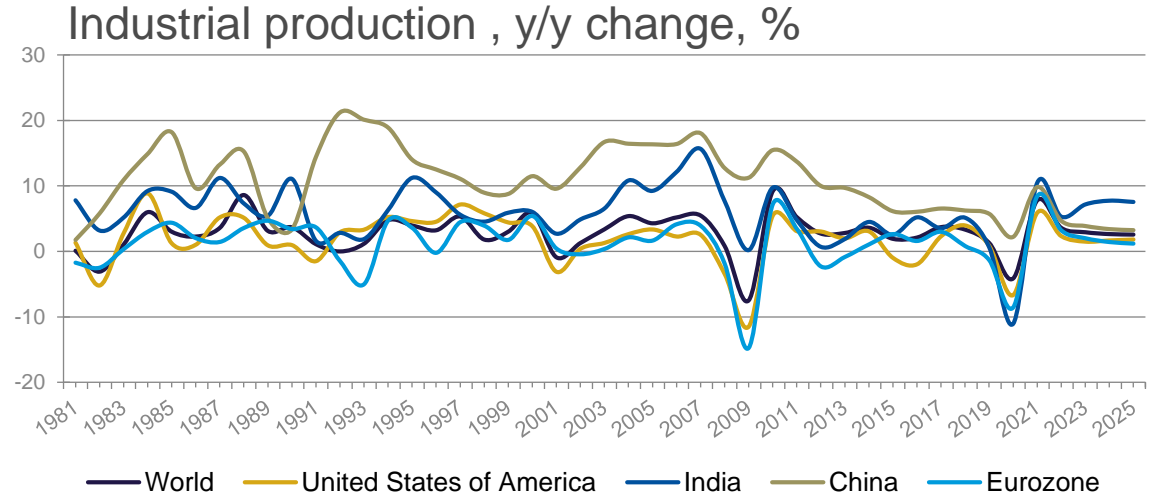
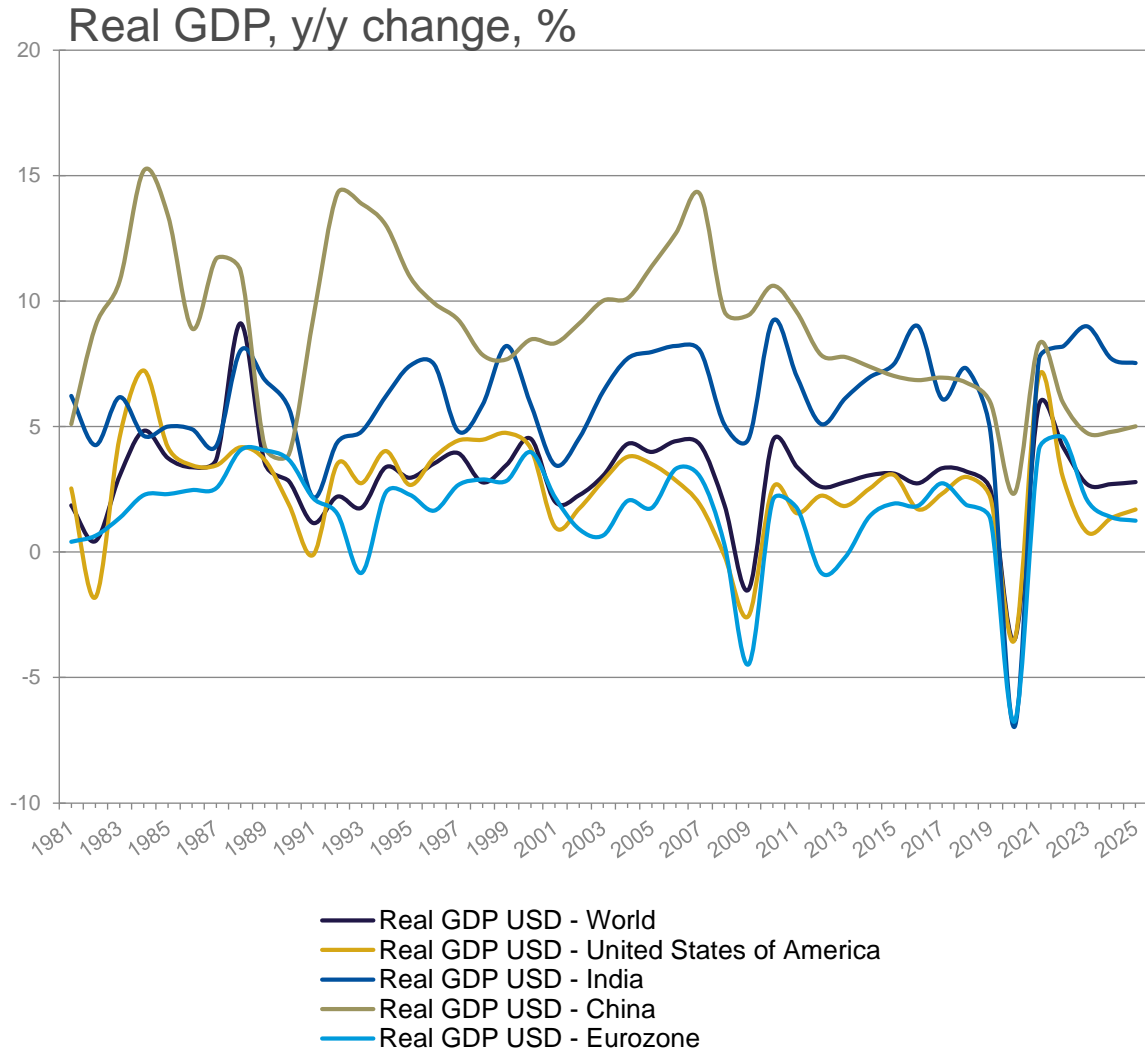
Total finished steel apparent consumption, 2018 Q1=100



1 The Chinese re-bond was quick and sustained in both construction and industrial production...

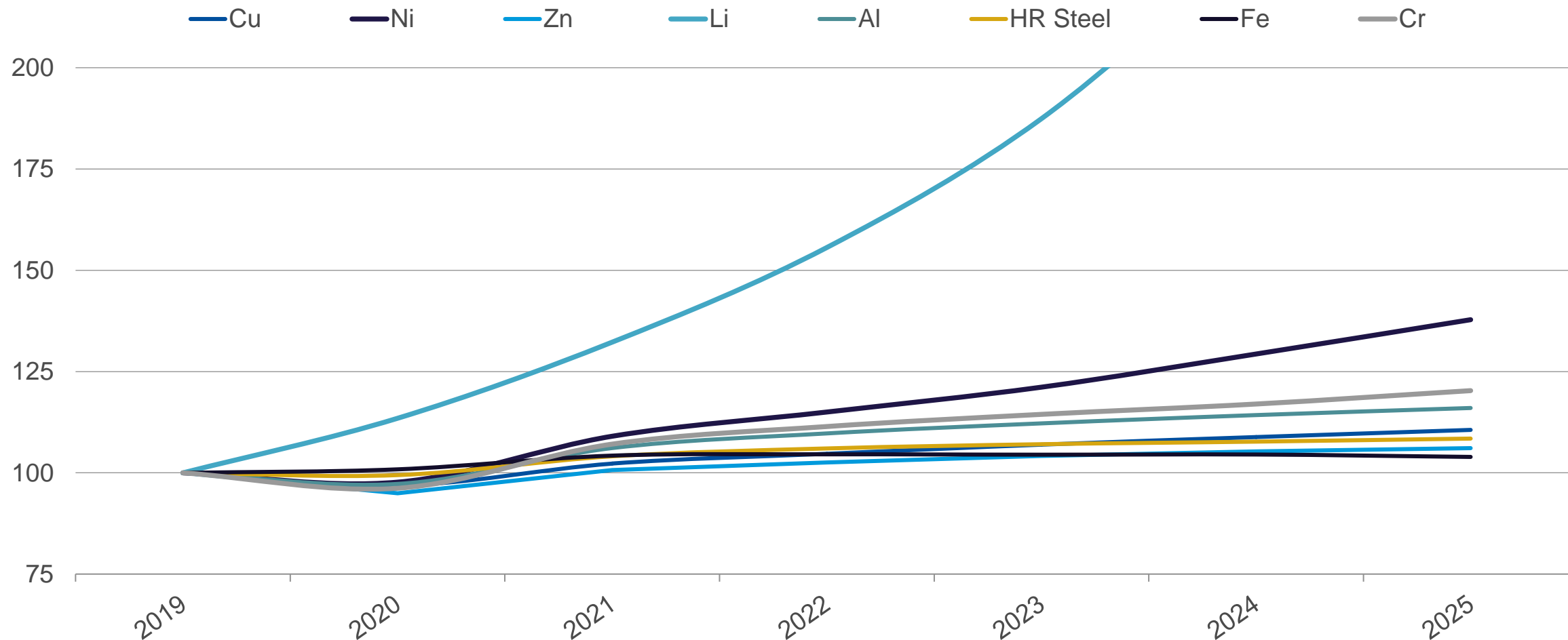
2 ...and as China recovered, the rest of the world slowed, but a strong recovery is underway

Strong demand for goods and construction are driving the recovery

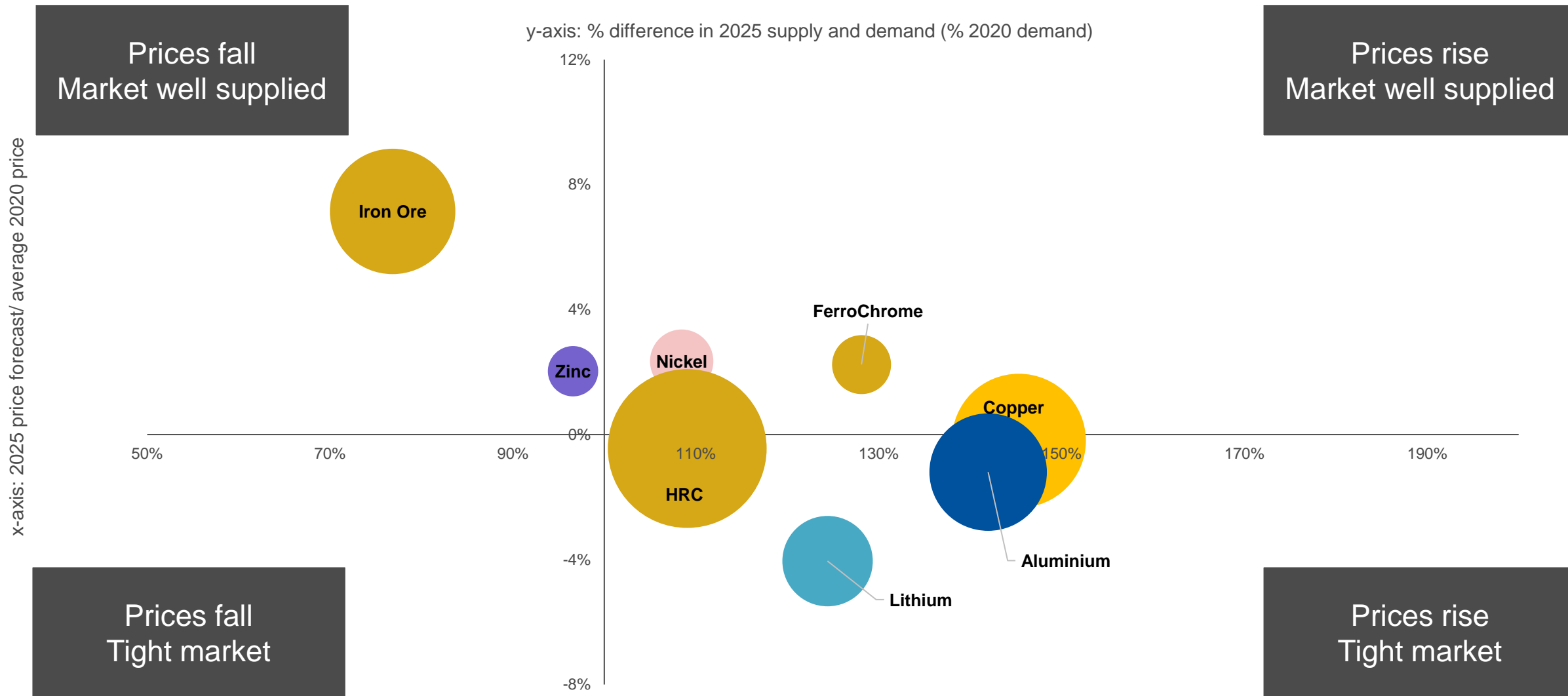


Demand through to 2025 is forecast be good...

Actual and forecast consumption, 2019 = 100



...but the picture for prices is more mixed.



China's latest 5-year plan aims to pivot the economy

The Chinese government's 'two-sessions' meeting in March set out the priorities for 2021, endorsed the 'dual circulation' policy and approved the next 5-year plan and long-term objectives up to 2035

1. Internal circulation

- Rebalance growth towards higher consumption, away from investment.
- Investment focus switches to technological advancement and away from steel intensive heavy infrastructure projects reducing steel demand.

2. External circulation

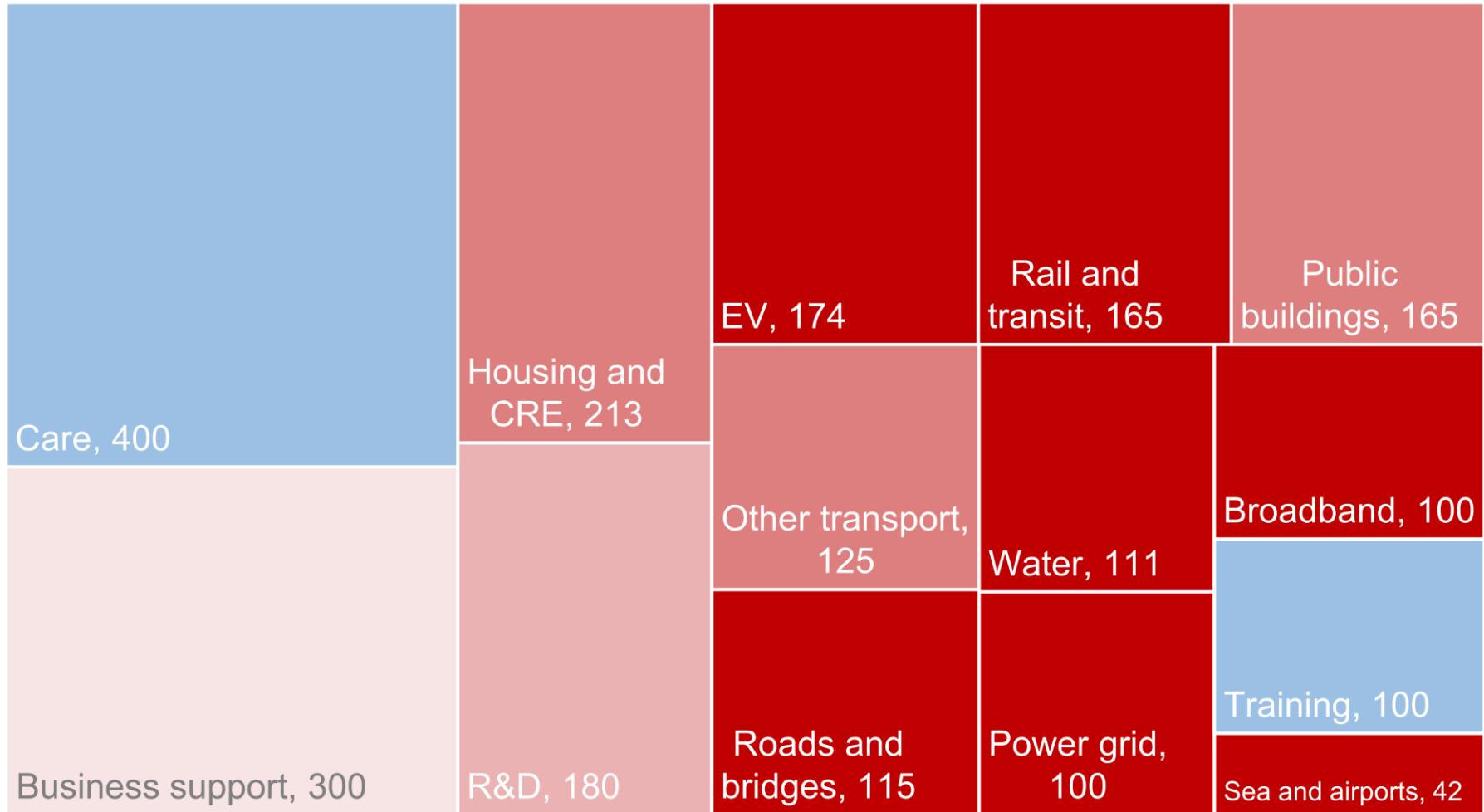
- Increase imports of 'essential' low tech, low value-added products.
- Move up the value chain, replacing "labour intensive" exports with higher value, high technology products.

3. Focus on carbon reduction and the environment

- 'Greener' growth defined as lower energy intensity per unit of GDP.
- Renewed focus on emissions from carbon and energy intensive industry (steel, ferroalloys), greener energy

There are upsides still to be built into some regional forecasts...

The American Jobs Plan (AJP)



Red:
most commodity intensive

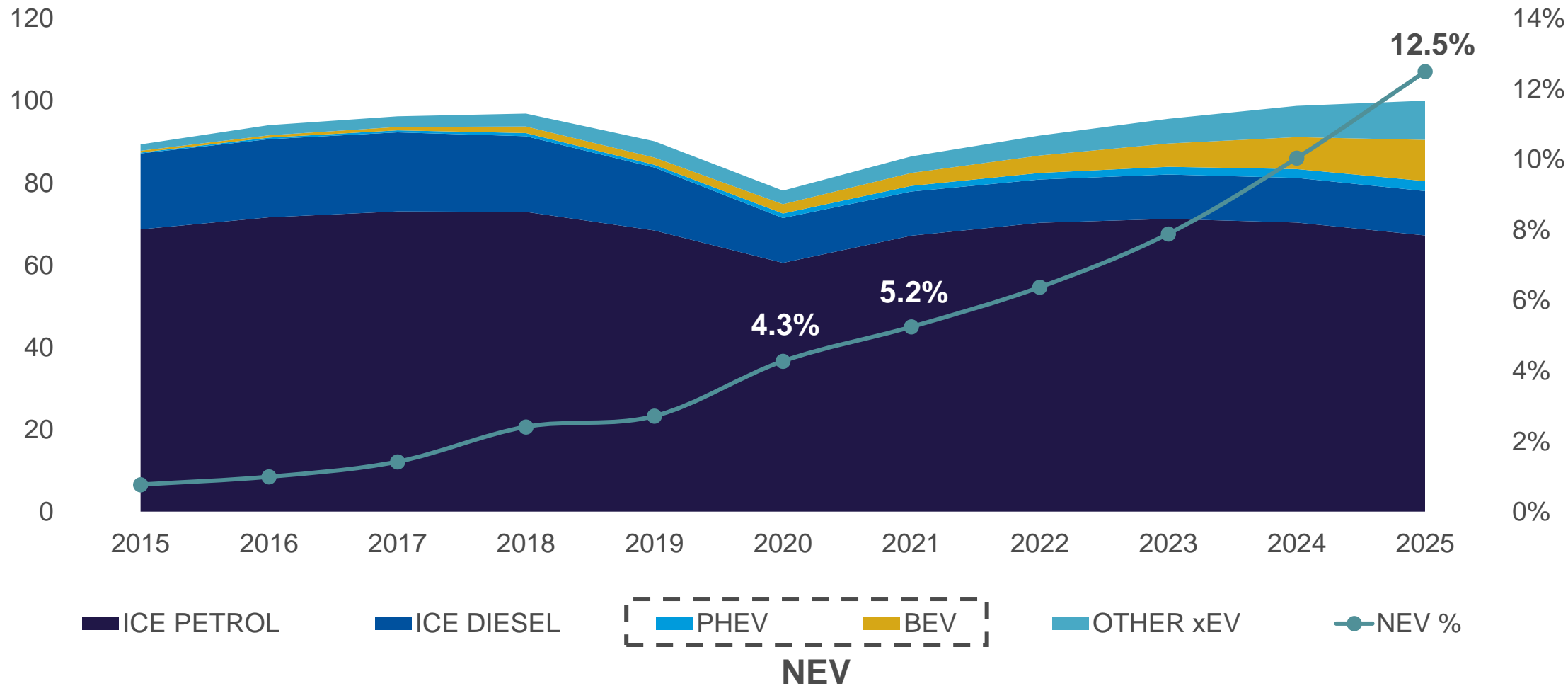
Blue:
least commodity intensive

Metals Consumption Estimates:
(assumes over five years)
Copper = 140,000 t/y
Steel = 5 Mt/y
Aluminium = 157,000 t/y

...and the growth in EV production will drive changes...

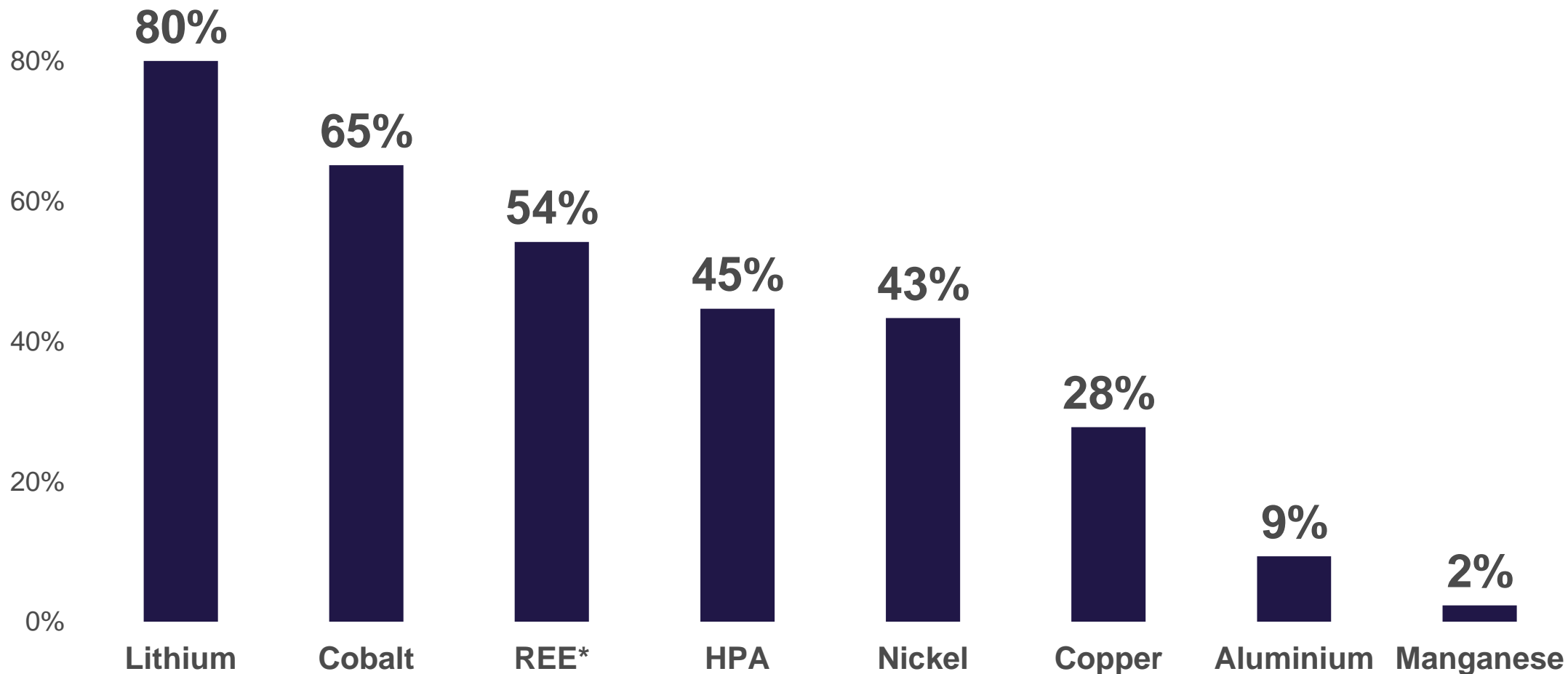
LHS: Global LDV sales by powertrain, million units

RHS: NEV market share, %



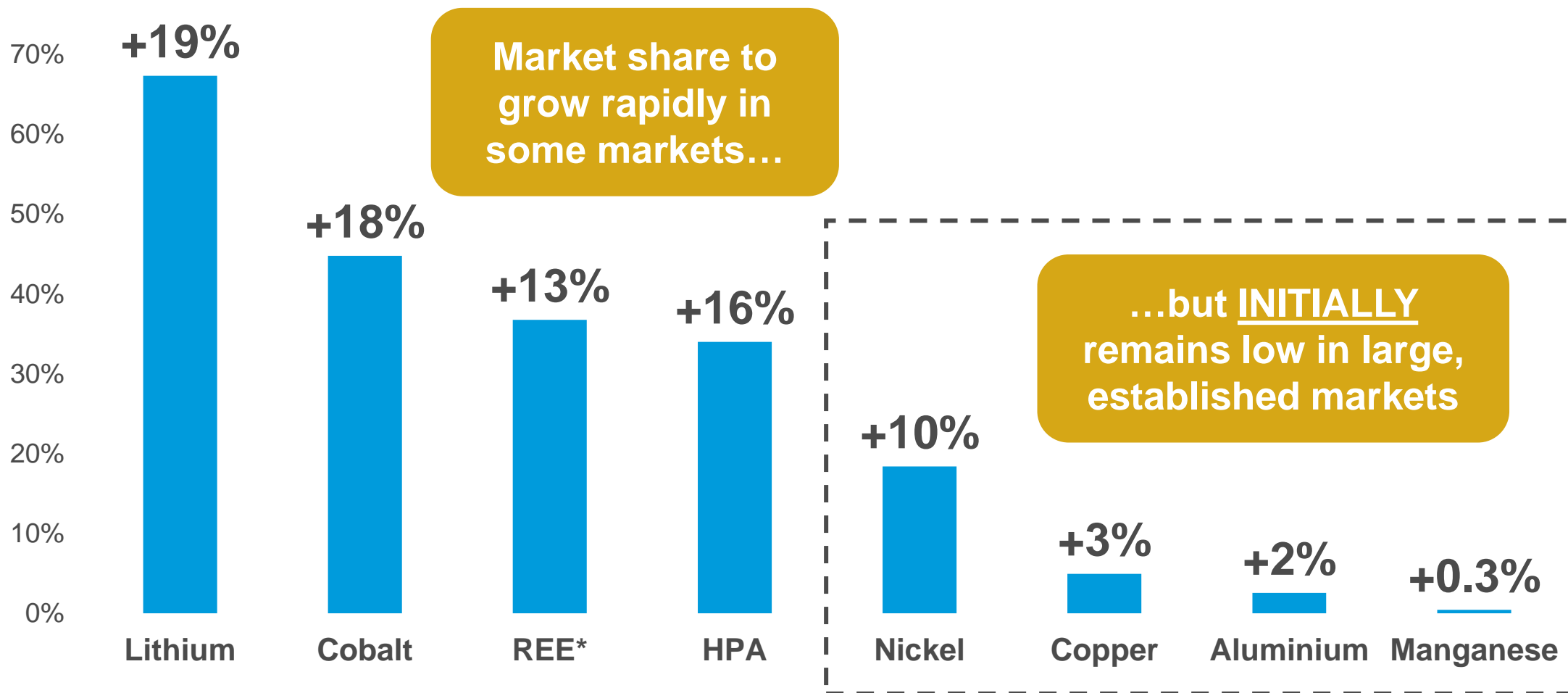
... with some products gaining more than others...

Share of demand growth from 2020-2025 from EVs















...at least in the short-term.

EV share of total demand in 2025, '+' relative change vs 2020

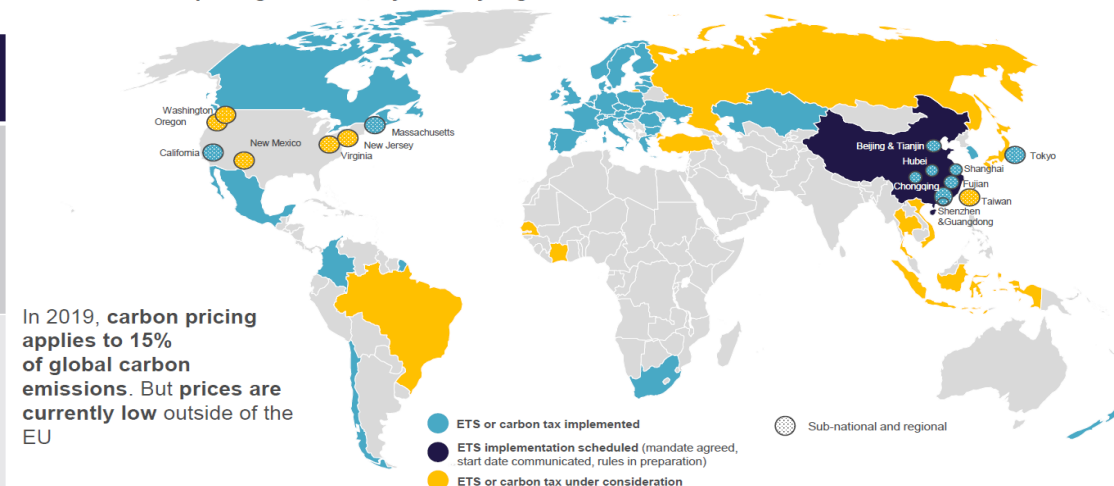


Carbon emissions are a hot topic in the commodities space

Materiality of ESG Issues	1st	2nd	3rd
Mining	Carbon emissions 	Community and labour rights 	Local habitat and biodiversity impacts 
Metal processing	Carbon emissions 	Electricity and fuel prices 	Community and labour rights 
Fertiliser production	Emissions to water 	Carbon emissions 	Operational risk and transparency 
Fossil-fuel power	Carbon emissions 	Electricity and fuel prices 	Local habitat and biodiversity impacts 

SOURCE: CRU & Fitch Ratings Client Survey Results

Status of carbon pricing schemes, by country/region



Teck switching Chile mine to renewable power

Teck Resources has announced a major agreement with AES Corp. to switch its operations on Cerro Verde to renewable power by 2025.

BHP switches to green power for Chilean copper starting 2021

REUTERS

China pledges to be 'carbon-neutral' by 2060

Surprise move at UN by world's biggest emitter increases pressure on US over climate commitments

Copper & Copper News

21 December 2020

Comments

New climate assessment of major mining companies reveals gap in alignment to Paris climate goals

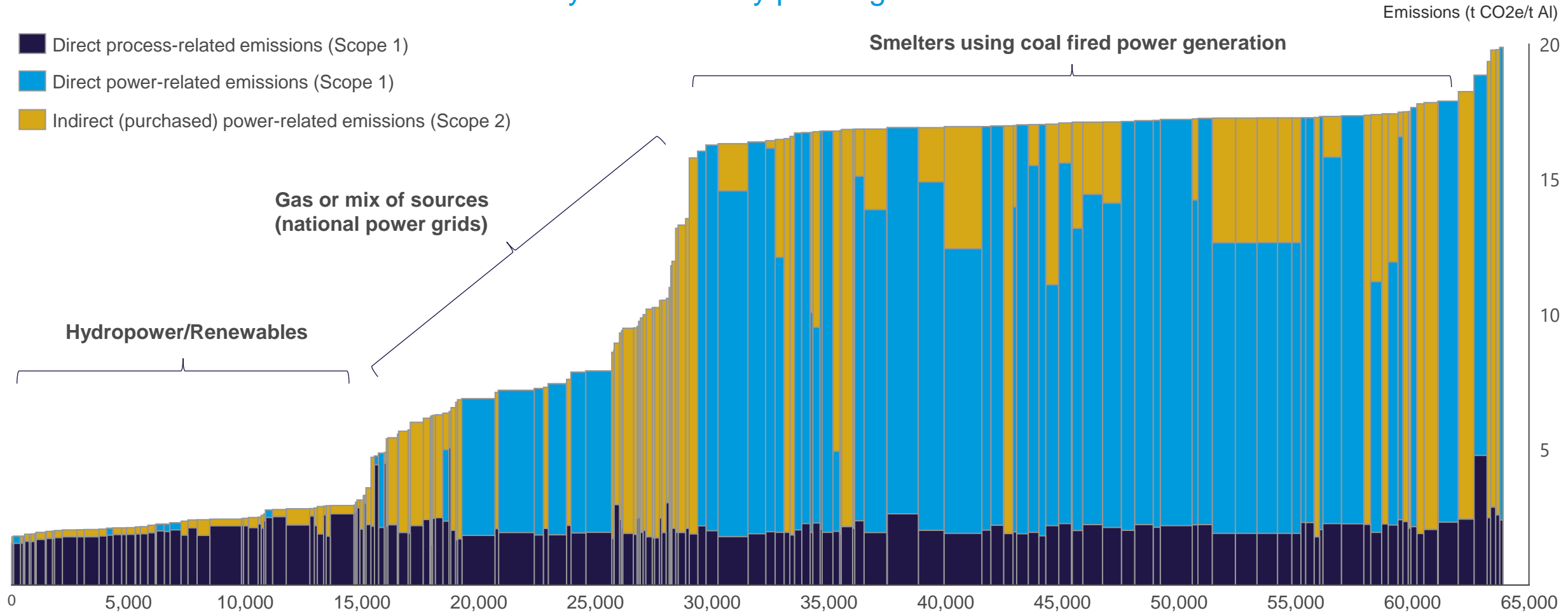
Global Mining Review, Tuesday, 05 May 2020 10:30

China, the world's biggest greenhouse gas emitter, has announced at the virtual UN Climate Summit that it will reach carbon neutrality by 2060. President Xi Jinping told the world's leaders that China will reach its peak carbon emissions by 2030 and reach carbon neutrality by 2060.

New research from the Transition Pathway Initiative (TPI) reveals that just two of the 10 largest mining companies are aligned with limiting climate change to 2°C. These 10 companies have a market capitalisation of over US\$350 billion and contribute to annual carbon emissions of over 1.5 billion t either directly or indirectly via their products.

CRU provides powerful, consistent data on the aluminium industry

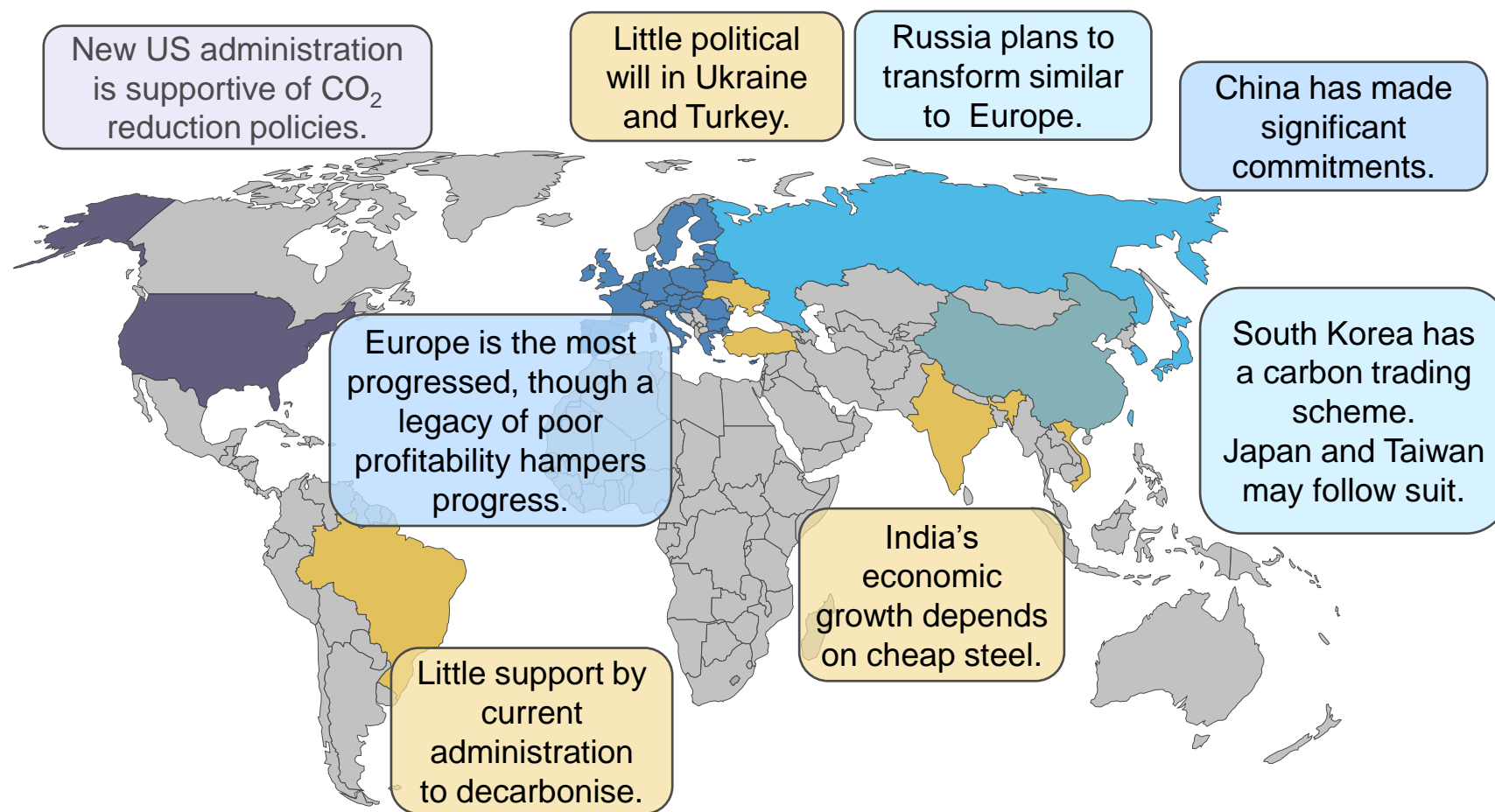
GHG emissions in the aluminium industry are driven by power-generation fuel mix



DATA: CRU 2020 Aluminium Cost Model; CRU Global Carbon Emissions Service. Cumulative Industry Production '000t

Steel faces a major decarbonisation challenge...

- Europe is the first mover worldwide, though Chinese mills have recently pressed ahead with low-CO₂ steelmaking.
- EU policies (e.g. ETS¹) are the driver of Europe's transformation and are a major source for uncertainty.
- Europe's steel industry has a history of strong R&D, which is being utilised for the transformation.
- While Asian countries could transform their steel industry, no immediate plans have been announced outside China.



Price volatility and demand recovery, with structural changes longer term



- Demand recovery, re-stocking and slower supply recovery have led to steep price rises and near-term price volatility
- We forecast under-lying demand recovery will continue with products connected to EVs and the 'green economy' growing more strongly
- Decarbonisation will bring challenges and opportunities.