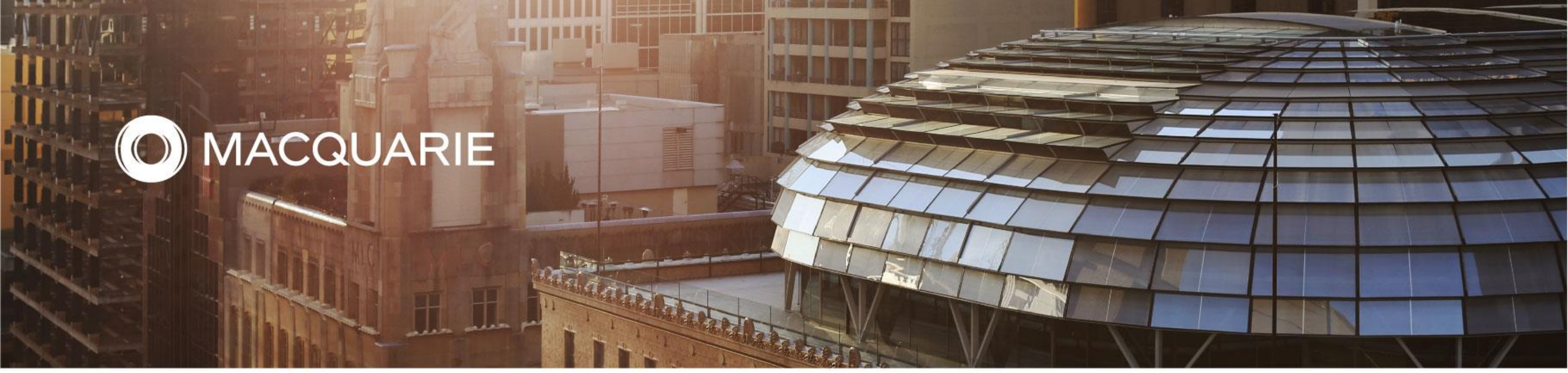


# Commodities update

## Big commodity price downgrades

- Despite the oft cited correlation between commodity prices and inflation, Macquarie have argued that this only holds while inflation is “demand pull” in nature and accelerating.
- If the causation becomes “cost push”, or merely once the inflation itself and the associated central bank policy responses become demand destructive, inflation presents a headwind for commodity prices. This dynamic now appears to be playing out in an even faster and more dramatic fashion than was their base case a quarter ago.
- Moreover, the erosion of Russia related supply risk premiums has dovetailed, with lacklustre Chinese domestic demand growth, slowing US construction and manufacturing sectors, and the early arrival of a European industrial recession to precipitate a rapid reversal of investor positioning and sharp prices declines across commodity markets.
- Until demand growth appears set to turn sustainably higher, Macquarie think it will remain a “sell rallies” market environment.
- For that turn to come, developed market inflation will arguably need to have been tamed, enabling central banks to dial back restrictive policy settings, and China’s efforts to lift domestic end demand will need to be gaining traction, quite possibly after a progressive relaxation of the country’s zero-Covid policy.
- Macquarie’s base case is for general price lows to be made in 1H23 and, when that cyclical turn comes, for the positive secular demand trends emanating from the energy transition to become a progressively larger driver of commodity markets, especially if lower interim prices have slowed potential supply growth in those markets crucial to its delivery.

*This is a summary of the recently released “Commodities Compendium: The (super) cycle is dead, long live the cycle” from Macquarie’s global commodities team.*

## Key commodity calls

Macquarie’s commodity preferences listed below are set relative to spot prices reported shortly before the publication of this report.

### Short-term tactical views

- **Precious metals** – Rising real interest rates and a strong US dollar present a clear headwind to precious metals, added to which silver should underperform while global industrial growth is slowing.
- **US HRC** – Prices expected to fall further as the US enters recession and demand declines sequentially.
- **California carbon** – Upside from likely programme revision and linkage to inflation.

### Next 6-9 months’ most preferred

- **Coking coal** – Despite the weak steelmaking backdrop, cross-over tonnes moving into the thermal market tightens the balance.
- **Thermal coal** – Tighter for longer as a beneficiary of gas and power markets, while high-CV seaborne supply growth is constrained.

### Next 6-9 months’ least preferred

- **Oil** – Ongoing ramp-up of US shale production and signs of demand destruction move the market into surplus.
- **Industrial metals and bulks** – A global growth slowdown is bad news for prices across the board.

### Medium-term winners

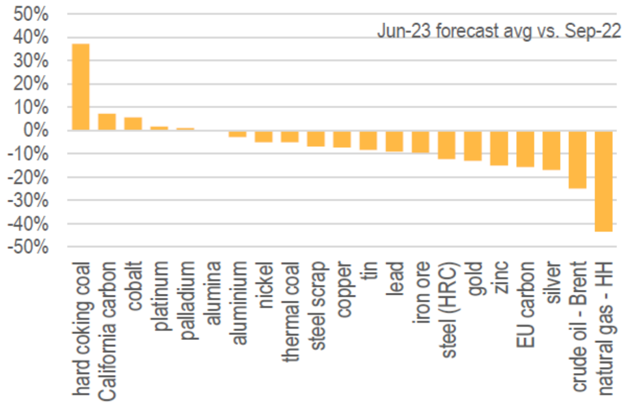
- **Carbon** – European ETS market benefits from tighter cap and policy tailwind form RePowerEU programme.
- **Electrification metals** – The EV revolution is underway and elevated prices will be required for sufficient supply to be delivered.

### Medium-term strugglers

- **Fossil fuels** – Current cyclical tightness wanes and structurally negative demand trends develop, though gas remains a key transition fuel.

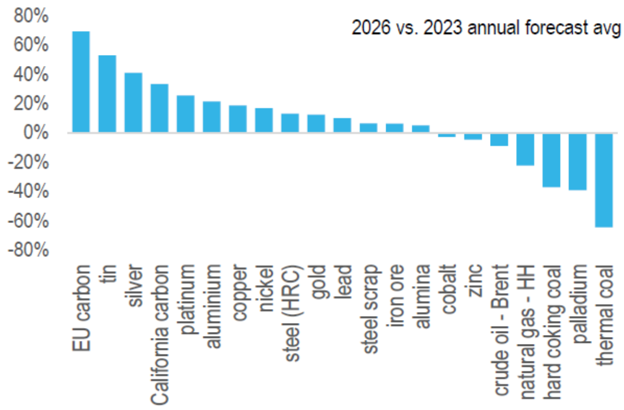
- **Palladium** – The end of the structural bull market, with autocatalyst demand set to decline at the same time as primary and secondary supply rise.

Next 6 to 9-months: Most markets expected to bottom in 1H 2023




Source: Macquarie Commodity Strategy, September 2022

Four years out: Upside building for energy transition winners




Source: Macquarie Commodity Strategy, September 2022

## Big forecast downgrades (& some upgrades)

- **Base metals downgrades** – copper (31st August), zinc and aluminium were previously downgraded due to deteriorating demand conditions, albeit with smelter cut offsets for the latter two metals.

- **Ferrous downgrade** (23rd August) – iron ore expected to deliver a clear surplus in Q4 and steel prices to come under pressure from slowing ex-China growth.

- **Coking coal upgrade** (13th September) – despite the weak steelmaking backdrop, short-term support from semi-soft tonnes switching to the thermal market and longer-term lack of supply growth tightens the balance.

- **Thermal coal upgrade** (27th September) – tighter for longer as gas shortages and elevated electricity prices boost demand at the same time as supply growth ex-Indonesia and China domestic is constrained.

- **Precious metals downgrade** – even faster Fed hiking cycle, to a higher peak, reduces late 2022 and early 2023 price expectations.

- **EU carbon downgrade** – weaker demand due to industrial recession and increased supply from auction frontloading but LT upgraded given commensurate reduction in deferred supply.

Revisions to Macquarie's price forecasts since last Commodities Compendium of 21st June 2022

| | CY22 | CY23 | CY24 | CY25 |
|---|---|---|---|---|
| Aluminium | -7% | -18% | -24% | -20% |
| Copper | -12% | -16% | -6% | -5% |
| Nickel | -6% | 0% | 0% | 0% |
| Zinc | -9% | -15% | -4% | 0% |
| | | | | |
| Crude Oil Brent | -5% | 0% | -1% | -1% |
| Crude Oil WTI | -7% | 0% | -1% | -1% |
| | | | | |
| Thermal Coal | 14% | 58% | 114% | 124% |
| EU carbon | -5% | -28% | -22% | -16% |
| California carbon | -11% | -14% | 0% | 0% |
| | | | | |
| Iron Ore, fines | -14% | -19% | 6% | 6% |
| Iron Ore, lump | -19% | -18% | 5% | 5% |
| Hard Coking Coal | -10% | 41% | 21% | 41% |
| Soft Coking Coal | -8% | 58% | 82% | 100% |
| Steel HR Coil | -14% | -8% | 15% | 5% |
| | | | | |
| Gold | -3% | -3% | 0% | 0% |
| Silver | -5% | -13% | -3% | 0% |
| Palladium | -3% | 3% | 6% | 8% |
| Platinum | -9% | -7% | 0% | 0% |
| | | | | |
| Lithium | 2% | 45% | 92% | 102% |

Source: Macquarie Commodity Strategy, LME, CME, ICE, Bloomberg, Platts, September 2022

## Macquarie's metals, bulk and energy price forecasts

| commodity | unit | LT price 2022$ real | Sep-22 est. | Dec-22 est. | Mar-23 est. | Jun-23 est. | Sep-23 est. | 2022 est. | 2023 est. | 2024 est. | 2025 est. | 2026 est. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| copper | $/tonne | **7,700** | 7,765 | 7,400 | 7,100 | 7,200 | 7,200 | 8,674 | 7,225 | 7,600 | 7,950 | 8,563 |
| aluminium | $/tonne | **2,500** | 2,365 | 2,250 | 2,200 | 2,300 | 2,350 | 2,693 | 2,288 | 2,250 | 2,500 | 2,775 |
| zinc | $/tonne | **2,350** | 3,295 | 3,100 | 2,900 | 2,800 | 2,600 | 3,521 | 2,725 | 2,700 | 2,650 | 2,600 |
| nickel | $/tonne | **20,000** | 22,100 | 22,000 | 21,000 | 21,000 | 21,000 | 25,285 | 21,000 | 21,000 | 23,000 | 24,500 |
| lead | $/tonne | **1,850** | 1,980 | 1,850 | 1,820 | 1,800 | 1,800 | 2,093 | 1,818 | 1,900 | 1,925 | 2,000 |
| tin | $/tonne | **30,000** | 24,000 | 22,000 | 20,000 | 22,000 | 23,000 | 31,603 | 22,250 | 26,000 | 30,000 | 34,000 |
| gold | $/oz | **1,500** | 1,725 | 1,625 | 1,575 | 1,500 | 1,550 | 1,775 | 1,556 | 1,650 | 1,700 | 1,750 |
| silver | $/oz | **21.0** | 19.25 | 18.25 | 17.00 | 16.00 | 17.50 | 21.05 | 17.38 | 21.25 | 23.25 | 24.50 |
| platinum | $/oz | **1,050** | 885 | 850 | 825 | 900 | 1,000 | 934 | 956 | 1,150 | 1,200 | 1,200 |
| palladium | $/oz | **1,000** | 2,080 | 2,000 | 1,900 | 2,100 | 2,000 | 2,135 | 1,975 | 1,650 | 1,350 | 1,200 |
| rhodium | $/oz | **2,000** | 14,343 | 14,000 | 12,000 | 10,000 | 8,000 | 15,673 | 9,500 | 5,000 | 3,000 | 2,750 |
| iron ore, spot fines | $/tonne, cfr China | **80** | 105 | 90 | 90 | 95 | 100 | 119 | 99 | 105 | 100 | 105 |
| iron ore, spot lump | $/tonne, cfr China | **96** | 111 | 93 | 100 | 113 | 118 | 130 | 115 | 123 | 120 | 125 |
| hard coking coal | US$/tonne, fob Aust | **200** | 255 | 310 | 350 | 350 | 350 | 376 | 350 | 340 | 310 | 220 |
| LV-PCI | US$/tonne, fob Aust | **158** | 250 | 307 | 343 | 343 | 343 | 342 | 343 | 323 | 279 | 187 |
| semi-soft coking coal | US$/tonne, fob Aust | **134** | 212 | 288 | 319 | 319 | 319 | 305 | 319 | 306 | 264 | 176 |
| steel (avg HRC) | $/tonne | **547** | 718 | 635 | 615 | 630 | 655 | 882 | 640 | 730 | 703 | 723 |
| steel scrap (avg #1HMS) | $/tonne | **277** | 387 | 341 | 341 | 360 | 373 | 436 | 368 | 391 | 376 | 391 |
| thermal coal, spot | US$/tonne, fob Aust | **80** | 400 | 420 | 420 | 380 | 350 | 362 | 368 | 263 | 190 | 130 |
| thermal coal, JFY | US$/tonne, fob Aust | **80** | 375 | 375 | 375 | 330 | 330 | 309 | 341 | 263 | 195 | 135 |
| EU carbon | EUR/t, spot | **105** | 77 | 65 | 65 | 65 | 65 | 77 | 65 | 70 | 80 | 110 |
| California carbon | US$/tonne | **44** | 28 | 26 | 30 | 30 | 30 | 29 | 30 | 38 | 40 | 40 |
| alumina | US$/tonne, spot fob Aust | **288** | 330 | 335 | 320 | 330 | 325 | 364 | 324 | 318 | 336 | 340 |
| ferrochrome | c/lb, EU | **130** | 180 | 150 | 150 | 150 | 140 | 182 | 145 | 145 | 150 | 155 |
| molybdenum | $/lb | **13.00** | 16.00 | 17.00 | 16.00 | 15.00 | 15.00 | 17.62 | 15.25 | 14.00 | 13.00 | 13.00 |
| cobalt | $/lb (99.8%) | **28.5** | 26.50 | 27.00 | 27.00 | 28.00 | 28.00 | 32.00 | 27.75 | 27.75 | 27.00 | 27.00 |
| lithium | $/tonne, Asia Carbonate | **15,000** | 66,000 | 65,000 | 63,000 | 61,000 | 59,000 | 63,072 | 60,250 | 55,750 | 47,000 | 36,250 |
| crude oil - Brent | $/bbl | **61.00** | 98.00 | 88.00 | 85.00 | 80.00 | 70.00 | 98.97 | 76.25 | 65.46 | 67.41 | 69.41 |
| crude oil - WTI | $/bbl | **57.00** | 93.00 | 83.00 | 80.50 | 75.50 | 65.50 | 94.88 | 71.25 | 61.17 | 62.99 | 64.86 |
| natural gas - HH | $/mmBtu | **3.75** | 8.00 | 7.30 | 7.00 | 5.00 | 4.75 | 6.85 | 5.50 | 4.02 | 4.14 | 4.27 |

Source: Macquarie Commodity Strategy, LME, CME, ICE, Bloomberg, Platts, (i.e. 2022$ real, active from 2027), September 2022

**Macquarie WM Investment Strategy Team**

Commodities Update was finalised on 29 September 2022.

**Recommendation definitions (Macquarie Australia/New Zealand)**

**Outperform** – return >3% in excess of benchmark return

**Neutral** – return within 3% of benchmark return

**Underperform** – return >3% below benchmark return

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