CRU Webinar

Indian iron ore – all you need to know

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Europe and Americas session

Title: India's steel market outlook and green steel ambitions

Agenda:

1. Indian iron ore exports – recent developments and outlook
2. Mining reforms – how it is restructuring iron ore industry and implication on costs
3. Falling grades of Indian iron ore and challenges with beneficiation
4. Indian iron ore imports and outlook
5. Q&A

Leonardo Paraiso
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Sr. Analyst – Steel Raw Materials

Erik Hedborg
Head – Steel Raw Materials

APAC session

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Jennifer Andrews
Customer Success Director

Lalit Ladkat
Sr. Analyst – Steel Raw Materials

Liz Gao
Lead Iron Ore Analyst

Market intelligence that *empowers* confident decision-making - today, tomorrow and for the future

Data and Insight

Independent and transparent

- In-depth analysis of global demand, production, trade and stocks for 50+ commodity markets
- Historical, current and forecast prices. News and analysis of commodity market developments
- Short, mid and long-term outlooks for production, demand, price outlook, scenario and risk analysis
- Independent cost and emissions data by production site. Analysis of cost structures and drivers
- 1000+ independently assessed prices
- Robust and transparent methodologies
- Compliance with IOSCO code of best practice
- Seamless integration of price, cost and emissions data into in-house data analytics stacks through API delivery
- Regular access to analysts

Strategy

Bespoke project advisory

- Bespoke advisory tailored to specific needs
- Strategy development
- Market assessment
- Due diligence
- Policy advice and support

Communities

Creating valuable connections

- Technical and commercial events and training
- Conferences and exhibitions
- Briefings
- Newsletters
- Webinars
- Community chats

Sustainability

Advisory and analytics

- Analysis of carbon emissions through value chains
- Policy and regulation assessment
- Forecast carbon prices
- Green technologies
- Scenario planning

CRU Global **Expertise**

Integrating adjacent commodities and intermediate value chains

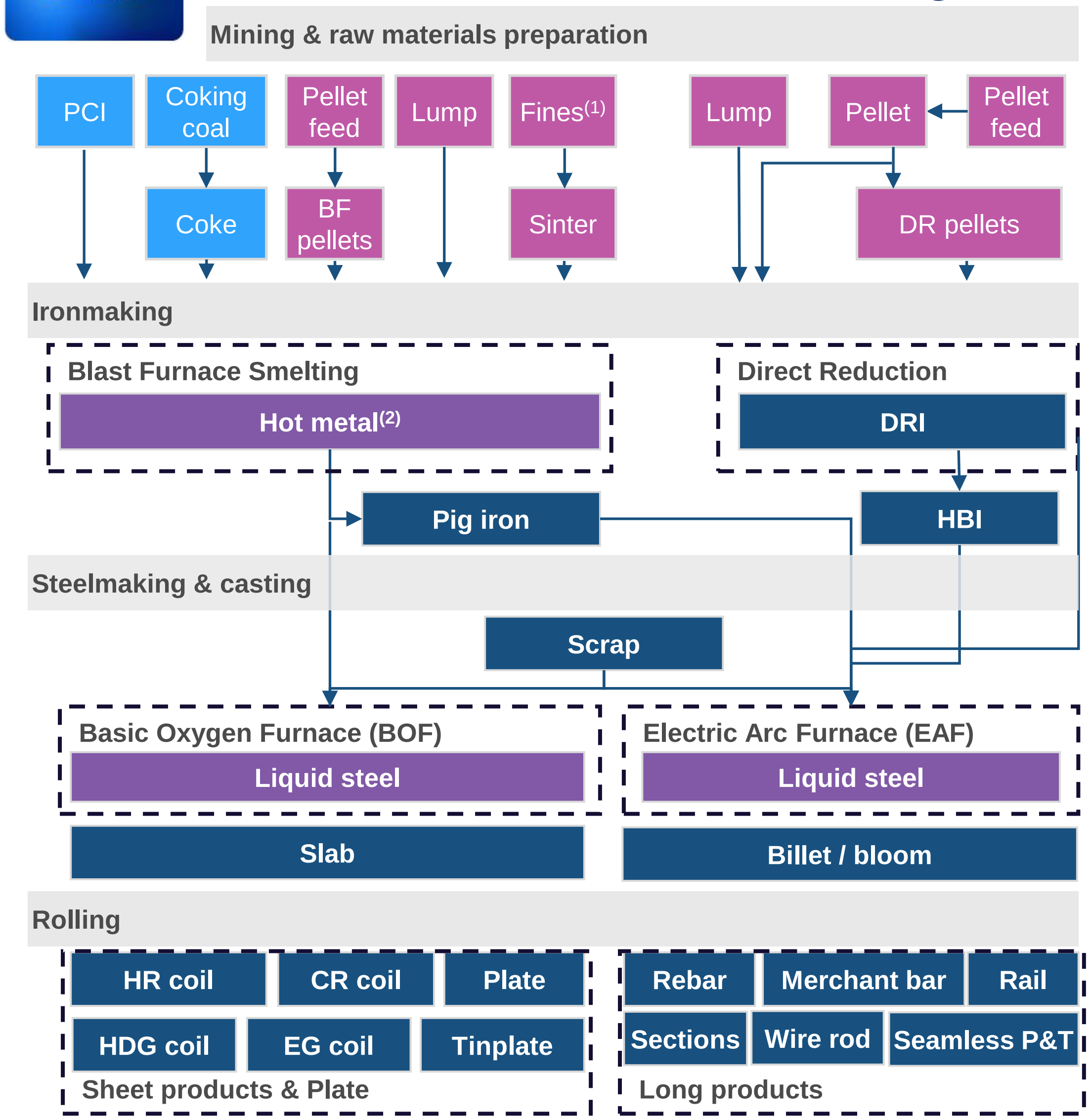
- Ni Nickel
- Zn Zinc
- C Carbon
- V Vanadium
- Mn Manganese
- Mo Molybdenum
- Fe Iron

55 staff on *5* continents drawn from an exceptional range of industry

- *12* Principals
- *18* Seniors
- *25* Analysts

- **Producers**: Rio Tinto, Vale, BHP, Fortescue, Anglo American, BMA,
- **Traders**: Trafigura, Glencore, Mecuria, Vitol, Cargill
- **Steel**: Nippon, JFE, Baowu, Nucor, Bluescope, Ansteel, ArcelorMittal
- **Banks**: Goldman Sachs, Citi Group, Morgan Stanley, Macquarie
- **Competitors**: Wood Mackenzie, S&P Global (Platts)

CRU covers the *full* steel supply chain



PRICES & ANALYSIS	FORECASTS	ASSET LEVEL
Steelmaking Raw Materials		
• Steelmaking Raw Materials • Bulk Ferroalloys	• Iron Ore • Metallurgical Coal & Coke • Manganese	• Iron Ore • Metallurgical Coal • Manganese • Manganese Ferroalloy
Steelmaking & Casting		
• Steel Metallics[4]	• Crude Steel • Metallics	• Steel
Rolling		
• Steel[3] • Steel Long Products • Steel Sheet Products • Global Steel Trade Service • Stainless Steel Flat Products	• Steel Long Products • Steel Sheet Products • Steel Plate Products • Stainless Steel Flat Products	• Steel

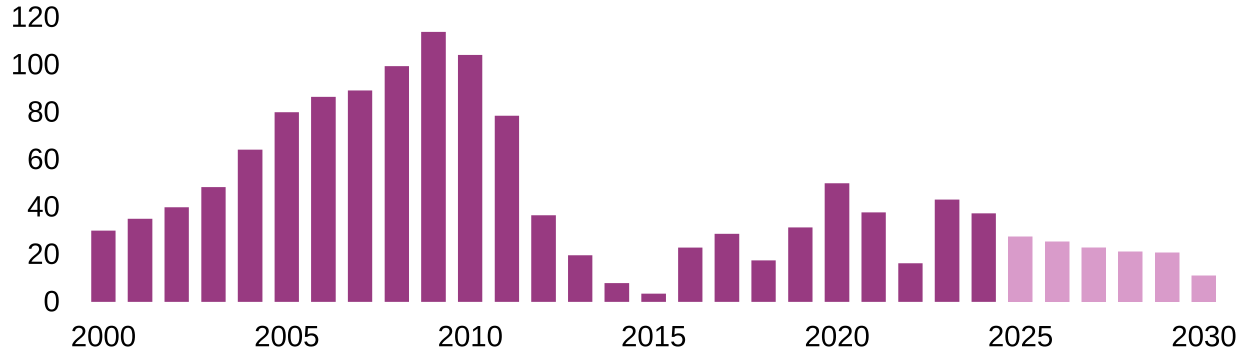
Steel Long Term Market Outlook

CRU produces a **Steel Emissions Abatement Value (CRUsteav)** which is a weekly calculation of the value attributable to a reduction of CO2 emissions in the production of HR coil in the EU relative to the tradition BF-BOF processing route. This value can be used as an input for decisions on how much to pay for low emission steel, the viability of investments and which future production technologies and commercial strategies to pursue.

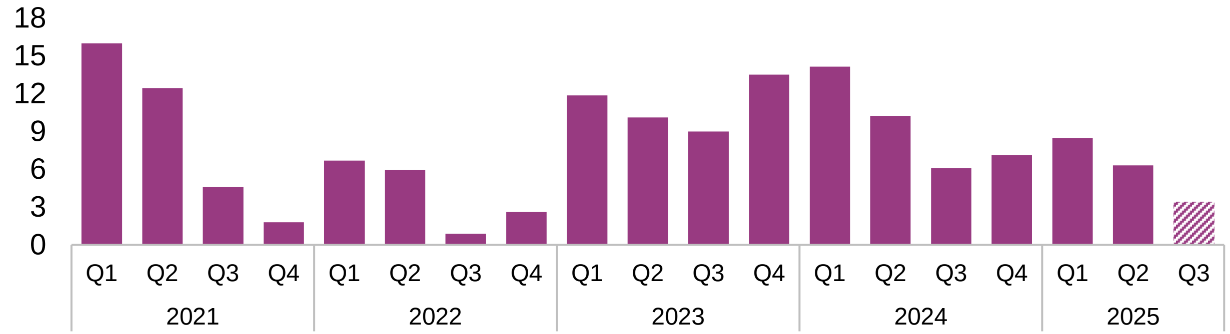
NOTES: 1 Also includes concentrate, 2 Often referred to as liquid iron, virgin iron, crude iron , (3) coverage of plate prices and a selection of sheet and longs products prices, (4) covers scrap, pig iron and HBI

Indian iron ore export will decline with fall in seaborne prices

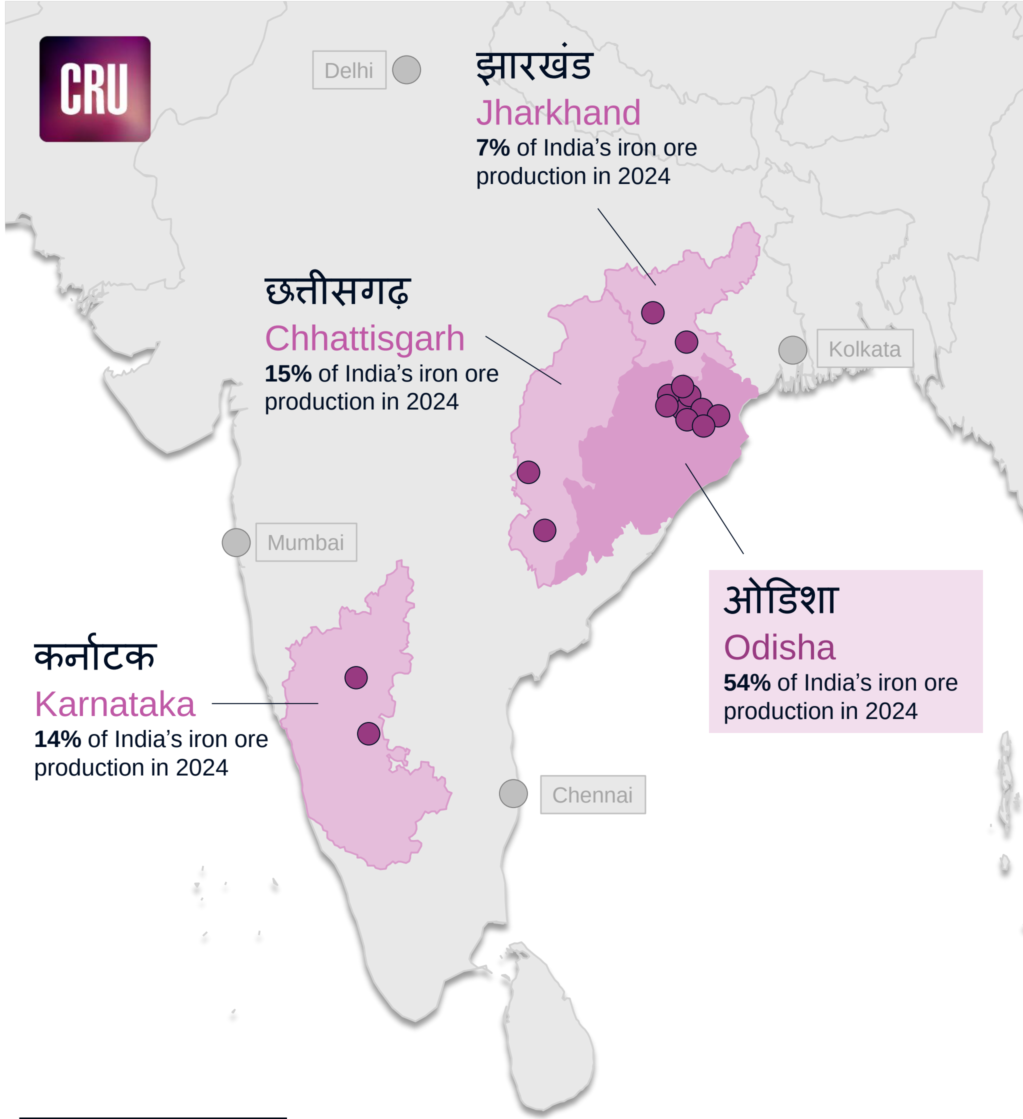
Indian iron ore exports (CRU medium term outlook), Mt



Indian iron ore exports, Mt

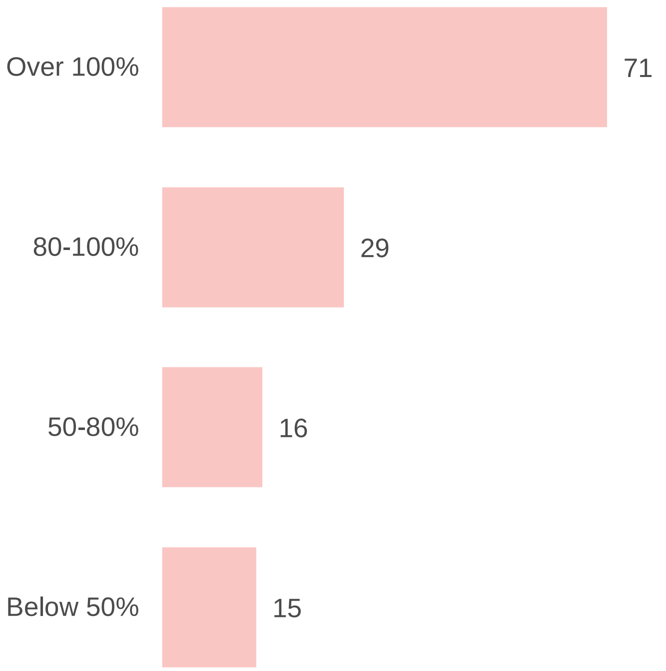


DATA: CRU, GTT, Kpler

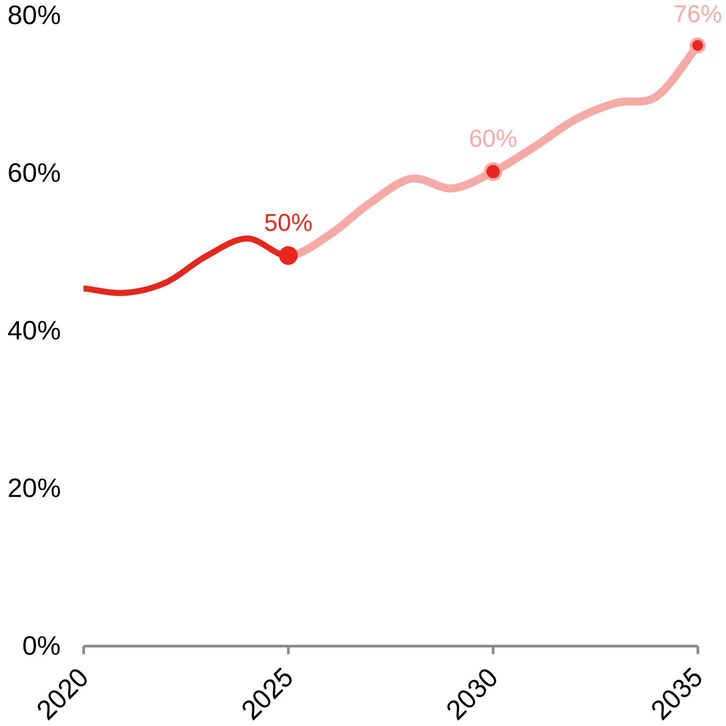


Private supply become increasingly costly due to auction premiums

Number of mines auctioned at various 'auction premia' levels



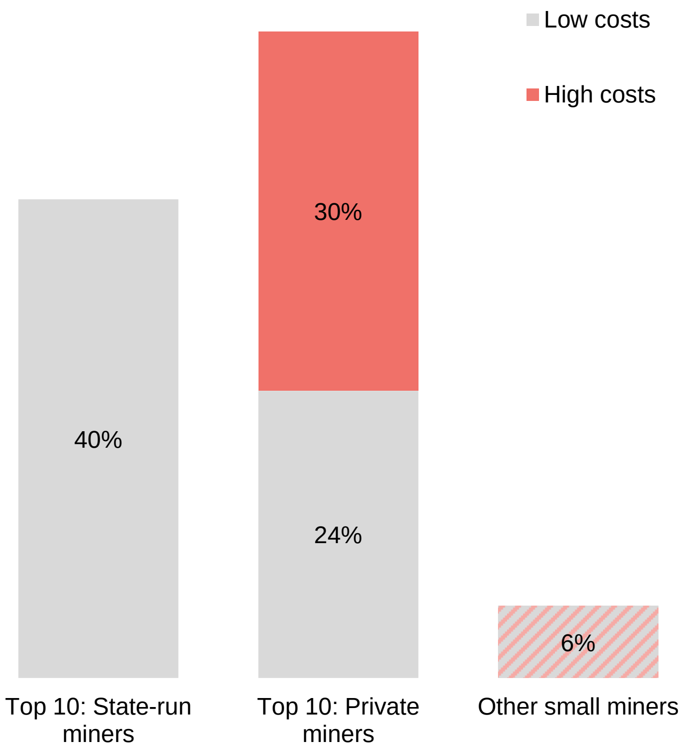
Share of iron ore production by 'private miners' that is subject to 'auction premia'



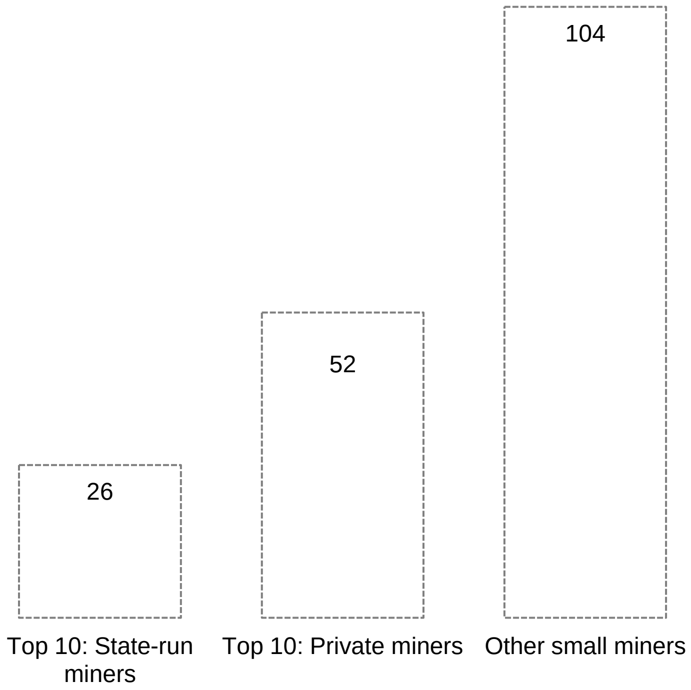
DATA: CRU, Indian Bureau of Mines

State-run miners' share in production will rise to 45% in 2030

2024 market share for Indian iron ore miners,%



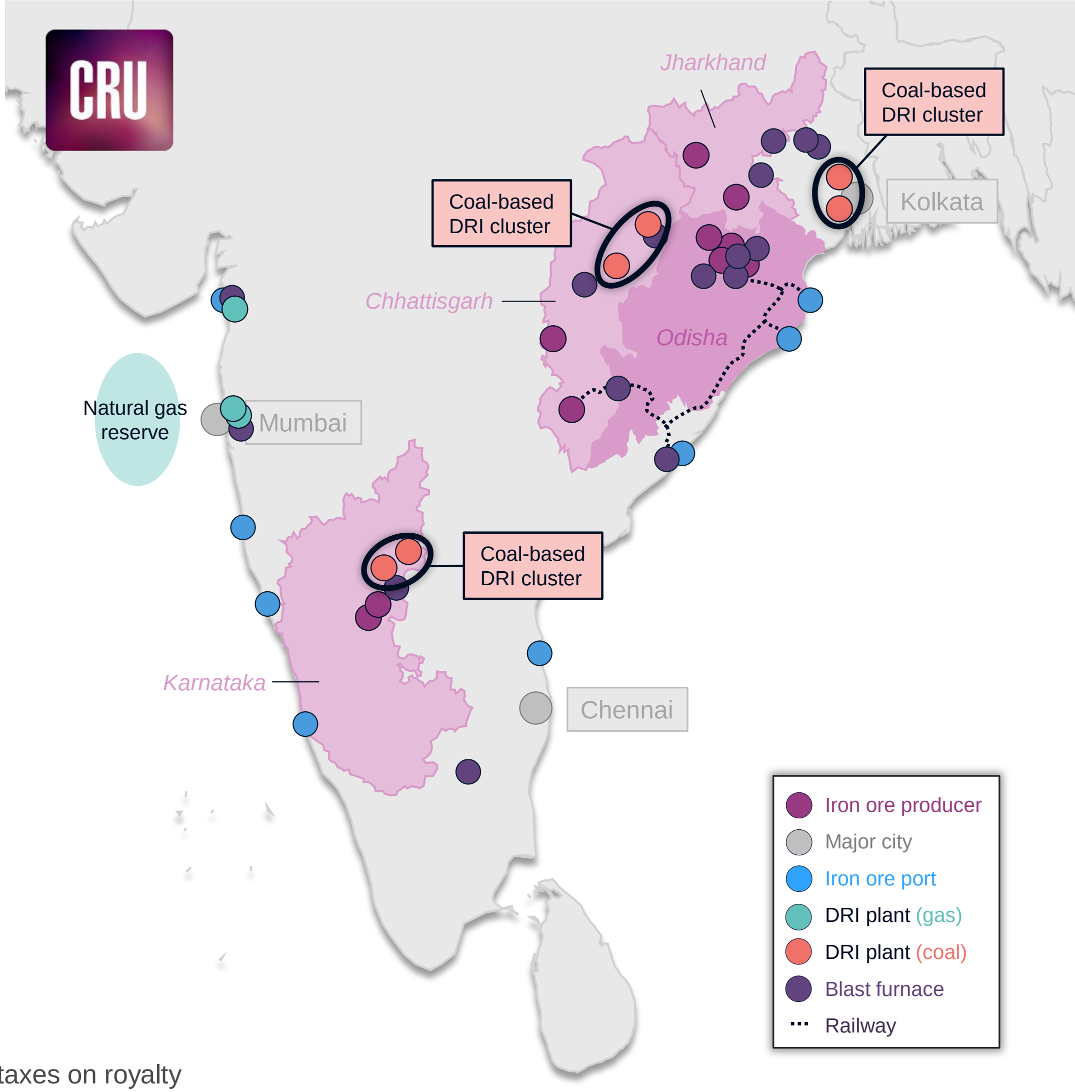
Number of operating mines in 2024, by ownership structure



DATA: CRU

Iron ore production costs will continue to grow

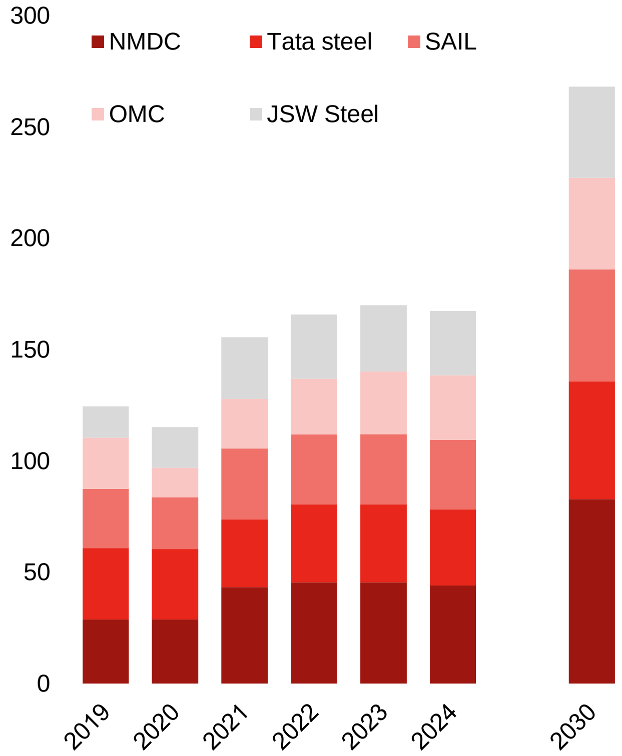
	State-run miners (B)		Private miners (A & C)	
	Mining lease obtained before 2015 (B)	Mining lease obtained in 2015 or later (B)	Mining lease obtained before 2015 (A)	Mining lease obtained in 2015 or later (C)
Ex-mines market price (62% Fe fines, $/dmt)	59	59	59	59
Cash costs, excl. royalties ($/dmt)	8	8	8	8
Royalties and cess* ($/dmt)	12	25	12	12
Auction premium ($/dmt)	-	-	-	56
Ex-mines costs ($/dmt)	**20**	**33**	**20**	**75**



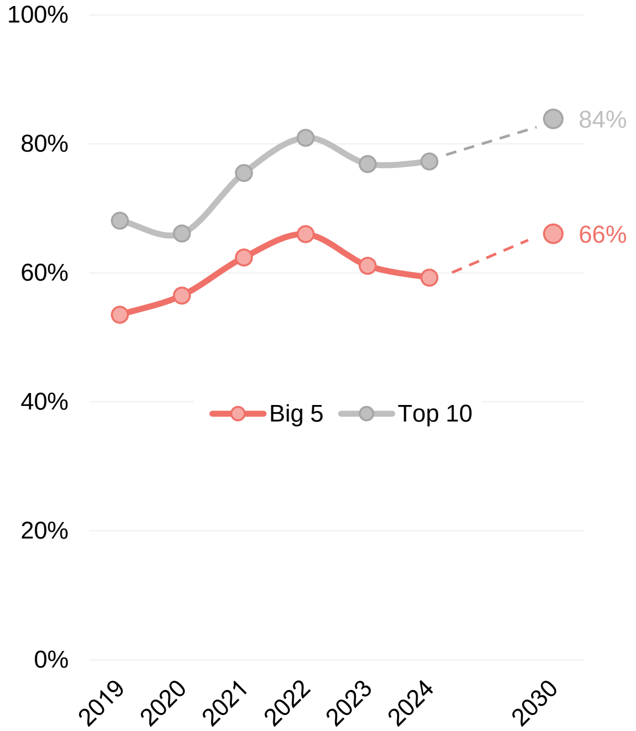
DATA: CRU, Indian Bureau of Mines; NOTE: Royalty and auction premia is calculated on ROM quantity, *Cess means taxes on royalty

Domestic supply to consolidate among top producers

India's 'Big 5' iron ore (ROM) producers, Mt



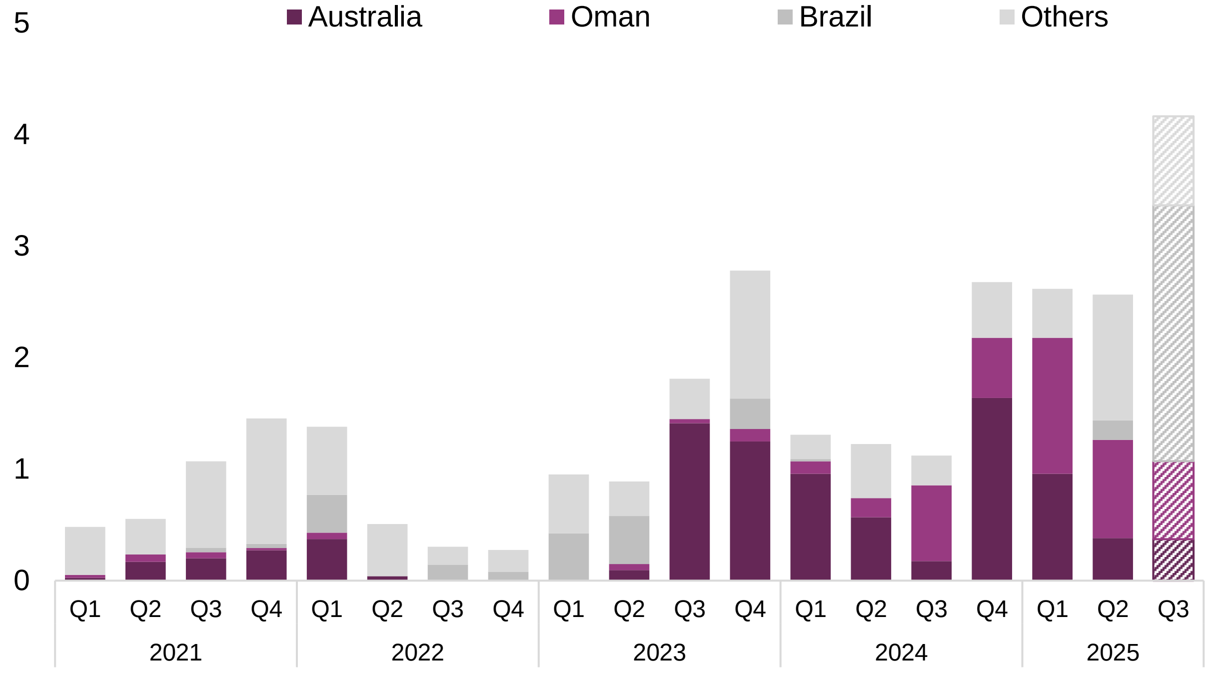
Major producers' share in production, %

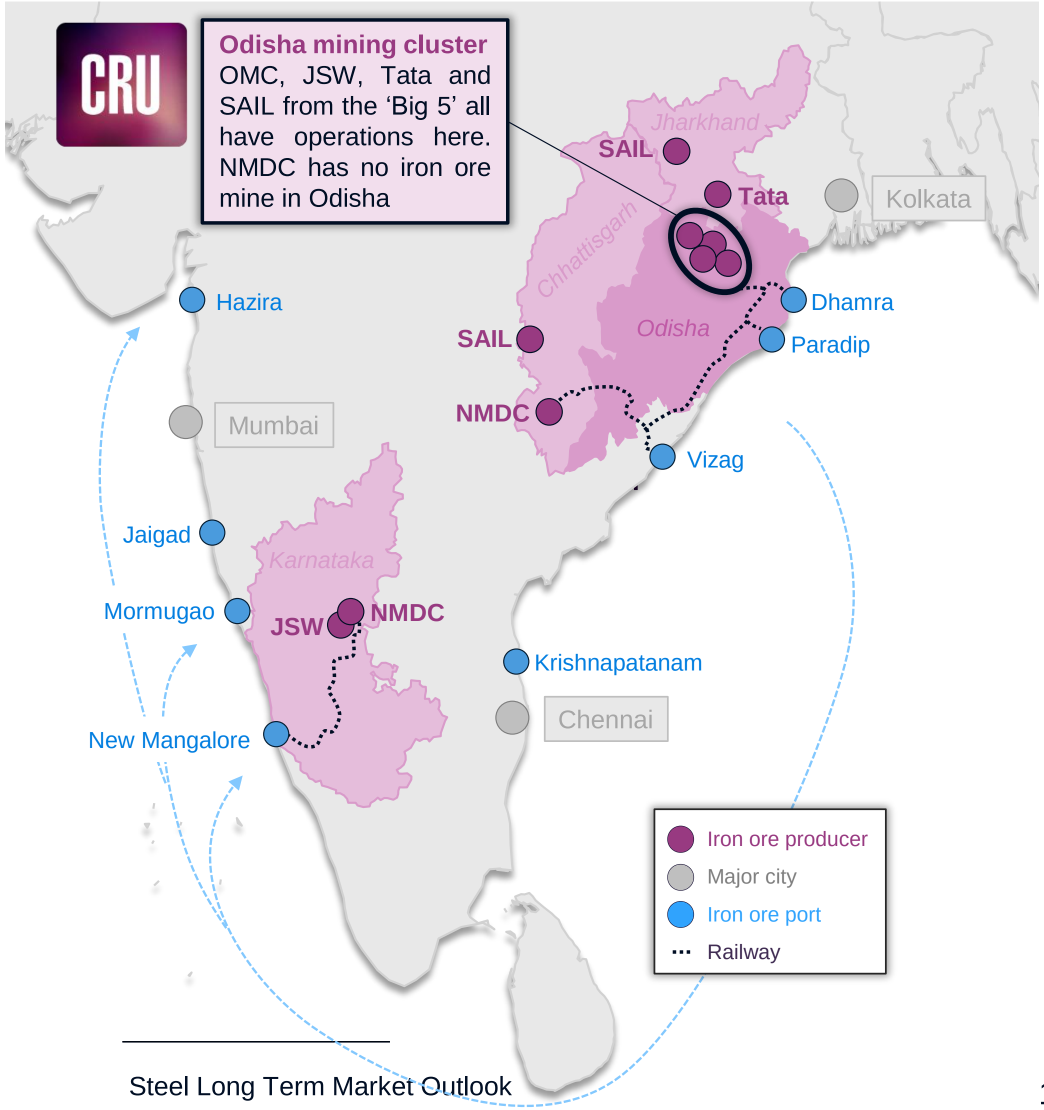


DATA: CRU, Company reports

Indian iron ore imports have almost doubled so far in 2025

Indian iron ore imports, Mt

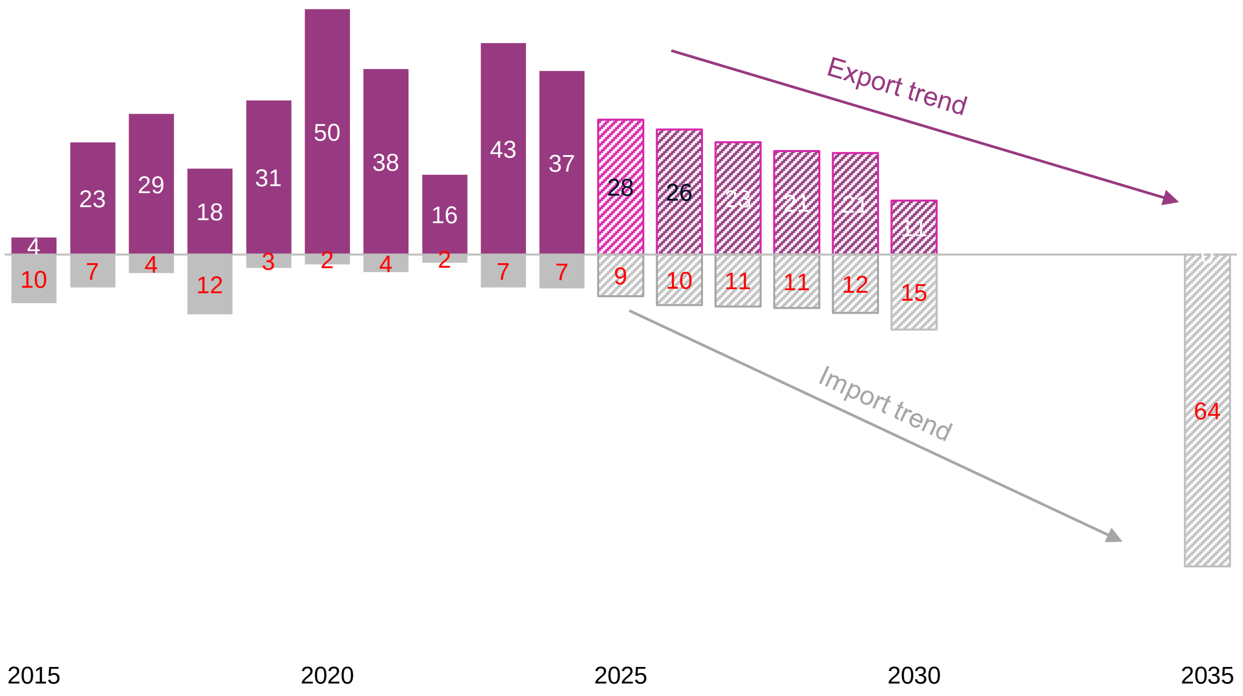


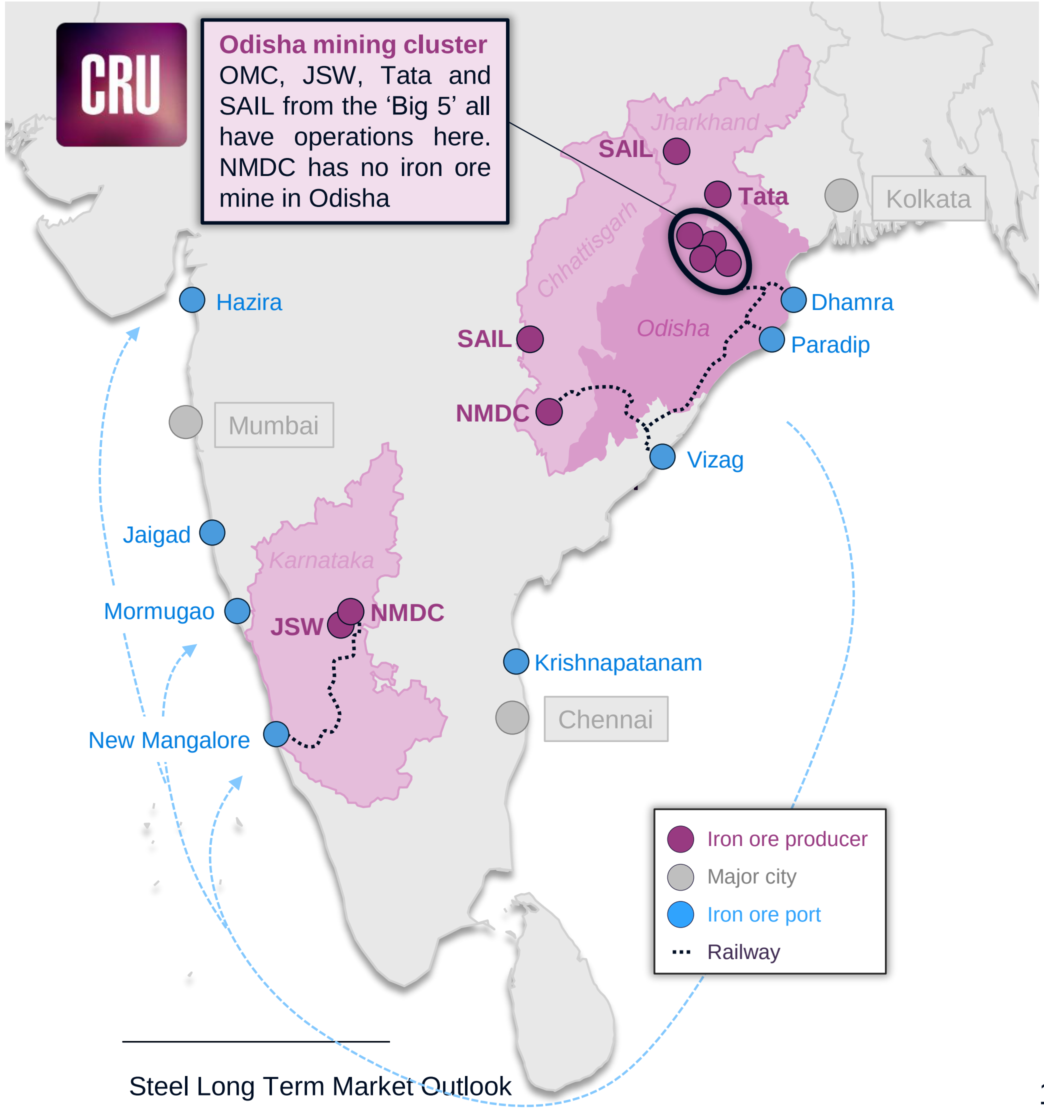


DATA: CRU, Kpler

India to turn net importer after 2030 as iron ore imports grow rapidly

Indian iron ore imports, Mt

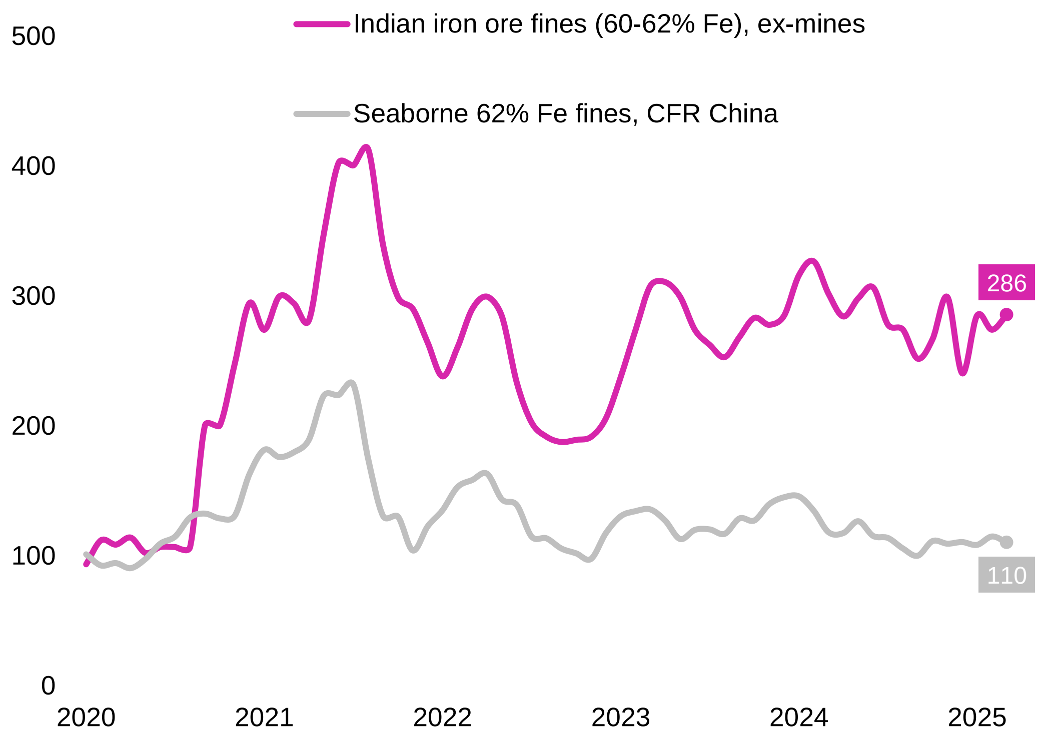




DATA: CRU

Indian iron ore prices stay elevated due to growing costs

Iron ore prices indexed at 2019 average



Major Indian steelmakers’ medium-term scope 1 and 2 carbon emission targets

Steel producer	CRU estimated carbon emissions, 2025, tCO_2/tcs	Carbon emission target, 2030, tCO_2/tcs	Net zero target year
AMNS India	2.5	1.8	2050
JSW Steel	2.9	2.0	2050
SAIL	3.2	2.3	2070
Tata Steel	2.7	1.8	2045

DATA: Indian Bureau of Mines, Company reports, CRU Asset Platform, NOTE: CRU estimated emissions are calculated for representative mills of each steel group

Data, Insight, Strategy & Communities

Q & A

Thank you!!