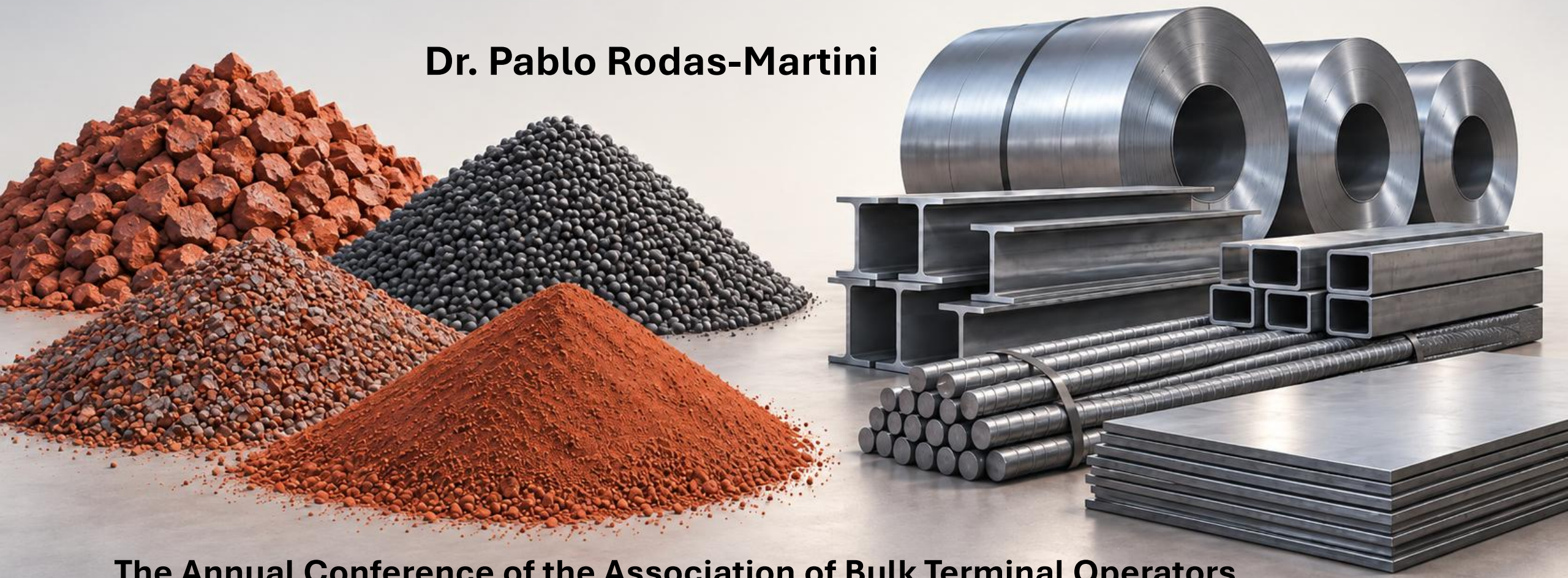
“Iron ore trade in turbulent times: rising steel protectionism and the Iran war”

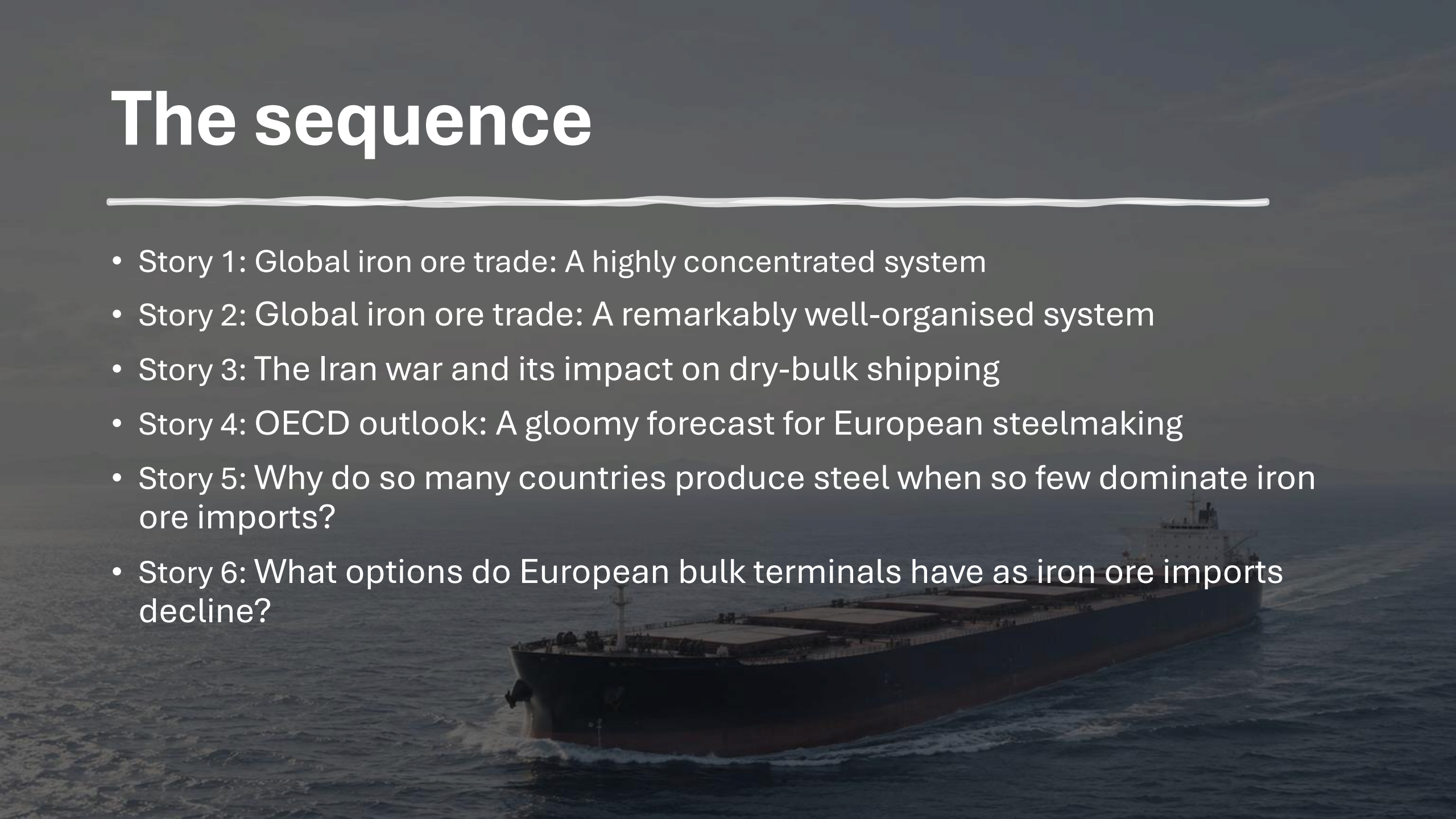
Dr. Pablo Rodas-Martini



The Annual Conference of the Association of Bulk Terminal Operators (ABTO), hosted by the Port of A Coruña, Spain, 21 October 2026

The sequence

- Story 1: Global iron ore trade: A highly concentrated system
- Story 2: Global iron ore trade: A remarkably well-organised system
- Story 3: The Iran war and its impact on dry-bulk shipping
- Story 4: OECD outlook: A gloomy forecast for European steelmaking
- Story 5: Why do so many countries produce steel when so few dominate iron ore imports?
- Story 6: What options do European bulk terminals have as iron ore imports decline?



Top exporters of iron ore (million metric tonnes)

Rank	Country	2025	
1	Australia	923.2	52.2%
2	Brazil	416.3	23.5%
3	South Africa	64.8	3.7%
4	Canada	61.6	3.5%
5	Ukraine	31.0	1.8%
6	Sweden	22.0	1.2%
7	China	21.8	1.2%
8	Malaysia	20.1	1.1%
9	Mauritania	14.9	0.8%
10	Chile	14.5	0.8%

	Australia		Brazil	
Rank	Country	2025	Country	2025
1	China	86.3%	China	70.7%
2	Japan	5.2%	Malaysia	4.7%
3	South Korea	5.1%	Japan	3.1%
4	Taiwan	1.3%	Netherlands	2.4%
5	Vietnam	1.1%	Bahrain	2.3%
6	Indonesia	0.8%	South Korea	1.9%
7	India	0.1%	India	1.5%

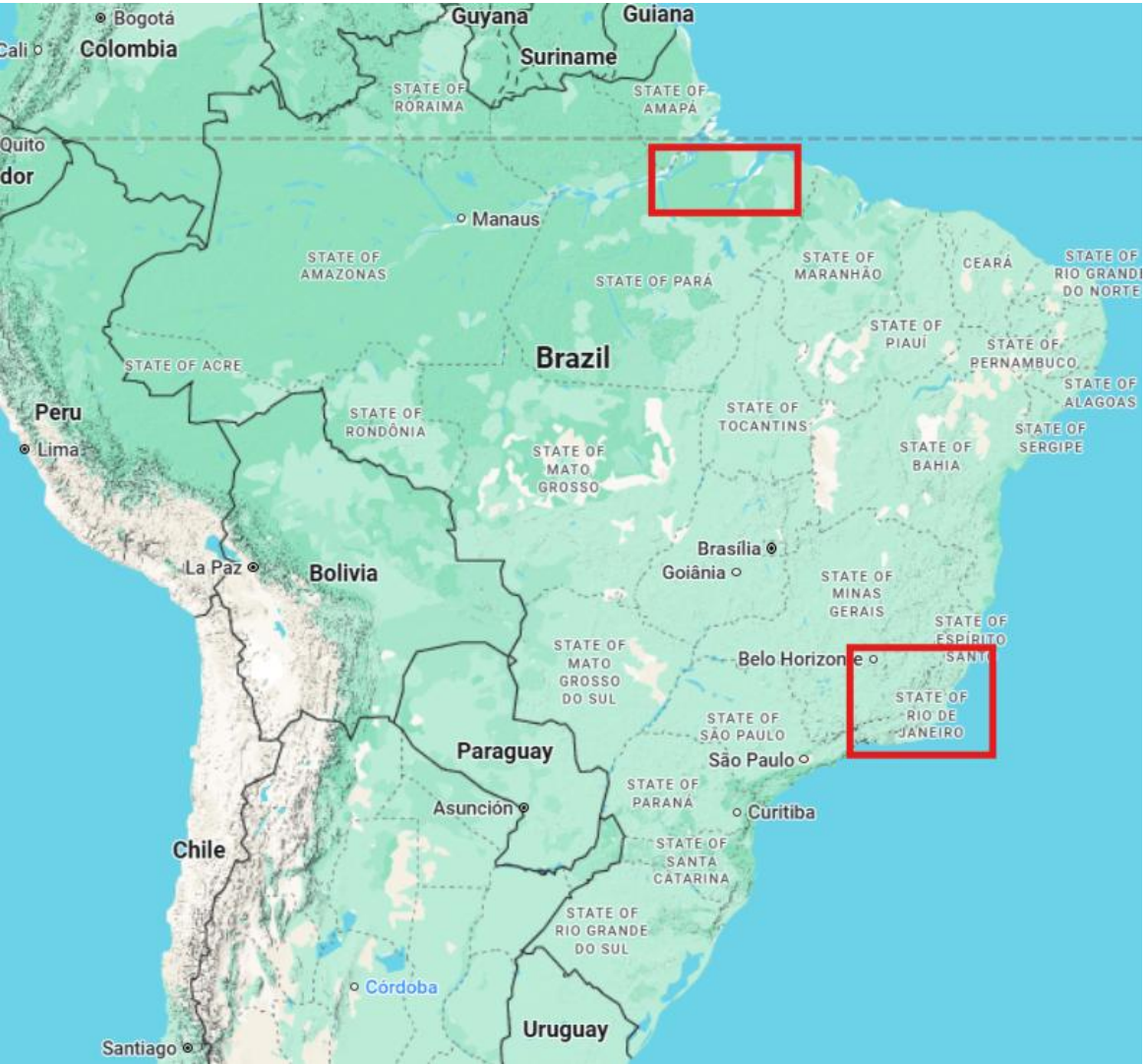
Sources: UN Comtrade, Geoscience Australia, Brazilian MDIC/Secex, and other national sources.

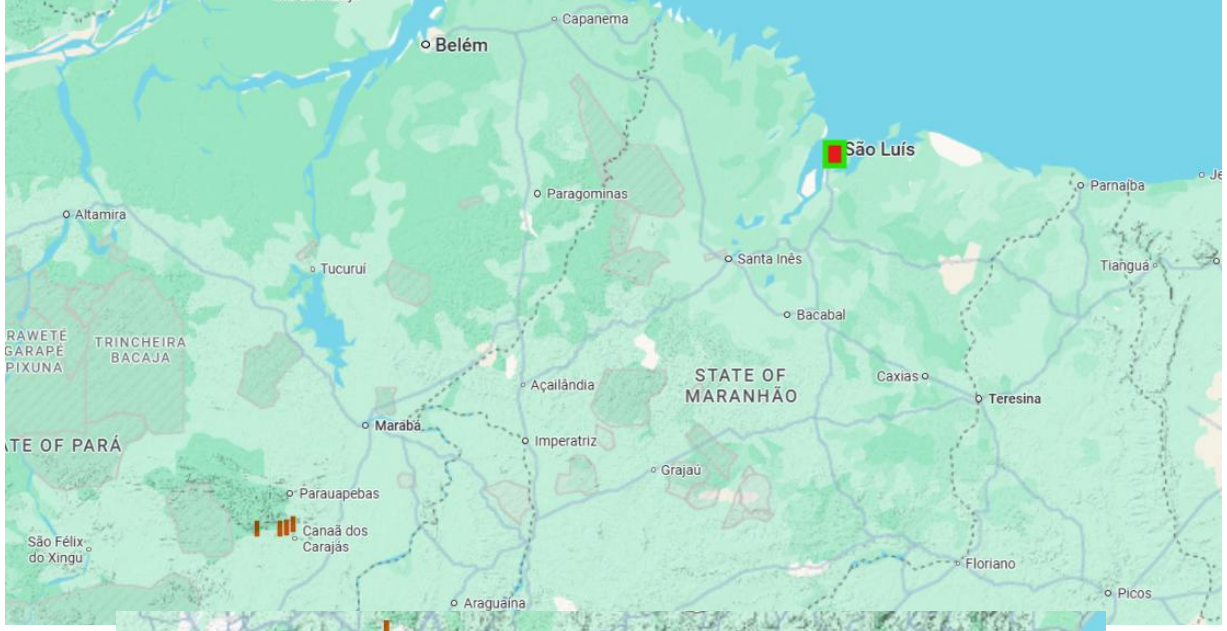
The Brockman Iron Formation in the Hamersley Range

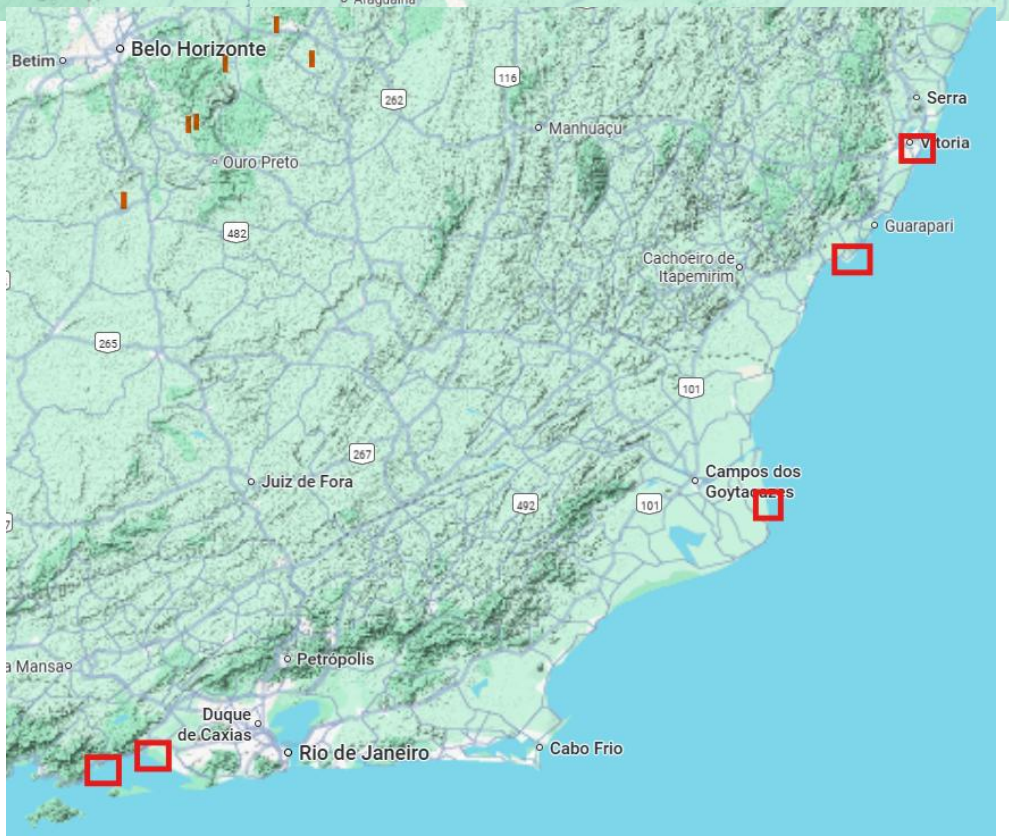




The Carajás Formation & the Iron Quadrangle







Iron ore market benchmarks

Benchmak	Description	Typical grade
Platts IODEX	Leading global spot-price benchmark	61% Fe
Fastmarkets MB 62% Fe	Alternative medium-grade fines index	62% Fe
Fastmarkets MB 65% Fe Brazil	High-grade fines index	65% Fe
Fastmarkets MB 58% Fe	Low-grade fines price index	58% Fe
SGX IODEX Futures	Exchange-traded contracts for price hedging	61% Fe

Grade	Price US$/dmt Friday, 16 October 2026	Description
61% Fe (IODEX CFR China	$89.40	Main medium-grade benchmark
65% Fe (Brazil, CFR Qingdao)	$107.75	Premium for higher iron ore content
58% Fe (CFR Qingdao)	$84.78	Discount for lower iron content

Variable	Why it matters
Moisture content	Typically 5–12%; affect dry weight
Gangue/impurity chemistry	Affects slag volume and steel quality
Particle size distribution	Some fines: liquefaction risk above TML

Transporting iron ore from Australia, Brazil, South Africa and Canada to East Asia



The Iran war and dry-bulk shipping

- The Iran war has primarily affected tanker shipping, with a much smaller impact on dry bulk
- The world's two largest iron ore trade routes remain far from the conflict zone
- Dry-bulk freight rates have reacted differently across vessel classes
- Higher bunker prices have raised operating costs and reduced effective vessel availability
- Disruption to Persian Gulf dry-bulk trade is much greater than global freight indices suggest
- The war has coincided with higher earnings in some dry-bulk segments
- Fertilisers and sulphur are among the dry-bulk commodities most exposed to disruption

Key findings from the OECD Steel Outlook 2026

- Global excess steelmaking capacity could reach 745 million tonnes by 2028
- Global capacity utilisation could fall to 74% or less by 2028
- China exported a record 131 million tonnes of steel in 2025, accounting for 41% of world exports
- China's steel demand fell 6.9% in 2025, while India's grew 9.8%
- Chinese steelmakers received 15 times more subsidies relative to assets than their counterparts elsewhere
- China gained global export market share in 2025, while Europe lost ground
- Steelmaking raw-material prices rose faster than steel prices in 2025
- Around 86% of Chinese overseas steelmaking investments involve BOF facilities

Crude steel production (million tonnes)

Rank	Country	2023	2024	
1	China	1,028.9	1,005.1	53.3%
2	India	140.8	149.6	7.9%
3	Japan	87.0	84.0	4.5%
4	United States	81.4	79.5	4.2%
5	Russia	76.0	71.0	3.8%
6	South Korea	66.7	63.6	3.4%
7	Germany	35.4	37.2	2.0%
8	Turkiye	33.7	36.9	2.0%
9	Brazil	32.0	33.8	1.8%
10	Iran	30.7	31.4	1.7%
11	Vietnam	19.2	22.0	1.2%
12	Italy	21.1	20.0	1.1%
13	Taiwan	19.1	19.2	1.0%
14	Indonesia	16.8	18.0	1.0%

Source:
World Steel Association

Top exporters and importers of steel (million tonnes)

Rank	Country	2024	2025		Rank	Country	2024	2025	
1	China	117.1	133.5	29.3%	1	United States	27.3	23.9	5.2%
2	Japan	31.2	29.8	6.5%	2	Italy	18.5	20.4	4.5%
3	South Korea	28.0	27.9	6.1%	3	Germany	18.3	20.2	4.4%
4	Germany	22.6	20.9	4.6%	4	Turkiye	19.7	19.8	4.3%
5	Turkiye	17.0	17.5	3.8%	5	Thailand	13.5	15.5	3.4%
6	Russia	12.3	15.2	3.3%	6	Mexico	17.6	14.8	3.2%
7	Belgium	15.4	14.7	3.2%	7	Vietnam	17.2	13.5	3.0%
8	Italy	15.0	14.3	3.1%	8	UAE	10.6	13.4	2.9%
9	Iran	10.8	13.5	3.0%	9	Indonesia	12.8	13.0	2.8%
10	Indonesia	11.4	11.6	2.5%	10	Belgium	11.9	12.6	2.8%
11	Vietnam	13.4	11.1	2.4%	11	Poland	11.5	12.6	2.8%
12	Brazil	10.3	11.0	2.4%	12	South Korea	14.2	11.0	2.8%
13	India	9.7	9.9	2.2%	13	France	11.2	10.4	2.4%
14	France	9.8	9.7	2.1%	14	Spain	10.5	10.4	2.3%

Steel types by product forms

Product form	End-use sectors	Share of steel market
Flat products	Automotive, appliances, shipbuilding, pipelines	~55–60%
Long products	Construction (bars, beams), rail, rebar	~25–30%
Tubular products	Oil & gas pipelines, construction, engineering	~8–10%
Semi-finished products	Inputs for re-rolling into flats or longs	~10–15%
Specialty steels	Aerospace, energy, defense, hydrogen pipelines	~5–8%

Steel types by grade families (I)

Grade family	Market share / Volume	End-use sectors	Share of ~3,500 grades
Carbon Steels (low, medium, high)	Very high (≈90% of global steel output)	Construction, infrastructure, pipelines, shipbuilding, rail	≈25–30% (fewer distinct grades, but huge tonnage)
Alloy Steels (low-alloy, high-alloy)	Moderate (≈5–7%)	Energy, aerospace, automotive, pressure vessels	≈15% (many tailored compositions)
Stainless Steels (austenitic, ferritic, martensitic, duplex)	Small but growing (≈2–3%)	Food processing, medical, chemical, marine, consumer goods	≈15% (large variety of grades across families)
Advanced High-Strength Steels (AHSS)	Niche but rising fast	Automotive lightweighting, crash safety, EV structures	≈10–12% (many variants within DP, TRIP, CP, 3rd generation)

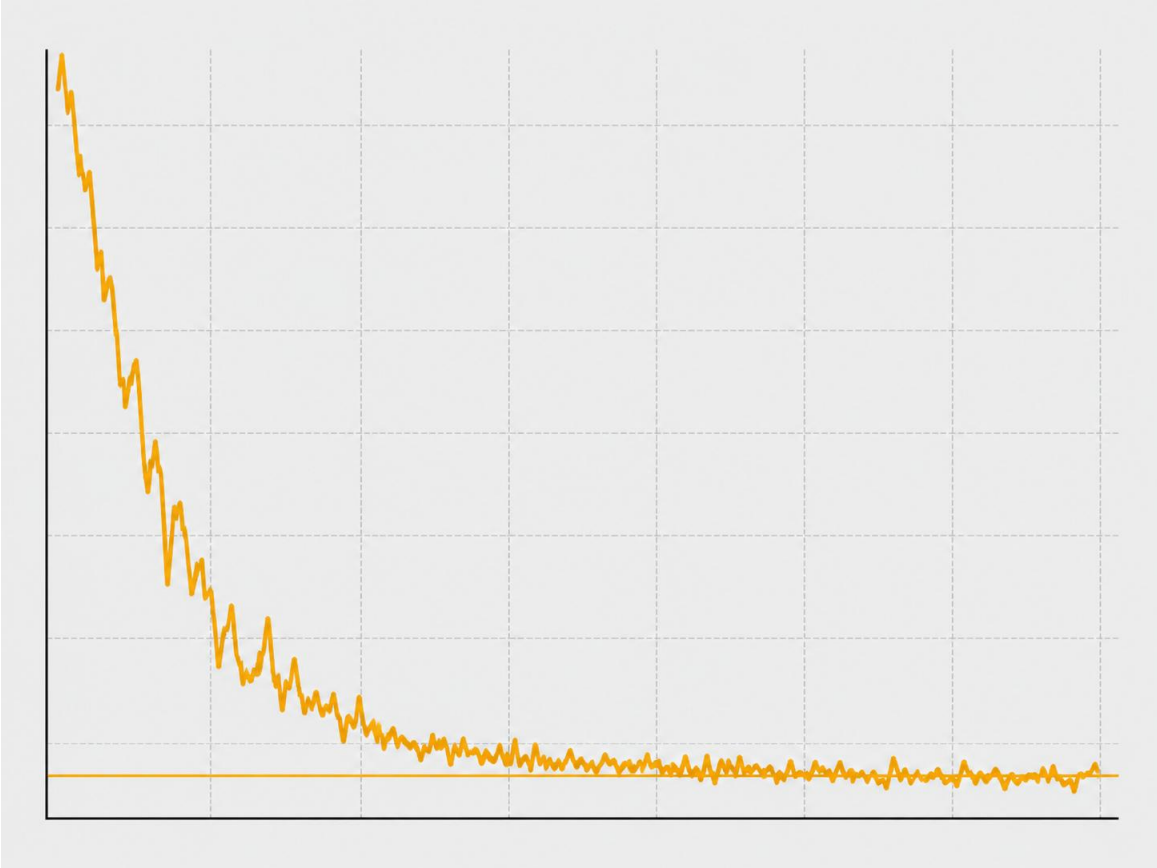
Steel types by grades families (II)

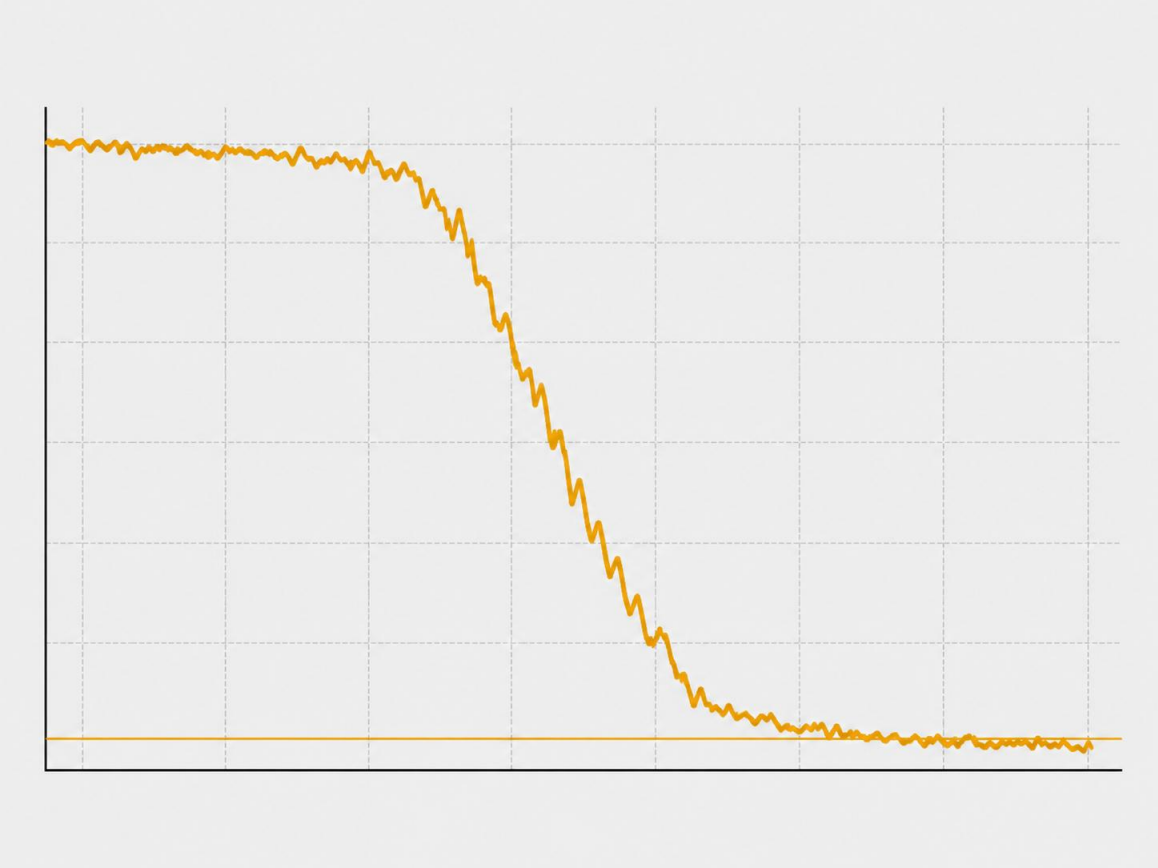
Grade family	Market share / Volume	End-use sectors	Share of ~3,500 grades
Electrical Steels (GOES, NOES)	Small share (<1%) but strategic	Transformers, motors, EV drivetrains	≈5% (specialized grades with fine distinctions)
Tool & Die Steels	Niche (<1%)	Cutting tools, dies, molds, machining	≈8% (many grade variants for hardness, toughness, wear)
Specialty Steels (weathering, cryogenic, hydrogen-resistant, ultra-high strength)	Small but high-value	LNG tanks, bridges, hydrogen pipelines, defense	≈10% (innovation-driven, many niche grades)
Cast & Forged Steels	Moderate niche	Heavy machinery, turbines, pressure parts	≈5% (fewer grades, but critical applications)

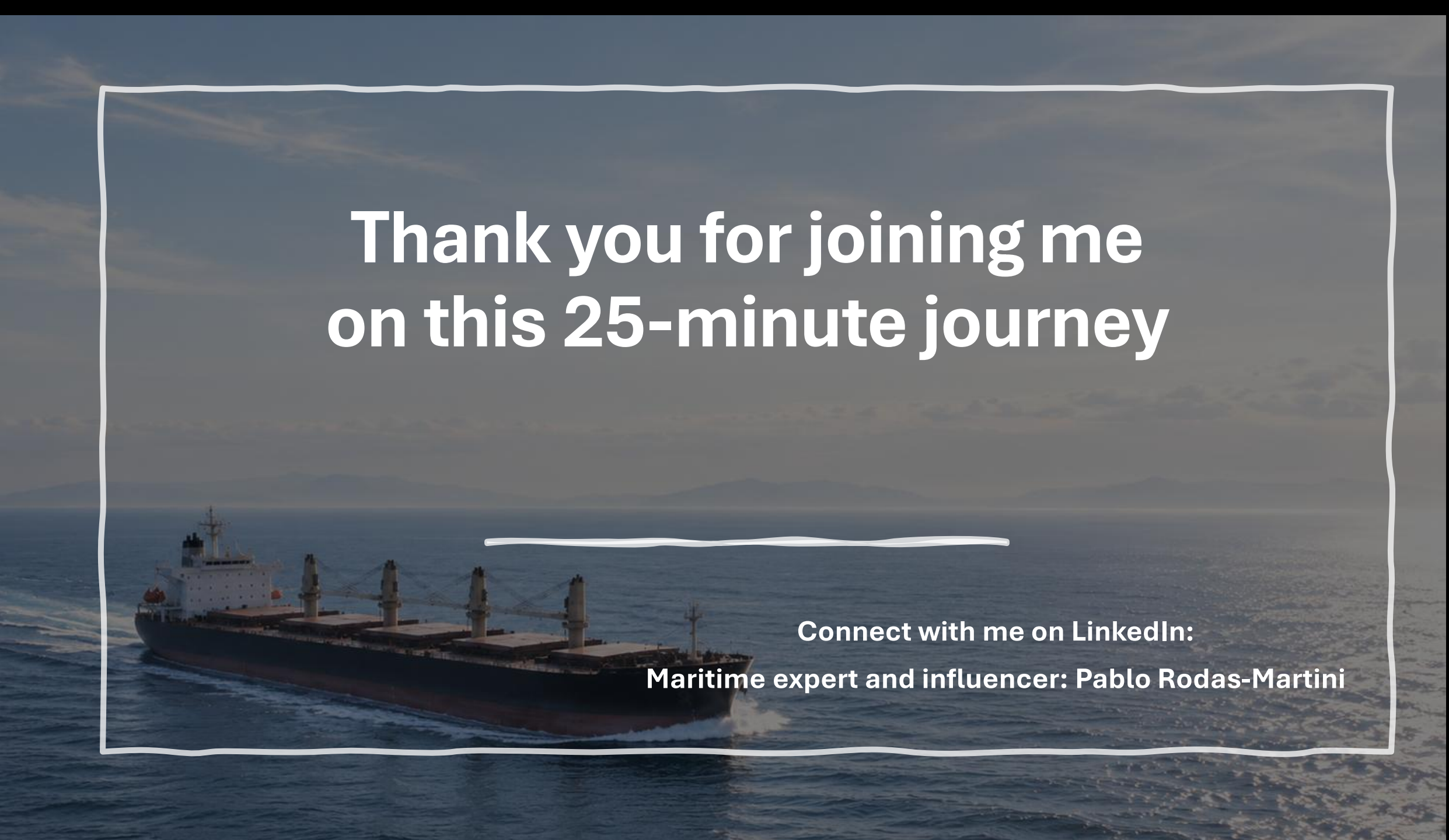
What options do European bulk terminals have as iron ore imports decline?

- The reality: European iron ore imports are declining
- Could higher imports of agglomerated iron ore (pellets) offset declining volumes of non-agglomerated iron ore (fines and lumps)?
- Could DRI and HBI imports provide new opportunities?
- Could handling and processing ferrous scrap offer an alternative?
- Could other minerals, grains or bulk commodities replace lost iron ore volumes?
- Could handling imported steel products offer another opportunity for ports dependent on iron ore?

Which river profile best reflects the iron ore and steel market?







Thank you for joining me on this 25-minute journey

Connect with me on LinkedIn:

Maritime expert and influencer: Pablo Rodas-Martini