

30 October 2026

To,
Shri Sandeep Poundrik
Secretary
Ministry of Steel
Government of India
GPOA-3, Netaji Nagar
New Delhi – 110023

Subject: Feedback on the draft National Steel Policy: Vision 2047

Dear Sir,

On behalf of the Institute for Energy Economics and Financial Analysis (IEEFA), thank you for the opportunity to provide feedback on the draft National Steel Policy (NSP): Vision 2047. IEEFA is an independent energy finance think tank that examines issues related to energy markets, trends, and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable, and profitable energy economy.

IEEFA welcomes the draft policy's recognition of decarbonisation as a key pillar, including the development of a domestic scrap ecosystem, improved energy efficiency, and greater electric arc furnace (EAF) production. IEEFA's suggestions cover two areas. The first is raw material security for metallurgical (met) coal, which includes coking coal and pulverised coal injection (PCI) coal, and for iron ore. Both are closely linked to the energy security of India's steel sector. The second is financing the transition, including public capital for first commercial plants, demand creation through public procurement, catalytic capital, support for secondary steel producers, and alignment with the Carbon Credit Trading Scheme (CCTS).

The table below summarises IEEFA's recommendations, followed by detailed rationale for each.

Summary of recommendations

Topic	Draft policy reference	Key recommendation
Met coal	Cl. 2.2.1; Section 5.3; Annexure II-B	Assess whether 284MTPA of met coal can be sourced by 2047, set an indicative split between domestic and imported supply, and add a target to reduce met coal use per tonne of steel.
	Section 5.3; Chapter 6	Make methane baseline studies a condition for new coking coal mines and mines supplying coal gasification projects and include coal mine methane in steel sector emissions accounting.
Iron ore	Cl. 5.2.4(iii); Cl. 1.10(xix)	Plan iron ore imports by grade and prioritise direct reduction (DR)-grade ore, hot-briquetted iron (HBI), and green iron in overseas assets and partnerships.

Finance	Paragraph 8.5; paragraphs 2.2, 6.8	Add a transition finance section with phase-wise investment estimates, a Union Budget window for the first commercial near-zero plants, and an R&D challenge fund under the Steel Research and Technology Mission of India (SRTMI).
	Paragraph 2.1.5(iii)	Notify green public procurement with a separate near-zero steel share and pilot a 10-year contract for difference auction for up to 1MTPA of near-zero steel from FY2027-2028.
	Paragraph 10.7	Set up a credit guarantee facility that accepts multilateral development bank (MDB) counter-guarantees, add a steel annex to India's climate finance taxonomy, and build a green steel investment platform.
	Paragraphs 3.5, 6.2	Integrate the National Strategy for Sustainable Secondary Steel (NSSS) into the NSP through two windows: Loan guarantees with interest rebates for proven technologies, and milestone-based grants for first-of-a-kind technologies, with no support for new coal-based capacity.
	Cl. 1.10(x); paragraphs 6.2, 6.4	Enable cluster-level group-captive renewable energy for steel units and extend guarantee support to organised scrap collection and processing.
	Chapter 6; MoEFCC draft CCTS notification (26 June 2026)	Adopt 2.2tCO ₂ /tcs by 2030 as an interim milestone, and work with the Ministry of Environment, Forest and Climate Change (MoEFCC) and Bureau of Energy Efficiency (BEE) to publish CCTS target trajectories for steel to at least 2035, consistent with the 2047 pathway.

Sincerely,

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Metallurgical coal

1. Assess whether projected metallurgical coal demand can be met, and plan to reduce it

Reference: Clause 2.2.1 (“By 2047, the share of the BOF route is likely to increase above 50%”); Section 5.3 and Annexure II-B on projected coking coal demand (72 to 236MTPA) and PCI coal demand (17 to 48MTPA) by 2047.

Proposed revision: IEEFA recommends that the policy (i) require a met coal supply-security assessment, covering seaborne supply by exporting country, price scenarios, and India’s import share through 2047; (ii) set an indicative split between domestic and imported met coal for 2030, 2035, and 2047; (iii) add a target to reduce met coal consumption per tonne of crude steel, alongside a scenario in which scrap-based EAF and hydrogen-based direct reduced iron (DRI) used in EAFs meet incremental steel demand; and (iv) require new blast furnace-basic oxygen furnace (BF-BOF) capacity proposals to show long-term met coal sourcing and exposure to price volatility.

Rationale: The draft projects total met coal demand (coking coal and PCI coal) of 284MTPA by 2047 and outlines supply measures. However, it does not assess whether this supply will be available. Global met coal trade was 340Mt in 2025, of which 61Mt was exported from Mongolia to China and is unlikely to be available to India.

This leaves 279Mt, slightly below India’s projected 2047 requirement of 284Mt. And though domestic production would meet a small part of this demand, the gap illustrates the scale of India’s requirements relative to the global met coal trade. Australia, the largest exporter, expects its met coal exports to peak at 164Mt in 2028-2029 before falling to 158Mt by 2030-2031. Russia, Canada, and the US also appear unlikely to increase their met coal exports significantly over the coming decade.

Domestic supply is also limited. Most domestic coking coal has a high ash content. India has 39MTPA of coking coal washing capacity, but only 17Mt of coal was fed into washeries, producing [~6Mt of washed coal in FY2024-2025](#). Since it is unclear how much domestic met coal supply can grow, India’s steelmakers would have to rely on a significant increase in global met coal trade, which looks unlikely.

[Diversifying suppliers](#) would also have limited impact on the cost of coal. A shortfall in global met coal supply is not just an energy security issue; it would also raise the price of met coal, a major input cost for steel. Australian [met coal miners are already telling investors](#) to expect structurally higher long-term prices because of supply shortfalls. Reducing reliance on BF-BOF steelmaking should be treated as a [long-term energy security](#) and steel input cost priority.

2. Integrate methane abatement into coal expansion and gasification plans

Reference: Section 5.3 on expanding domestic coking coal supply and washeries; Chapter 6 on the decarbonisation pathway, including coal gasification.

Proposed revision: IEEFA recommends that the policy (i) require mine-level methane baseline and pre-feasibility studies as conditions for new or expanding coking coal mines, including mines supplying coal gasification projects; (ii) prioritise abatement at the highest-emitting coking coal mines; (iii) include upstream coal mine methane in emissions accounting for the steel sector; and (iv) support the use of recovered coal mine methane in steel plants.

Rationale: The draft plans to expand domestic coal use for steelmaking and gasification but does not address methane emissions from coal mining. Mission Coking Coal targets domestic production of 140Mt by FY2029-2030, up from 66Mt in FY2024-2025. Coking coal mining is

around 50% more methane-intensive than non-coking coal mining. About 97% of current coking coal mining is surface-based, but 41% of remaining reserves lie deeper than 300 metres, where methane content is generally higher. [IEEFA's analysis](#) of 30 operating mines found that seven of them account for 81% of the group's 138.3kt of annual methane emissions. Around 87% of abatable emissions can be cut for less than USD20/tCO₂e (INR1,875/tCO₂e), and methane utilisation has a negative cost of USD11.9/tCO₂e (INR1,115/tCO₂e) because the recovered gas generates revenue. These costs are in line with global estimates from the [International Energy Agency \(IEA\)](#). Tata Steel piloted the injection of coal bed methane into a blast furnace at Jamshedpur in 2022.

Iron ore

1. Align iron ore imports with the transition to lower-emissions steelmaking

Reference: Clause 5.2.4(iii) on pursuing foreign asset acquisition and joint ventures to secure high-grade iron ore; Clause 1.10(xix) on strategic partnerships for critical raw materials.

Proposed revision: IEEFA recommends that the policy (i) require estimates of iron ore imports by grade, separating blast furnace-grade ore from direct reduction (DR)-grade pellet feed, for 2035 and 2047; (ii) prioritise overseas assets, joint ventures, and long-term offtake agreements for DR-grade ore (67% Fe or higher, with low alumina and silica) and for HBI and green iron; and (iii) include ore quality specifications in raw material partnerships with supplier countries such as Australia and Brazil.

Rationale: The draft seeks high-grade ore overseas but does not specify grades or link sourcing to steelmaking technology. India has more than 353MTPA of steelmaking capacity under development, about [59%](#) of it being BF-BOF. [IEEFA's analysis](#) found that importing mainly blast furnace-grade ore could lock in this route and prolong dependence on imported coking coal. DR-grade feedstock supports DRI-based steelmaking, including a future shift to green hydrogen. Tata Steel has trialled imported Canadian iron ore for its lower alumina content, and Jindal Steel operates a DRI plant in Oman.

Finance

1. Provide a dedicated financing framework and public capital for first commercial plants

Reference: Paragraph 8.5 promises support for first-of-a-kind projects in line with technology maturity, but the draft does not estimate investment needs for 604MTPA of capacity and an emission intensity of 1.54 tonnes of CO₂ per tonne of crude steel (tCO₂/tcs) by 2047 (paragraphs 2.2 and 6.8), or say how public capital will help achieve them.

Proposed revision: IEEFA recommends that the NSP include a dedicated section on transition finance that (i) estimates the phase-wise investment requirement; (ii) maps public finance instruments to each phase and technology maturity; (iii) creates a green steel deployment window in the Union Budget for the first commercial-scale scrap-based EAF and green hydrogen-based DRI plants, with funding awarded competitively and paid against milestones and verified output to cap public exposure to cost overruns; (iv) limits eligibility for this window and for steel support under the missions in paragraph 6.7 to plants that meet a near-zero standard aligned with [IEA thresholds](#) by a set date; and (v) sets up an R&D challenge fund under the SRTMI for emerging technologies, such as hydrogen reduction of iron ore fines, drawing from the Anusandhan National Research Foundation (ANRF) and Research Development and Innovation Fund (RDIF) (paragraph 8.4.1). The five-yearly review proposed in paragraph 12.10 could then track progress on financing alongside demand and capacity.

Rationale: [IEEFA's analysis](#) shows that the roughly USD24 billion (INR2.25 lakh crore) invested globally in steel decarbonisation to date has been overwhelmingly enabled by public capital, and that green steel carries a cost premium of about USD210 per tonne (INR19,687/t) over conventional production. Across projects, public support has ranged from USD110 to USD1,168 (INR10,312.50 to INR109,500) per tonne of CO₂ abated, up to 13 times the EU carbon price, indicating that carbon pricing alone cannot close the gap.

IEEFA's [decarbonisation readiness](#) assessment of India's steel sector found that companies scored lowest on financing. The UK is paying 40% of the cost of [Tata Steel's EAF](#) at Port Talbot in arrears against milestones. India has [no comparable scheme](#) yet, and its hydrogen pilots in steel received only [INR455 crore](#) (USD48.53 million). Grants alone do not secure investment: [ArcelorMittal declined](#) EUR1.3 billion (USD1.45 billion) of German support in 2025, citing energy costs. The [Green Steel Taxonomy's](#) five-star band (below 1.6tCO₂e/t) is far above the IEA near-zero levels (0.05–0.40tCO₂e/t). For earlier-stage technologies, [IEEFA recommends](#) directing limited public funds to testing facilities, standards, skills, and technology access.

2. Create revenue certainty through public procurement and contracts for difference

Reference: Paragraph 2.1.5(iii) aims to prioritise life cycle cost (LCC) in government procurement, but the draft has no measure to create demand for near-zero steel.

Proposed revision: IEEFA recommends that the policy (i) make central projects anchor buyers by notifying a green public procurement mandate, with a separate share for near-zero steel that rises through 2032, and count embodied carbon in LCC evaluation; and (ii) pilot a 10-year contract for difference (CfD) auction in FY2027-2028 for up to 1MTPA of certified near-zero steel, with separate lots for scrap-based EAF and hydrogen-based DRI. Bidders would quote a fixed premium per tonne below a published ceiling, which an agency similar to the Solar Energy Corporation of India (SECI) would pay on certified tonnes delivered, net of any CCTS credit revenue. CfD tonnes should count towards procurement shares, so the Government does not pay twice.

Rationale: As the steel sector is [deregulated](#), the contract would pay only the premium set at auction, leaving prices and sales to the market. Globally, green hydrogen-based projects that secured buyer premiums of 20–30% have progressed, while gas-based DRI projects without such premiums have been cancelled despite government grants. Reported [draft procurement tiers](#) (20%, 5%, and 1% for three-, four-, and five-star steel, respectively) let buyers meet each share with the cheapest qualifying steel, giving near-zero plants no assured demand. The volume cap and published ceiling fix the Government's maximum payout before bidding opens, as in SECI's Strategic Interventions for Green Hydrogen Transition ([SIGHT](#)) green hydrogen auctions, where bidders quote the per-kilogram incentive they need. Unlike the central procurement agency the Ministry of Finance [rejected in 2024](#), this agency would not buy or hold steel.

3. Attract MDB and other catalytic capital

Reference: The draft proposes the creation of a structured framework for international collaboration that will facilitate G2G and B2B partnerships, support outbound and inbound investments, and strengthen India's integration with global value chains.

Proposed revision: IEEFA recommends that the policy (i) set up a credit guarantee facility for green steel loans that accepts MDBs' counter-guarantees and first-loss capital, so that MDB support reaches borrowers as rupee loans, housed in an existing institution such as the National Bank for Financing Infrastructure and Development (NaBFID), with a wider mandate, or the National Credit Guarantee Trustee Company; (ii) add a steel annex, based on the near-zero standard in Finance point 1, to India's [draft climate finance taxonomy](#); and (iii) build a green steel

investment platform under paragraph 10.7, with a project pipeline, standard term sheets, and project preparation support.

Rationale: Various studies show that [credit guarantees mobilise about 2.4 times](#) their value in private finance, against 0.5 to 1.5 times for grants. Hedging erodes the low cost of foreign-currency MDB loans; the Climate Policy Initiative ([CPI](#)) estimated in 2015 that hedging added about 7 percentage points to Indian renewable energy debt costs. India was not among the seven countries chosen in 2025 for the Climate Investment Funds' USD1 billion (INR9,375 crore) [Industry Decarbonization Investment programme](#), which assessed institutional readiness.

4. Design support for the secondary steel sector that MSMEs can use

Reference: The draft recognises that secondary steel producers account for about 47% of crude steel capacity and face constraints in finance, technology, and modernisation (paragraphs 3.5 and 6.2).

Proposed revision: IEEFA recommends that the NSP integrate the NSSS and design it with two windows matched to technology risk: (i) for [proven technologies](#) (renewable power, higher scrap use, iron ore pellets, and waste heat recovery), dedicated partial guarantees on commercial loans through the facility in Finance point 3, with the incentive paid as an interest rebate once the emission cut is verified; and (ii) for [first-of-a-kind technologies](#), such as hydrogen use in rotary kilns and vertical shaft-based DRI, milestone-based capital grants released in stages for design, commissioning, and verified performance. Support under both windows should be conditional on (a) energy efficiency confirmed by a BEE-accredited audit; (b) no finance for new or expanded coal-based capacity, with transitional measures such as pellets or waste heat recovery eligible only if they deliver a minimum emission cut and only until a set end date; and (c) at least a Zero Defect Zero Effect (ZED) Bronze certificate.

Rationale: The draft includes no financing measures for secondary steel producers. The Government has indicated an [INR5,000 crore \(USD533.33 million\) NSSS](#), which the draft does not mention, and that it would reward year-on-year emission reductions rather than provide upfront capital subsidies. [IEEFA's analysis suggests](#) that a results-only payment model will not work for micro, small, and medium enterprises (MSMEs). Small units must invest first, and banks seldom lend against future government payments. By contrast, the EU Innovation Fund pays up to 40% of its grant against milestones before a plant begins operating.

5. Finance cluster renewable energy and organised scrap

Reference: Paragraph 1.10(x) aims to strengthen the scrap collection, processing, and recycling ecosystem. Paragraphs 6.2 and 6.4 recognise renewable energy as both a challenge and a lever for decarbonisation, but the draft does not propose how steel units can procure it.

Proposed revision: IEEFA recommends that the policy (i) enable cluster-level special purpose vehicles for [group-captive renewable energy](#), with SECI, using its demand aggregation model, as a potential intermediary; (ii) work with the Ministry of Power and state regulators to simplify group-captive ownership, consumption, and energy banking rules for steel clusters; and (iii) extend guarantee support to organised scrap collection and processing, so that MSMEs receive a steady supply of sorted, tested scrap.

Rationale: Two of the most cost-effective abatement levers are held back by financing and regulatory barriers rather than weak economics. A recent study found that steel units procuring 10MW of [group-captive solar](#) could obtain electricity at a tariff 34% lower than grid supply and recover their equity within two years. [Sectoral modelling](#) shows that using 30% scrap and 50% renewable electricity can reduce emission intensity by 28%.

6. Use the CCTS steel targets as a long-term investment signal

Reference: The MoEFCC draft notification of 26 June 2026 brings [255 iron and steel units](#) under greenhouse gas emission intensity targets effective from the 2026-2027 compliance year, against a 2023-2024 baseline. The draft NSP does not refer to it, and the proposed targets alone are unlikely to shift investment decisions.

Proposed revision: IEEFA recommends that the NSP adopt the Ministry of Steel's goal of 2.2tCO₂/tcs by 2030 as an explicit interim milestone, and commit, with MoEFCC and BEE, to publishing multi-year CCTS target trajectories for steel through at least 2035, consistent with the path to 1.54tCO₂/tcs or a more stringent target, so that blast furnace relining and new capacity decisions are taken with visibility of future emission reduction requirements.

Rationale: IEEFA's research shows that the impact of the CCTS on industry will depend on carbon prices, which are driven by the [stringency of targets](#). The draft targets require emission intensity reductions of 2.1% to 9.3%, with a median of about 5.5%. Targets of such depth are likely to be met through energy-efficiency and operational measures, consistent with Phase I in Table 6.1 of the draft NSP, but will not finance the shift to DRI-EAF and hydrogen envisaged in Phases II to IV. [Steel investment decisions](#) span 15 to 30 years, while the draft CCTS notification sets targets only for 2026-2027.