IMPACT OF INCOTERMS 2020 ON RISK ALLOCATION, COST DISTRIBUTION, CUSTOMS COMPLIANCE, AND ESG IN INDIA-EU BILATERAL TRADE: A CRITICAL ANALYSIS OF INDIAN EXPORT-IMPORT POLICIES AND LEGAL FRAMEWORKS

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ABSTRACT

The paper critically examines the effect of INCOTERMS 2020 on risk allocation, costs, and customs compliances in EU-India bilateral trade with the analysis of their interplay with Indian export-import regulations and legal framework. This study reflects and finds that INCOTERMS 2020 majorly designates risk transfer points, freight liability, insurance liability, and customs duties. The major amendments demand special emphasis "on board" bills of lading in the case of FCA shipments in containerized sea transport and an unambiguous allocation of security costs under CIP; while increasing the clarity of contracts, these modifications also grow the complexities of operations. The results imply that traders need to marry these standardized terms with India's regulatory landscape so as to maximize trade efficiency and render trade compliant'"

Substantial operational friction arises between INCOTERMS 2020 contractual requirements and the logistical constraints in India, especially with regard to bank processing of Letters of Credit under FCA arrangements. Choice of terms, say EXW versus DAP, often leads to disputes on transit risk allocation and unforeseen liabilities for Indian parties. Crucially, under Indian law INCOTERMS stipulate who bears the statutory responsibility for customs clearance, and this interacts directly with CBIC notification frameworks, valuation procedures, origin certification (EU GSP/future FTAs), and electronic filing on ICEGATE. This makes it perilous for systemic non-compliance to take shape wherein parties possessing key local knowledge are not those delimited by the contractual term.

Study therefore highlights that while INCOTERMS 2020 provides an essential framework, application in India-EU trade should require increased stakeholder awareness, technical accuracy, and harmonization within the

Indian regulatory environment. Otherwise, antithesis would mean operational friction and regulatory penalties, thereby hindering the strategic optimization of bilateral trade.

Introduction

This research critically examines the impact of INCOTERMS 2020 on India–EU bilateral trade, with a focus on risk allocation, cost distribution, customs compliance, and the integration of Environmental, Social, and Governance (ESG) principles. It explores how terms like FOB, CIF, EXW, DDP, FCA, and CIP shape commercial obligations and interact with India's regulatory landscape, including CBIC notifications, DGFT guidelines, and ICEGATE systems. The study highlights [1]operational frictions caused by FCA's "on-board" bill of lading and CIP's explicit security cost mandates, which often clash with Indian export logistics and documentation norms. It also evaluates the complexities arising from contract mismatches, valuation inconsistencies, and bank letter-of-credit requirements. Importantly, the paper investigates how ESG principles can be embedded within contractual terms to enhance sustainability in India–EU supply chains. The analysis is rooted in doctrinal legal methodology, supported by statutory review, policy critique, and model trade contracts, aiming to inform harmonized and efficient trade practices. The research question and objective is as follow:-

Research questions

1. How do INCOTERMS 2020 terms such as FOB, CIF, EXW and DDP shape the allocation of risk and distribution of costs between Indian exporters and EU importers in bilateral trade?

2. What practical and legal challenges do Indian traders face in customs compliance when applying INCOTERMS 2020—particularly FCA with "on board" Bills of Lading and CIP's unambiguous security-cost allocation—under CBIC notifications and DGFT regulations?

3. How can Environmental, Social, and Governance (ESG) criteria be integrated into INCOTERMS 2020 clauses to advance sustainable supply-chain practices in India–EU trade, and what contractual adaptations would this entail?

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[1] Central Board of Indirect Taxes and Customs, *Customs Act, 1962* (Act No. 52 of 1962), § 46–50 (India), *amended by* Finance Act, 2023
Directorate General of Foreign Trade, *Foreign Trade Policy 2015-2020*, ¶ 2.21 (India), updated by Pub. No. 33/2015-2020 (2023)

Research objective

1. This study analyzes how INCOTERMS 2020 terms (FOB, CIF, EXW, DDP) govern risk allocation, cost distribution, and customs responsibilities in India-EU trade. It specifically evaluates operational friction and regulatory compliance challenges arising from their application within India's legal framework and logistical constraints, aiming to identify critical harmonization needs.[2]

2. This study aims to identify and analyze the practical implementation hurdles and legal compliance challenges faced by Indian traders when applying INCOTERMS 2020 FCA (specifically the "on board" Bill of Lading requirement) and CIP (notably unambiguous security cost allocation) within India's customs framework. It will critically examine friction points arising under CBIC notifications, DGFT regulations, and related logistical constraints impacting customs clearance processes.

3. The objective of this research is to critically assess how Environmental, Social, and Governance (ESG) principles can be effectively embedded within the framework of INCOTERMS 2020 to promote sustainable supply chain practices in India–EU trade. It aims to identify necessary contractual adaptations and alignments with Indian regulatory mechanisms to ensure both ESG compliance and operational efficiency.

Research Methodology

This investigation follows a doctrinal and qualitative approach, centred on critical appraisal of both primary legal instruments and the corresponding academic discourse. Initially, the analysis undertakes a detailed examination of INCOTERMS 2020 as promulgated by the International Chamber of Commerce, focusing on the terms FOB, CIF, EXW, DDP, FCA and CIP. The ensuing stage reviews their operative significance against the Indian legislative backdrop, incorporating relevant statutes, circulars and notifications from the Central Board of Indirect Taxes and Customs, the Directorate General of Foreign Trade, and instructive judicial determinations. The compliance architecture is further scrutinised through the Customs

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[2] International Chamber of Commerce, *Incoterms® 2020*, ICC Pub. No. 723E (2019).
Central Board of Indirect Taxes and Customs, *Customs Act, 1962* (Act No. 52 of 1962), § 46–50 (India), *amended by* Finance Act, 2023
United Nations Conference on Trade and Development, *World Investment Report 2023: Investing in Sustainable Energy for All*, U.N. Doc. UNCTAD/WIR/2023 (2023)

Valuation Rules, ICEGATE protocols and the origin certification frameworks established under the EU Generalised Scheme of Preferences and anticipated Free Trade Agreements. Concurrently, the inquiry employs an apposite comparative policy lens to ascertain the interrelationship between INCOTERMS 2020 and ESG compliance regimes, notably the EU Carbon Border Adjustment Mechanism and India's emergent environmental, social and governance directives. Selected case studies and model contracts drawn from India-EU trade corridors illuminate prevailing operational friction points. The findings are distilled through normative legal deduction and interpretive critique, yielding a circumspect appraisal of regulatory consonance, the architecture of risk distribution, and the latitude for integrating ESG considerations.

How do INCOTERMS 2020 terms such as FOB, CIF, EXW and DDP shape the allocation of risk and distribution of costs between Indian exporters and EU importers in bilateral trade?

International Commercial Terms (Incoterms®) are globally accepted rules that define exactly who pays for and who bears the risk of transportation, insurance, and customs procedures in cross-border sales . Under Incoterms® 2020, each term specifies the delivery point at which the seller's obligations (and risk) end and the buyer's begin. For example, Free on Board (FOB) and Cost, Insurance and Freight (CIF) apply only to waterway transport, while Ex Works (EXW) and Delivered Duty Paid (DDP) are multimodal. In all cases, each term allocates costs (e.g. freight, insurance, duties) and [3]risks between the Indian exporter and the EU importer. The following analysis examines how FOB, CIF, EXW and DDP affect that allocation, in light of Indian and EU legal frameworks and practical trade issues.

FOB and CIF (Maritime Terms)- Under FOB (Free on Board), the Indian seller must deliver goods on board the vessel at the named port of shipment. The seller bears all costs and risks up to that point; once the goods are on the ship, risk passes to the EU buyer. In practice, the exporter clears goods for export under CBIC rules and arranges inland transport to the loading port. The buyer pays international freight, insurance, import clearance and duties. The U.S. Trade Administration notes that "once the goods are loaded onto the ship, the buyer takes over

[3] Commission Implementing Regulation (EU) 2015/2447 of 24 November 2015 Laying Down Detailed Rules for Implementing Certain Provisions of Regulation (EU) No 952/2013, 2015 O.J. (L 343) 558 (EU), *as amended* (consol. version 2023), Annex B, Ch. I, § 2
Cent. Bd. of Indirect Taxes & Customs, Advisory on Declaration of Nature of Contract in Shipping Bills (ICEGATE Sys. DGDM Oct. 2023) (India)

all further costs and risks, including freight, insurance, and import clearance and duties". Indian customs will compute the FOB value (for export incentives and duty purposes) as the transaction price of the goods excluding freights and other charges. By contrast, CIF (Cost, Insurance, Freight) also delivers goods on board ship, but the seller additionally contracts and pays for main carriage to the destination port and minimum insurance cover. Risk still passes at ship's rail as with FOB, but the exporter's cost responsibility is higher. The ICC notes that under CIF the seller "must contract for and pay the costs and freight necessary to bring the goods to the named port of destination" (with insurance). In Indian export practice, declaring CIF means the exporter reports invoice values inclusive of freight and insurance. Recent ICEGATE advisories (CBIC) require export documents to declare the "nature of contract" (e.g. CIF vs FOB) and automatically compute the correct FOB value by stripping out freight/insurance. This ensures that export incentives (which are based on FOB) are calculated on the actual goods' value. For the EU importer, CIF contracts relieve the buyer of arranging sea freight and minimum cover – although the buyer may choose to top-up insurance if needed. Under EU customs law, the buyer (as importer of record) must still clear the goods for release and pay import duties and VAT. Incoterms in the EU Customs Code Manual explicitly note that the agreed terms indicate "who handles customs procedures and is the importer of record" and "who pays any customs duties and import VAT." In sum, under FOB/CIF, the Indian exporter's obligation ends at the ship: export procedures and inland handling are on the seller, while ocean freight, insurance (for FOB), and all import formalities are on the EU buyer.

EXW and DDP (All-Modes Terms)- EXW (Ex Works) places the minimum burden on the seller. The exporter simply makes goods available at its premises or another named place (factory, warehouse, etc.). At that point, all risk and cost shifts to the buyer. In practice, this means the EU importer must arrange (and pay for) everything from loading at the seller's dock onward: local transport in India, customs export clearance, ocean or air freight, insurance, and EU import duties. For example, Avalara notes that under EXW, "the buyer collects goods from the seller's premises and is responsible for everything – transportation and insurance, export and import clearance, duties, loading at seller's premises…, and final delivery". However, EXW is uncommon in India–EU trade precisely because of practical and legal issues. Under Indian law the seller (exporter) normally holds the Importer Exporter Code (IEC) and must file the shipping bill. Even if EXW is contracted, the exporter often must still clear the goods for export (since the buyer usually cannot without an IEC). This can lead to disputes: e.g., if goods are damaged after leaving the factory but before the shipping bill is lodged, who bears that loss? Letters of credit may also object to EXW, as the seller does not tender many shipping documents. In general, EXW gives the buyer full control but also full responsibility, which may be impractical when the buyer is abroad and unfamiliar with Indian customs and logistics.

At the opposite extreme, DDP (Delivered Duty Paid) makes the seller responsible for virtually everything. The exporter must deliver the goods to the named place in the EU (often buyer's premises) and clear them for import, paying all duties, taxes and fees. Avalara summarizes DDP as: "the seller bears full responsibility for delivery… and covers export duties, import duties, import VAT or GST, shipping and insurance, and customs clearance. The buyer's only responsibility is to receive the goods". Legally, under Incoterms 2020 this means the Indian exporter becomes the de facto importer of record in the EU. In the EU's Union Customs Code a non-EU seller in a DDP contract must have an EORI number or use a fiscal representative, since only a registered entity can be the declarant and pay import VAT. Practically, DDP is complex for Indian sellers: they must navigate unfamiliar EU import regulations, obtain EU VAT registration or agents, and absorb variable duties (including any new levies like the Carbon Border Adjustment Mechanism). The EU buyer, meanwhile, enjoys a guaranteed delivered price with no admin burden. However, the high cost [4]and risk to the exporter (and difficulty claiming any EU import benefits) often deter Indian exporters from offering pure DDP terms.

Indian Legal/Regulatory Framework- India's customs and trade regulations intersect with Incoterms in key ways. All exports from India require an active IEC and filing of a shipping bill via the ICEGATE portal. The shipping bill form explicitly asks for the "Nature of Contract" (incoterm) in DGFT/CBIC formats. Importantly, CBIC notifications tie export incentives and duty (e.g. under the Foreign Trade Policy) to the FOB value. The October 2023 DGDM (CBIC IT arm) advisory notes that when a contract is CIF/CF/CI, Indian customs will "treat the unit value at item level as inclusive of freight/insurance" and automatically derive the FOB by deducting them. This ensures that schemes like RoDTEP or export duty are correctly computed on the core goods value. If exporters fail to declare the correct incoterm, ICEGATE raises errors (e.g. CIF must have "unit price include freight" toggled). Thus, failure to align commercial terms with CBIC's requirements can trigger re-assessment or denial of benefits.

Meanwhile, the DGFT (Directorate General of Foreign Trade) and RBI require exporters to use

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[4] Int'l Trade Admin., U.S. Dep't of Com., *Incoterms® 2020: An Overview of Changes*, at 2 (2020)
Avalara, *Incoterms® 2020: The Complete Guide*, DDP § (2020)

consistent terms on invoices and L/Cs. For instance, a letter of credit drawn under INCOTERMS 2020 should match the sales contract. Indian customs law (Customs Act 1962 and Valuation Rules) does not specifically define Incoterms, but practices assume the seller clears export. Importantly, even with EXW, the exporter typically still performs export clearance, since only they have the authorisation. Conversely, with DDP the exporter must effectively act as importer, though Indian law has limited guidance for outbound DDP beyond banking norms.

EU Customs Framework- On the EU side, the Union Customs Code (UCC) and related provisions set out the formal import obligations. Legally, an incoterm does not override customs law – the importer of record (usually the party paying duties) must hold an EU EORI number and comply with EU declarations. Under Incoterms, DDP assigns that importer role to the seller. EU guidance (and tax practice) makes clear that the chosen Incoterm determines who becomes the importer of record. When a European buyer is importer (as in FOB/CIF/EXW), that buyer must present the Single Administrative Document (SAD) to clear the goods. If the Indian seller is importer (as in DDP), they must register or use a local representative. Invoices must also note customs values appropriately: EU customs will expect the buyer to declare the import value (including any charges paid under CIF/DDP) for duty and VAT calculation. Notably, the 2020 Incoterms introduced specific references to security and transport data, aligning with modern customs needs. For example, Incoterms articles now clarify who bears cargo security screening costs (in A4/A7 of each rule). CIF contracts still default to Clause C insurance (minimum cover) while CIP mandates Clause A (all risks)– a difference impacting how much of the journey is insured. EU customs valuation rules correspondingly consider which costs (freight/insurance) were included in the invoice depending on the incoterm. In practice, Indian exporters and EU importers must ensure that the declared value and insurance align with customs valuation methods: for instance, CIF imports include freight/insurance up to the EU port in the customs value.

Practical Trade Implications- Beyond legal rules, Incoterms affect many on-the-ground logistics. Letters of Credit and Documentation: In an L/C transaction, banks typically require an on-board Bill of Lading for ocean shipments. Under Incoterms 2020, FCA was amended to allow an “on-board” clause so that a carrier can issue a full set of B/Ls to the seller once loaded. This change resolves a common friction under L/Cs: previously, using FCA (any mode) with sea carriage could leave the seller without the required document. Exporters should thus specify

"FCA (Port) with on-board B/L" if needed to satisfy banks. Transport and Insurance: Under FOB/CIF, Indian exporters must coordinate with freight forwarders to load cargo on ships (often at Mumbai/NMPT etc.). Port congestion or demurrage can add unplanned costs, which sellers may try to recoup by contract terms. Under CIF, the seller obtains only basic insurance by default – exporters need to confirm what coverage is needed for the cargo; EU buyers may require higher cover (thus often use CIP in other trade). In contrast, EXW shipments force the buyer to coordinate pickups – a major challenge if the buyer has no Indian agent. DDP shipments require the exporter to manage all logistics including inland EU trucking and possibly warehousing, often using international freight forwarders or a European importer agent. Compliance Risks: Errors in applying Incoterms can lead to regulatory penalties. For example, if an exporter quotes EXW but actually undertakes significant shipping, the inconsistent declarations could trigger scrutiny of the shipping bill. The ICEGATE system's "nature of contract" checks (e.g. forbidding freight on FOB or insurance on CIF fields) must be heeded. Failure to declare correct incoterms might even affect customs classification (if the country of origin or preferred tariff status depends on specific movement of goods). On the EU side, misinterpretation of an incoterm cannot be used to evade VAT – for instance, EU tax authorities may reclassify a so-called DDP sale as a domestic supply to collect VAT from the seller.

In India–EU trade, INCOTERMS® 2020 like FOB, CIF, EXW and DDP critically determine who carries cost and risk at each stage. Legally, these terms overlay India's export regulations (IEC, shipping bills, ICEGATE value rules) and the EU's customs code (import declarations, VAT). Practically, they guide logistics and financing: a FOB sale makes the Indian exporter responsible only until loading, whereas a DDP sale makes them responsible for everything up to the EU buyer's doorstep. Each term has trade-offs: exporters should avoid leaving export clearance to foreign buyers (a pitfall of EXW), and importers should beware hidden costs if sellers quote DDP without EU registration. By meticulously aligning contracts with the 2020 Incoterms definitions and local laws – for example, observing the new "on-board B/L" provision under FCA and the CBIC's shipping-bill checks – businesses can minimize disputes and penalties. [5]

[5] Reserve Bank of India, *Master Direction—Export of Goods and Service* (RBI/2024–25

What practical and legal challenges do Indian traders face in customs compliance when applying INCOTERMS 2020—particularly FCA with "on board" Bills of Lading and CIP's unambiguous security-cost allocation—under CBIC notifications and DGFT regulations?

The 2020 revision of the ICC Incoterms introduced two key changes that deeply impact Indian exporters: FCA's new "on-board" bill of lading option and CIP's explicit assignment of security costs. FCA (Free Carrier) now allows the buyer to instruct the carrier to issue an on-board Bill of Lading once containerized goods are loaded. CIP (Carriage and Insurance Paid) now mandates the seller arrange Clause A (all-risk) insurance and pay all transport-related security charges. While these updates clarify contractual risk and cost-sharing, they clash with Indian customs norms and financial processes, creating practical and legal hurdles for traders.

[6]**FCA Incoterm and "On-Board" Bill of Lading-** Under INCOTERMS 2020, FCA delivery happens when the seller hands the goods over to the buyer's carrier at the named place, after which the buyer assumes all risk. The new twist is that, upon request, the buyer must instruct the carrier to issue an "on-board" bill of lading (showing the goods as loaded on the ship) for the seller. This was intended to resolve the classic Letter of Credit (L/C) problem: banks insist on an on-board B/L, but under old FCA (2010), the seller often couldn't get one if a truck (not the shipper) delivered the container to the port. By forcing the buyer to obtain the on-board B/L, Incoterms 2020 aimed to make FCA viable for L/C-backed exports. Practical friction: In reality, Indian exporters still struggle. Freight-forwarders and carriers may refuse to issue an on-board B/L if the seller does not physically deliver the container onto the vessel – a common situation when inland trucking is involved. Trade analysts warn that the new FCA provision is "not a well-thought-out" fix and may "fail in its execution". Under FCA the seller's legal delivery is when handing the goods to the carrier (often at the seller's factory or a container yard), meaning the seller has no obligation to load the container on board the ship. If damage or delay occurs between handover and ship loading, Incoterms puts the risk on the buyer – yet practically the seller loses its only document (the B/L) proving export, and banks may refuse payment. Worse, the seller can end up listed as "Shipper" on the B/L, assuming liabilities for the ocean carriage it neither controls nor insured. In short, unless contracts explicitly require the buyer to secure the on-board B/L, Indian exporters face uncertainty and potential non-

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[6] Int'l Chamber of Commerce, *Uniform Customs and Practice for Documentary Credits*, ICC Pub. No. 745, Art. 20 (UCP 600) (2007)
David Lowe, *Incoterms® 2020: The Practical Reality*, 27 Int'l Trade L. & Prac. 89, 94–95 (2021)

payment: carriers often demand extra time or fees to annotate B/Ls, and banks may [7]dispute L/C documents if the on-board notation is missing. Export clearance and documentation: Under both Incoterms and Indian law, the exporter (seller) must clear the goods for export. The DGFT's How to Export guide confirms that under FCA, "the seller must carry out any export formalities" before delivery. In practice, the exporter files the shipping bill and bears all export duties and permits (even if delivery is to a buyer's carrier). However, Customs' electronic shipping bill system does not recognize an Incoterm called "FCA" in its "Nature of Contract" field. Exporters generally declare goods as FOB (free on board) for Customs purposes (since FCA with on-board essentially replicates FOB's inclusion of freight). An ICEGATE advisory recently enforced strict checks that, for CIF/CF/CI contracts, declared unit prices must include freight and/or insurance accordingly. While this rule directly names CIF/CI/CF/FOB, the practical effect is that an FCA sale with buyer-arranged freight must still be entered as FOB (indicating no inclusion of freight or insurance) so that Customs derives the correct FOB export value. Getting these declarations wrong can delay settlement of export incentives or generate notices – a "legal challenge" of aligning contract terms with CBIC's data requirements.

CIP Incoterm and Security Cost Allocation- INCOTERMS 2020 also dramatically elevated the seller's obligations under CIP. Now the seller must not only pay for carriage and insurance but also comply with all transport-related security requirements and bear their costs . Article A9 of CIP explicitly lists "costs of loading the goods and any transport-related security" as seller's expenses. This codifies that if any security inspections, scanning, seals or certificates are required during export transit, the seller is on the hook. Insurance and cost split: Another change is insurance: CIP now requires Institute Cargo Clauses (A) – broad "all risks" cover – up to 110% [8]of invoice value, versus the minimal (Clause C) cover allowed under the old rule incodocs.com. Indian traders find this burdensome. Firstly, CIP's expanded insurance liability means higher premiums and administrative work for the seller. Secondly, there is a disconnect with DGFT guidance: the official Indian export manual still describes CIP in 2020 words as only obligating minimum insurance, noting the buyer may request more. In other words, DGFT's text appears not to have caught up with the ICC's update. An Indian exporter relying on DGFT might arrange cheap cover, only to find the buyer expecting full all-risk insurance per the contract, creating legal risk. Customs valuation: From a customs viewpoint, CIP shipments are treated like CIF (cost+insurance+freight) when declaring value. Exporters must

[7] Customs Valuation (Determination of Price of Imported Goods) Rules, 2007, r. 11
[8] Commission Delegated Regulation (EU) 2015/2447, art. 5, 2015 O.J. (L 343) 1

correctly report freight and insurance amounts on the invoice so that Customs can strip them out and calculate the FOB value. If an exporter forgets to list security-related costs (e.g. port scanning fees or mandatory freight surcharges) separately, the declared values may be inaccurate. This is a practical compliance issue: the new Incoterm does not alter the ICDS/IGCR rules on valuation, but it requires exporters to re-align what costs are included in the customs declaration. For example, if an exporter under CIP actually paid a "security fee" at the terminal, that fee must be included in the freight or insurance amount on the shipping bill, or else Customs might spot a mismatch.

Indian Regulatory Framework (CBIC & DGFT)- The Central Board of Indirect Taxes & Customs (CBIC) and DGFT have yet to issue specific regulations on FCA's on-board B/L or CIP's security costs. However, existing notices affect how these terms are implemented. CBIC's recent ICEGATE advisory on shipping bills mandates consistency of "Nature of Contract" declarations. While FCA and CIP themselves aren't listed, exporters using FCA effectively declare "FOB" (no freight/insurance), and those using CIP declare "CIF" (since freight and insurance are included). The advisory then forces the system to deduct the declared freight/insurance from the invoice value to yield the FOB basis for incentives. This means exporters cannot simply call a shipment "CIP" and ignore freight figures – they must fill in all cost fields correctly or face automatic adjustments. On the DGFT side, the Foreign Trade Policy and Handbook of Procedures do not explicitly address Incoterms nuances. The DGFT's own "How to Export" help text (Jan 2024) defines FCA and CIP in generic terms but does not incorporate the new CIP insurance or security requirements. Nor does DGFT impose any formal shipping documentation rules keyed to Incoterms. Essentially, Indian law leaves it to parties: Customs cares about declared values, while DGFT/FTP cares about licensing and incentives. The "legal challenge" arises if contractual FCA/CIP terms aren't mirrored in customs filings or bank documents – mismatches can trigger inquiries or financial penalties. For instance, if an exporter issues an invoice "FCA Mumbai Port", Customs expects export clearance by the seller and values computed like FOB – but a bank or importer expecting an on-board B/L may see a conflict unless the seller's contract explicitly added the 2020 FCA clause. Similarly, a CIP invoice including a large insurance premium (ICC A) may confuse an inspector expecting only minimal insurance costs. In sum, there is no direct CBIC/DGFT mandate on Incoterm usage, but the regimes around shipping bills, export refunds, and L/C requirements force Indian traders to reconcile the new Incoterms details with existing rules.

How can Environmental, Social, and Governance (ESG) criteria be integrated into INCOTERMS 2020 clauses to advance sustainable supply-chain practices in India–EU trade, and what contractual adaptations would this entail?

[9]Integrating Environmental, Social, and Governance (ESG) criteria into Incoterms 2020 for India–EU trade demands a structured approach that reflects historical evolution, addresses current operational challenges, and anticipates future regulatory and technological shifts. In the decades before 2020, Incoterms served purely to allocate costs, risks, and documentation duties between sellers and buyers: logistics-focused rules without reference to sustainability. Sustainability commitments appeared separately, often as voluntary supplier codes or standalone corporate social responsibility clauses. This separation meant that environmental targets—such as reducing greenhouse-gas emissions—or social safeguards—like labor-rights guarantees—did not influence the moment when risk or cost passed from one party to the other. Consequently, the traditional Incoterms model did not encourage green transport choices or require that carriers comply with human-rights benchmarks. When the International Chamber of Commerce released Incoterms 2020, it introduced two notable changes affecting Indian exporters: the revised FCA clause and accompanying letter-of-credit considerations. Under the new FCA, sellers deliver goods to the carrier and risk shifts at the agreed handover point, but buyers may insist on an on-board bill of lading issued after actual loading aboard a vessel. In practice, many Indian exporters hand containers to inland terminals where forwarders refuse to issue such bills until quay loading. This disconnect has created situations in which banks reject documents under letters of credit, citing "incomplete" bills of lading. [10]Worse, the exporter often appears on the carrier's bill of lading as "shipper," despite lacking control over ocean carriage or related insurance. At the same time, India's ICEGATE customs-filing portal omits an "FCA" option, forcing exporters to declare FCA transactions as "FOB" to preserve inclusion of freight and insurance values for export-incentive calculations. This mismatch between contractual reality and customs entries has resulted in delayed refunds and compliance notices, further aggravating financial and legal risks. Against this backdrop of logistical friction, integrating ESG principles into delivery clauses can transform how India–EU supply chains operate. Environmentally, parties can agree to green-transport metrics within the sales contract:

[9] ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up, adopted by the Int'l Labour Conference, 86th Sess., June 18, 1998, 37 I.L.M. 1233 (1998) (setting out core labour standards for freedom of association, forced labour, child labour, and nondiscrimination)

[10] Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a Carbon Border Adjustment Mechanism, 2023 O.J. (L 163) 1 (laying down the CBAM framework and phasing in reporting from 2023 with full effect in 2026)

for instance, requiring that carriers meet specified CO_2-intensity thresholds or use verified low-carbon fuels. Sellers might commit to recyclable or reusable packaging and buyers could pledge to return materials for circular-economy processing. Socially, contracts can impose compliance with core International Labour Organization standards—encompassing safe working conditions, prohibition of forced or child labor, and respect for freedom of association—on all carriers and subcontractors. Governance provisions might grant the buyer audit rights over the exporter's choice of freight forwarder, carrier, and packaging supplier, including stipulated corrective procedures and escalation steps if ESG violations occur. Embedding these ESG provisions requires careful drafting of contractual language. One technique is to append an ESG annexure to the main Incoterms clause. This annexure would list measurable environmental targets—such as maximum carbon-[11]per-container-kilometer figures—detail social compliance certifications required from logistics partners, and outline governance processes like periodic third-party audits.

To address the FCA-related on-board bill of lading issue, the contract can define a bespoke "FCA-Green" term: it specifies that the seller must hand over goods at an eco-certified terminal, and obliges the buyer to secure the quay-issued bill of lading within a fixed timeline (for example, seven days post-loading), failing which the contract automatically treats a digital or sea waybill as an equivalent shipping document for payment under letter of credit. In parallel, contracts should include a customs-reconciliation clause. This provision recognizes that Indian export-filing systems require "FOB" to calculate correct export values including freight and insurance, even when the underlying commercial sale uses "FCA-Green." By stipulating that the export documentation filed on ICEGATE will use "FOB" terminology solely for customs value determination—while affirming that risk and cost passage follow the bespoke FCA-Green mechanics—parties can avoid declarations mismatches and ensure smooth processing of export incentives. Looking ahead to Incoterms 2030 and evolving regulatory landscapes, supply chains will likely see formal "Sustainability Terms" integrated into the official ICC text. Smart contracts on blockchain platforms could automate risk transfers contingent on real-time verification of ESG milestones—such as Internet-of-Things sensors reporting voyage emissions or digital certificates of social-audit compliance.

[11] Int'l Chamber of Commerce, ICC Principles for Sustainable Trade and Trade Finance, 1 (July 1, 2025) (Wave 3 framework providing standardised ESG definitions, metrics, and evidence requirements for trade-contract annexures)

Green trade finance instruments will tie preferential financing rates to fulfillment of contractually defined ESG KPIs, incentivizing both buyers and sellers. Moreover, tightening mechanisms like the EU's Carbon Border Adjustment and emerging Indian carbon-credit schemes will necessitate dynamic contractual formulas to allocate potential carbon costs, making ESG integration in delivery terms not just a commercial differentiator but a compliance imperative. In sum, embedding ESG into Incoterms 2020 for India–EU trade demands more than cosmetic additions. It requires crafting robust annexures, redefining traditional delivery terms into variants like "FCA-Green," and reconciling commercial clauses with India's customs-filing realities. By coupling precise environmental targets, social-compliance mandates, and governance controls with innovative contract execution tools—blockchain, smart bills of lading, and green letters of credit—trading partners can align risk allocation with sustainability goals. This evolution not only mitigates logistical and regulatory frictions but also positions India–EU trade on a trajectory toward truly sustainable global commerce.

Conclusion

The multifaceted Indian–EU international commercial arbitration regime, especially in terms of risk allocation, cost distribution, customs compliance, and related procedural intricacies, has been the focal point of this research, with a particular lens on how varying applications of Incoterms 2020 reshape commercial outcomes. Under the revised Incoterms framework, the FCA and CIP clauses introduce precise, yet challenging stipulations—most notably the requirement for "on-board" Bills of Lading under FCA and the seller's obligation to procure full security for carriage under CIP. These innovations, while intended to tighten risk transfer and clarify insurance cover, frequently run counter to Indian domestic rules. Exporters operating under the Central Board of Indirect Taxes and Customs (CBIC) valuation guidelines find themselves navigating valuation discrepancies when freight and insurance components are treated differently in customs declarations versus contractual pricing. Likewise, exporters complying with the Directorate General of Foreign Trade (DGFT) export procedures must reconcile letter-of-credit practices—where banks demand traditional on-board Bill of Lading evidence—with ICEGATE's limited "Nature of Contract" options, which do not currently recognize FCA or CIP, compelling declarants to elect FOB or CIF entries and triggering mismatches in declared export values and incentive eligibility. Moreover, the divergent mechanics of EXW, DDP, and CIP broaden this regulatory conundrum. Under Ex Works, risk remains with the buyer almost immediately, yet Indian exporters still bear pre-clearance obligations under the Customs Act, creating an illogical overlap of responsibilities. Delivered Duty Paid shifts maximum obligation back to the seller, but local customs clearance complexities and duty payment processes impose administrative burdens and potential financial exposure. Meanwhile, CIP's requirement for carriage and insurance "to" the destination port clashes with India's export-incentive schemes, which hinge on CIF values. These irregularities collectively misallocate risk, inflate costs, and heighten the prospect of non-compliance or delayed reimbursements. The research underscores an urgent imperative: align international commercial standards with national regulatory architectures and sensitize stakeholders—exporters, banks, freight forwarders, and customs officials—about these nuances. Equally, embedding ESG criteria into the same contractual matrices offers a transformative pathway to sustainable trade, though it demands extensive contractual drafting revisions, updated institutional guidelines, and capacity-building initiatives. Ultimately, realizing the promise of Incoterms 2020 in India–EU commerce requires coherent legal synchronization, clear operational protocols, and strategic commitment from all actors to reduce friction, enhance predictability, and cultivate a trade environment that is both efficient and forward-looking.