UNMASKING THE GREEN MIRAGE: REGULATORY GAPS IN ESG COMPLIANCE FOR PIPE INVESTMENTS IN INDIA

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ABSTRACT

*This study explores the rise in private placement in public equity (hereinafter referred to as **"PIPE"**) deals in India from an Environmental, Social, and Governance (hereinafter referred to as **"ESG"**) perspective. PIPE has become an important route for raising capital in India's listed companies, but its growth also raises an important question about the quality of capital being deployed. The study aims to ascertain whether private investment in public equity genuinely upholds ESG principles or simply evades stringent evaluation. Drawing on a*

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doctrinal review of SEBI regulations and Indian statutes, and comparing them with global ESG criteria, as well as analysing recent instances of PIPEs, reveals a disjointed regulatory setting where compliance with the ESG framework is often considered optional, if not outright evasive, and thus undermines the spirit of strict adherence. The findings highlight that PIPE investments sidestep mandatory disclosure norms, lack standard procedures for assessing sustainability risk in due diligence, and, thereby, contractual warranties and voluntary reporting often fail to translate into sustained environmental or social outcomes, thereby paving the way for greenwashing and opacity at the investor level. The article suggests a detailed plan to address these challenges by requiring tailored ESG disclosures and independent verification for PIPE transactions, necessitating formal ESG due diligence by certified auditors, implementing continuous monitoring through digital reporting platforms, also aligning India's ESG framework with global norms to attract responsible investment and uphold *worldwide reputation. Given that these measures are adopted in phases and in build-the-capacity mode, they will effectively serve as the mechanisms to convert PIPE deals into accountable channels for sustainable capital, thus moving India's private markets a step closer to global standards. By integrating doctrinal legal analysis with practical policy design, the article contributes a pragmatic roadmap for regulators, investors, and market participants seeking to ensure that private equity–backed public offerings foster measurable, long-term sustainability.*

Keywords: *ESG Compliance, PIPE transactions, Greenwashing, SEBI regulations, Sustainable Finance*

I. INTRODUCTION

In a world where business firms are seeking both profitability and sustainability, they are not only criticised as social and environmental wrongdoers but also as firms that conserve nature, empower communities, and uphold values. After reviewing the morning's market indexes, it is essential to determine whether our investments in these firms are positively contributing to sustainable development.

In the hectic life of Indian capital markets, Private Investment in Public Equity (hereinafter referred to as **"PIPE"**) has become the ideal technique for bringing in new capital into public firms behind the scenes. From the majestic boardrooms of Mumbai to the entrepreneurial corridors of Bengaluru, investors are attracted to private placement because of its quick and accommodating nature. But beneath the transactional statements and publicity-seeking valuations, an important question goes unanswered: Are these transactions consistent with the environmental, social, and governance (hereinafter referred to as (hereinafter referred to as **"ESG"**) principles that advance sustainable development?

Consider ESG not as a Corporate Social Responsibility (hereinafter referred to as **"CSR"**) box to be checked or as a marketing phrase, but as a compass that leads conservative investors to those companies that are environmentally responsible, respect their people, and are transparent and have accountable leaders. In the case of PIPE deals, that compass will be the separating line between an affordable investment and a reputational or regulatory risk. A company whose factories skirt pollution standards or whose boardroom is not independent can provide short-term, enticing profits, but at what expense?

Today's investors understand that true value comes from combining financial performance with responsible management. In PIPE Deals, having strong ESG credentials is not just a nice-to-have, but a must-have that safeguards a company's long-term growth, attracts valuable capital, and reduces financing costs. With the growing prominence of India's PIPE market, it becomes crucial to assess whether our regulatory framework, particularly the Securities and Exchange Board of India (hereinafter referred to as **"SEBI"**) regulations, ensures that every investment yields more than just financial profits. Do these guidelines not only focus on financial gains but also prioritise fostering eco-friendly practices, equitable work environments, and transparent governance?

This study examines whether India's regulatory framework, particularly the system managed by the SEBI, is adequately equipped to ensure that PIPE transactions do more than generate capital. The primary objective is to assess the effectiveness of existing ESG disclosure and monitoring standards in the context of PIPE transactions. Accordingly, the study proceeds in seven parts. It begins with an introduction and a conceptual understanding of PIPE and ESG, followed by a legal discussion of PIPE transactions and India's existing ESG framework. It further examines the core regulatory gaps in ESG monitoring, compares India's position with selected global jurisdictions, and considers practical challenges in implementing effective oversight. It further sets out policy recommendations before concluding with the study's key findings.

II. A LEGAL INSIGHT INTO PIPE DEALS AND ESG NORMS

A. WHAT ARE PIPE DEALS?

A PIPE is a private placement of securities of a public company, made to a specific accredited investor. It allows a public company to issue equity or equity-like securities more quickly than in a typical registered offering. A PIPE transaction is simply the most cost-effective alternative for many issuers struggling for liquidity. It also benefits investors as they may get the securities at a discounted price. PIPE is becoming a popular financing option for capital formation.[1] In today's market, many companies are unable to access traditional public and private finance sources, making PIPEs especially vital.[2] The PIPE market has evolved from a last resort for financially distressed corporations or issuers unable to access traditional sources of funding to a market with more sophisticated participants.

From a deal standpoint, a PIPE transaction entails an investor making a direct stock or equity-linked investment in the issuing company. A lot of issuing companies prefer this method of financing as it enables them to access funds without the initial cost of a publicly registered offering.[3]

[1] Marc I Steinberg and Emmanuel U Obi, 'Examining the Pipeline: A Contemporary Assessment of Private Investments in Public Equity ("PIPEs")' (2008) 11(1) U Pa J Bus L 1 < https://scholar.smu.edu/law_faculty/293/> accessed 12 June 2025.

[2] Susan J Chaplinsky and David Haushalter, 'Financing under Extreme Risk: Contract Terms and Returns to Private Investments in Public Equity' (2010) 23(7) The Review of Financial Studies 2789.

[3] *Steinberg and Obi* (n 1).

When done correctly, PIPE deals can efficiently raise capital and provide liquidity to investors.[4] ESG considers Environmental, Social, and Governance factors and Private equity firms benefit from ESG investing for lower risk and reputation. Companies integrate varying levels of ESG concerns into decision-making. Adopting ESG principles is both ethical and economically advantageous.[5] Neglecting ESG aspects increases the risk of scandals. Addressing ESG risks aids risk management in financing transactions. A focus on the ESG framework reduces reputational losses.

B. OVERVIEW OF EXISTING ESG AND PIPE REGULATIONS IN INDIA

India's ESG obligations are scattered across multiple laws and regulations. Environmental protection is regulated by laws such as the Environment (Protection) Act 1986 and related pollution-control statutes, while worker welfare is overseen by the Factories Act 1948 and various labour statutes.[6] Corporate governance (the "G" in ESG) is addressed by the Companies Act 2013 (e.g., directors' duties under

[4] James F O'Brien Jr, 'A Historical Perspective: The Bubble, Converts, and the Birth of Structured PIPEs' in Steven Dresner and E Kurt Kim (eds), *PIPEs: A Guide to Private Investments in Public Equity* (Bloomberg Press 2005).

[5] Sahib Kaul, 'ESG and Value Creation in Private Equity Investments: Analysing the Effects' (2023) 6(3) Asian J. Interdiscip Res 1 <https://pdfs.semanticscholar.org/8f8a/4eda3bbb4734575b98f7791caec716638f71.pdf> accessed 30 May 2025.

[6] Shiwangi Singh, 'Evolution of ESG Regime in India: Challenges and Way Forward' (*IIPRD*, 21 September 2023) <https://www.iiprd.com/evolution-of-esg-regime-in-india-challenges-and-way-forward/> accessed 31 May 2025.

§166 to act in the interest of "community as well as the environment",[7] and mandatory CSR spending under §135) and by anti-corruption and anti-money laundering laws like the Prevention of Money Laundering Act 2002.[8] SEBI's Listing Obligations and Disclosure Requirements (hereinafter referred to as **"LODR"**) 2015 likewise imposes governance requirements (board composition, committees, etc.) but only indirectly touches ESG.

A structured ESG disclosure framework has developed over time. SEBI introduced a more comprehensive Business Responsibility and Sustainability Report (hereinafter referred to as **"BRSR"**) structure in May 2021, replacing the Business Responsibility Report (hereinafter referred to as **"BRR"**).[9] According to BRSR, the largest 1,000 publicly traded companies (by market capitalisation) must provide quantitative ESG measures beginning in FY 2022- 23.[10] BRSR covers three sections: general company information, management/process disclosures (policies, systems), and principle-wise performance against the nine National Guidelines on Responsible Business Conduct (hereinafter referred to as **"NGRBC"**) principles.[11] Notably, SEBI

[7] Arpita Garg and others, 'Indian Legal Regime for ESG' (*S&R Associates*, 9 June 2022) <https://www.snrlaw.in/indian-legal-regime-for-esg/> accessed 25 May 2025.
[8] *Singh* (n 6).
[9] ibid.
[10] Priti Dubey, 'Business Responsibility and Sustainability Reporting (BRSR)' (*CEEW*, 28 March 2024) <https://www.ceew.in/gfc/quick-reads/explains/brsr> accessed 1 June 2025.
[11] IBM Envizi, 'The Indian Business Responsibility and Sustainability Report (BRSR) Explained' (*IBM Envizi*, 6 July 2023) <https://www.ibm.com/think/topics/brsr> accessed 1 June 2025.

designed BRSR to align with international standards: it "incorporates several Key Performance Indicators of international frameworks" and explicitly maps its principles to the UN Sustainable Development Goals.[12] SEBI's LODR also contains ESG-relevant provisions. Regulation 17 of LODR mandates minimum board composition, a minimum of one-third independent directors, and one female director, embedding basic governance standards.[13] Reg. 18 requires audit, nomination, and other board committees with independent-majority memberships (strengthening oversight of risks, including ESG risks). In the Issue of Capital and Disclosure Requirements (hereinafter referred to as **"ICDR"**) Regulations, SEBI addresses private placements like PIPE deals: notably, Regulation 160 ICDR sets strict conditions for preferential issues (the typical form of a PIPE), e.g., the investor's entire pre-issue shareholding must be dematerialised, and the issuer must meet public float requirements.[14] However, none of these rules imposes any affirmative ESG due diligence on PIPE transactions or investors. In sum, India's ESG framework is a patchwork of older

[12] Ernst & Young Associates LLP, 'Business Responsibility and Sustainability Reporting (BRSR)' (Indian Chamber of Commerce, EY 2023) <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-in/insights/climate-change-sustainability-services/documents/ey-business-responsibility-and-sustainability-reporting.pdf> accessed 1 June 2025.

[13] Palomita Sharma and Harshita Srivastava, 'Adapting to Change: SEBI's Updated Listing Regulations Framework for Listed Entities' (*Nishith Desai Associates,* 6 January 2025) <https://www.nishithdesai.com/research-and-articles/hotline/corpsec-hotline/adapting-to-change-sebis-updated-listing-regulations-framework-for-listed-entities-15240> accessed 1 June 2025.

[14] Vinod Kothari Consultants, 'FAQs on Preferential Issue of Equity Shares and Convertible Securities under SEBI ICDR' (*Vinod Kothari Consultants*, 1 October 2022) <https://vinodkothari.com/2022/10/faqs-on-preferential-issue-of-equity-shares-and-convertible-securities-under-sebi-icdr/> accessed 1 June 2025.

environmental and labour laws, company-law duties, CSR rules, and SEBI mandates (culminating in the 2021 BRSR).

III. FALLING THROUGH THE GAPS: WHERE ESG MONITORING MISSES THE MARK IN PIPE TRANSACTIONS

A. ABSENCE OF ESG-SPECIFIC DUE DILIGENCE FOR PIPE INVESTMENTS.

India does not have any mandate for ESG due diligence in PIPE transactions, irrespective of world trends. SEBI rules mandating disclosure by listed companies do not require private investors to evaluate or enforce ESG standards while purchasing shares. In practice, a PIPE is a technical rules-based preferential allotment to eligible investors (e.g., Reg. 160 ICDR's demat and public float requirements),[15] and common insider-trading standards, but without any express requirement for examining the investee's environmental or social compliance. India's ESG framework remains fragmented and predominantly voluntary,[16] with no single common standard governing all ESG aspects. So, advanced private investors might insist on ESG checks on their behalf, but without regulation, they have no statutory duty to do so. This loophole implies that companies raising capital

[15] ibid.

[16] Garg and others (n 7) 4.

through PIPEs might evade the increased scrutiny (and reporting) imposed on public issuers, so sub-standard ESG habits can be ignored. Current SEBI guidelines, such as ICDR and LODR, lack explicit provisions regarding the inclusion of ESG principles in private placement, which results in a gap in regulation in PIPE transactions, and no mandate for ESG regulation. Investors are unable to evaluate compliance with ESG due to the limited framework of BRSR for only the top 1000 listed firms. This leads to voluntary and non-standardised disclosure by others.

B. GREENWASHING AND ITS IMPLICATIONS IN PIPE DEALS

With the public eye fixed on sustainability, there is a genuine risk of greenwashing, overstating, or misrepresenting ESG credentials in PIPE transactions. Regulators have begun to crack down on greenwashing environmental claims: India's Central Consumer Protection Authority issued 2024 guidelines to stop companies from putting false or misleading representations about the environmental friendliness of their products and services.[17] The rules require that any aspirational or futuristic environmental statements be backed up by clear, achievable strategies.[18] Yet these Consumer-centric provisions do not cover securities transactions such as PIPE deals, so that firms can market

[17] Bhavya Sriram, Nandini Menon V, and Pratiksha Easwar, 'Central Consumer Protection Authority Issues Guidelines for Prevention and Regulation of Greenwashing or Misleading Environmental Claims' (*Lexology*, 7 November 2024) <https://www.lexology.com/library/detail.aspx?g=3dbbdb30-1392-4a28-a20f-75b08a263742> accessed 1 June 2025.
[18] ibid.

green approaches without compulsory validation, risking a credibility gap through dependence on self-reported ESG information. Briefly put, Indian law has no clear-cut rules against or monitoring this practice in PIPE deals.

C. LACK OF CONTINUOUS ESG MONITORING POST-INVESTMENT

In Indian PIPE deals, ESG promises are often just a one-off checkbox at closing. Investors may require environmental or social covenants, but post-investment, no external body monitors performance. ESG reporting in India is mostly a "check-the-box" exercise rather than a genuine practice.[19] Once a listed company files the mandatory BRSR report, regulators typically move on. This gap has real consequences. SEBI itself is now warning that without stronger oversight, ESG disclosures could become mere "paper disclosures".[20] New rules even allow ESG ratings to be simply withdrawn if a company fails to file its annual sustainability report.[21] Successful ESG integration requires

[19] Sahil Kanuga and Arjun Gupta, 'ESG: Adherence to Internal Policy and Procedures' (*Nishith Desai Associates*, 30 November 2022) <https://www.nishithdesai.com/fileadmin/user_upload/Html/Hotline/YGM_M_Nov3022.htm> accessed 6 June 2025.

[20] Jayshree P Upadhyay and Ira Dugal, 'India to Review ESG Disclosures for Listed Firms, Market Regulator Says' (*Reuters*, 16 April 2025) <https://www.reuters.com/sustainability/boards-policy-regulation/india-review-esg-disclosures-listed-firms-market-regulator-says-2025-04-16/> accessed 1 June 2025.

[21] Manvi Pant, 'India's Market Regulator Issues Norms for Withdrawing an ESG Rating' (*Reuters*, 29 April 2025) <https://www.reuters.com/sustainability/boards-policy-regulation/indias-market-regulator-issues-norms-withdrawing-an-esg-rating-2025-04-29/> accessed 1 June 2025.

"continuous monitoring, periodic reviews and reporting," and linking key performance indicators to compliance.[22]

The lack of enforcement has already led to troubling cases. The Reserve Bank of India (hereinafter referred to as "**RBI**") has also flagged that much of India's so-called "green" financing may suffer from "false compliance claims" and "misuse of Green Loans".[23] Adani Green Energy, held by many ESG funds for strong governance, faced bribery allegations and massive losses, damaging its reputation.[24] Though not a PIPE deal per se, Adani Green's collapse undercut the credibility of its ESG claims and shows how initial promises can be exposed later.

Without continuous independent oversight, then, ESG clauses in PIPE transactions risk becoming a mere formality. In the current regime, however, there is no mechanism to verify or enforce the substance of those disclosures post-investment, turning many green commitments into a mirage.

D. LIMITED ROLE OF INVESTORS IN ENSURING ESG ACCOUNTABILITY

[22] Prasenjit Chakravarti, 'How Is ESG Impacting India M&A?' (*Lexology*, 30 July 2024) <https://www.lexology.com/library/detail.aspx?g=b412bc32-57ae-4b9d-aa6d-44ad0b4aa8b0> accessed 1 June 2025.

[23] Sakshi Shairwal, 'Understanding Green Financing in India' (*Lexology*, 12 July 2021) <https://www.lexology.com/library/detail.aspx?g=bf2b86ca-e2cc-4236-b774-5c9e15831a39> accessed 1 June 2025.

[24] Ishika Mookerjee and Sheryl Tian Tong Lee, 'Adani Shock Exposes ESG Fund Bosses Caught in 'Terrible' Bet' (*BNN Bloomberg*, 22 November 2024) <https://www.bloomberg.com/news/articles/2024-11-23/adani-shock-exposes-esg-fund-managers-clinging-to-terrible-bet > accessed 1 June 2025.

Between 2020 and 2024, most PIPE and PE-funded transactions in India indicate investors neglect to implement ESG protections. High-profile ventures such as Byju's, BharatPe, Dunzo, and BluSmart encountered scandals only exposed through audits or whistleblowers.[25] In one high-profile case, an in-house inquiry at Sequoia supported fintech BharatPe only emerged after executives were fired for vendor misappropriation, by which time other investors complained they had not been kept in the loop.[26] Even with board positions, investors often don't have the inclination or tools to monitor environmental or social issues, showing a "pattern" of failure in governance.

While investors say they have control over the direction of the company, India has no statutory ESG responsibility. One observes that "gone are the days when… investors in a company are silent spectators", current backers now want to be "eager…to ensure corrective measures are taken".[27] Exits and financial return continue to take precedence over long-term sustainability considerations. Successful Venture Capitalists act like passive lenders, shying away

[25] Prashant Mara and Pratik Bakshi, 'Ingraining Good Governance in Start-ups: Buck Stops with the Investors' (*Financier Worldwide*, October 2023) <https://www.financierworldwide.com/ingraining-good-governance-in-start-ups-buck-stops-with-the-investors> accessed 2 June 2025.

[26] M. Sriram and Aditya Kalra, 'Sequoia India Grapples With Fallout From Governance Snafus' (*Reuters*, 17 June 2022) <https://www.reuters.com/business/finance/sequoia-india-grapples-with-fallout-governance-snafus-2022-06-17/> accessed 2 June 2025.

[27] Ritika Bansal, Mohammad Kamran and Sahil Kanuga , 'Shareholder Activism: An ESG Tool or a Founder's Curse?' (*Nishith Desai Associates*, 13 May 2022)<https://www.nishithdesai.com/fileadmin/user_upload/Html/Hotline/YGM_M_May1322.htm> accessed 2 June 2025.

from asking for environmental audits or labour protections except when regulators force them to.[28] High valuations and exit opportunities consistently overwhelm tighter regulation.

Regulators have been unclear on investors' responsibilities. A voluntary stewardship code is in place, but applied only to minority holders with no enforcement, with institutions holding only 26% equity compared to promoters' 55%.[29] Transparency reforms focus on financial reporting, not enforceable green standards. Therefore, with much-hyped sustainability, actual ESG responsibility from investors is mostly missing, a "green mirage".

E. NON-ALIGNMENT WITH INTERNATIONAL ESG STANDARDS

Lastly, India's standards are not yet fully aligned with leading global norms. While SEBI touts BRSR's interoperability with frameworks like Global Reporting Initiative (hereinafter referred to as **"GRI"**), Sustainability Accounting Standards Board (hereinafter referred to as **"SASB"**), and the Task Force on Climate-Related Financial Disclosures (hereinafter referred to as **"TCFD"**),[30] and its mapping to UN SDGs, these alignments remain partial and largely declaratory.[31]

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[28] Mara and Bakshi (n 25).

[29] Rudresh Mandal, 'The Indian Stewardship Codes and the Mirage of Corporate Governance Convergence in the ESG Era' (*Columbia Bus L Rev*, 31 October 2023) <https://journals.library.columbia.edu/index.php/CBLR/announcement/view/658 accessed 2 June 2025.

[30] IBM Envizi (n 11) 4.

[31] Ernst & Young Associates LLP (n 12) 4.

Indian regulations stop short of mandating those external benchmarks. For example, climate-risk reporting remains largely voluntary (no Indian equivalent yet of the TCFD mandate), and there is no local mandate for science-based emissions targets or European Union-style ESG taxonomies. Many institutional investors (especially foreign ones) may expect compliance with IFRS/ISSB sustainability disclosure standards or MSCI/Sustainalytics ratings, but PIPE investments can currently escape such scrutiny. In effect, India has built its own ESG layer (BRSR/NGRBC) on top of existing laws, but cross-border investors see gaps: there is no statutory requirement, say, for climate scenario stress-testing or human-rights due diligence as under OECD/UN guidelines. This misalignment means PIPE deals may underperform global ESG expectations even if they meet India's basic norms. Without closer harmonisation (and perhaps mandatory ESG reviews for all major deals), foreign investors might remain wary of Indian PIPEs, and locally raised capital may overlook international sustainability benchmarks.

IV. BEYOND BORDERS: PROVEN ESG MONITORING PRACTICES FOR PIPE INVESTMENTS

There are global best practices in ESG monitoring for PIPE deals that can be compared to the Indian framework and adopted for better functioning. Some of the best global practices in ESG monitoring for PIPE deals are:

A. UNITED STATES

In the United States, the Securities and Exchange Commission's (hereinafter referred to as **"SEC"**) ESG agenda has primarily addressed public companies, not private placements. In 2022, the Commission proposed broad climate-disclosure regulations for registrants, including mandating that companies disclose any material climate-related risks and greenhouse-gas emissions.[32] But those regulations were delayed in 2024 as domestic litigation ensued.[33] PIPE financings, on the other hand, lie outside of compulsory SEC disclosure regulations. Issuers that raise money through a PIPE do not have to submit ESG reports; they just have to eschew fraud. Some of the notable U.S. PIPE financings with an ESG or clean-tech theme (2020–2024) are mentioned below.

[32] Chapman & Cutler LLP, 'SEC Targets Greenwashing and Other Misleading ESG Claims' (*Chapman & Cutler LLP*, 20 July 2022) <https://www.chapman.com/publication-sec-targets-greenwashing-and-other-misleading-esg-claims#:~:text=In%20April%202022%2C%20the%20SEC%20voluntarily%20stayed,financial%20condition%2C%20including%20disclosures%20regarding> accessed 18 May 2025.

[33] Frank Zarb and Louis Rambo, 'SEC Voluntarily Stays Corporate ESG Disclosure Rules Pending Litigation' (*Regulatory & Compliance Insights,* 5 April 2024) <https://www.regulatoryandcompliance.com/2024/04/sec-voluntarily-stays-corporate-esg-disclosure-rules-pending-litigation/#:~:text=Yesterday%2C%20the%20SEC%20voluntarily%20stayed,begin%20compliance%20for%20their%202025> accessed 18 May 2025.

In January 2021, the hydrogen fuel-cell firm Plug Power revealed a $1.5 billion PIPE by South Korea's SK Group. SEC filings boast this as "the largest U.S. clean energy PIPE in the last 20 years."[34] Altus Power, a solar-plus-storage developer, raised $275 million through PIPE in connection with a SPAC merger in July 2021. That transaction, led by CBRE Group, was specifically designed to finance more "clean electrification" projects.[35] The wood-pellet biomass energy company Enviva Inc. closed a $250 million PIPE to finance new renewable wood-pellet plants. Private equity groups of its largest stockholders spearheaded the financing in March 2023.[36]

Also, an environmental-technology firm, Arq, Inc. (activated carbon and air pollution control), in May 2024, disclosed a $15 million PIPE

[34] Plug Power Inc, 'Plug Power and South Korean SK Group to Form a Strategic Partnership to Accelerate Hydrogen Economy Expansion in Asian Markets; Plug Power to Receive $1.5 Billion Strategic Investment From SK Group' (*Plug Power Investor Relations*, 6 January 2021) <https://www.ir.plugpower.com/press-releases/news-details/2021/Plug-Power-and-South-Korean-SK-Group-to-Form-a-Strategic-Partnership-to-Accelerate-Hydrogen-Economy-Expansion-in-Asian-Markets-Plug-Power-to-Receive-1.5-Billion-Strategic-Investment-From-SK-Group-2021-1-6/default.aspx> accessed 6 June 2025.

[35] Altus Power Inc, 'Altus Power, Inc., a Market-Leading Clean Electrification Company, Announces Business Combination with CBRE Acquisition Holdings, Inc.; Combined Company Expected to Be Listed on New York Stock Exchange' (*Business Wire*, 13 July 2021) <https://www.businesswire.com/news/home/20210713005393/en/Altus-Power-Inc.-a-Market-Leading-Clean-Electrification-Company-Announces-Business-Combination-with-CBRE-Acquisition-Holdings-Inc.-Combined-Company-Expected-to-Be-Listed-on-New-York-Stock-Exchange> accessed 6 June 2025.

[36] Enviva Inc, 'Enviva Announces $250 Million PIPE Transaction' (*Enviva Inc Investor Relations*, 1 March 2023) <https://ir.envivabiomass.com/news/news-details/2023/Enviva-Announces-250-million-PIPE-Transaction/default.aspx> accessed 6 June 2025.

to expand its clean-materials business.[37] All of these PIPE transactions were sold on their environmental or sustainability value, demonstrating strong investor demand for green sectors. Yet none of them were required by new SEC directives to report ESG metrics; they went under the same security laws as any other private offering, with regulators counting on fraud prohibitions instead of prescriptive ESG reporting.

Briefly, there is no ESG rulebook for PIPE transactions, just standard anti-fraud law, as even regulators and investors increasingly ask tough questions of any overstated sustainability sales pitch.

B. EUROPEAN UNION

The EU is ahead of India on sustainable finance with its 2020 Taxonomy regulation, developing a shared "language" for sustainable activities to direct private capital toward the green transition. Firms subject to EU disclosure requirements disclose the proportion of turnover, investment, and lending in line with taxonomy criteria,[38] measuring emissions and renewable energy consumption to prevent greenwashing and encourage transition investment.[39] The 2023

[37] Arq, Inc, 'Arq Announces $15 Million PIPE Transaction' (*GlobeNewswire*, 16 May 2024) <https://www.globenewswire.com/news-release/2024/05/16/2883304/25414/en/Arq-Announces-15-Million-PIPE-Transaction.html> accessed 18 June 2025.

[38] European Commission, 'EU Taxonomy for Sustainable Activities' (*European Commission Sustainable Finance*) <https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en#:~:text=This%20Delegated%20Act%20specifies%20the,business%2C%20investments%20or%20lending%20activities> accessed 21 May 2025.

[39] European Commission, 'Sustainable Finance Taxonomy: Complementary Climate Delegated Act' (European Commission Sustainable Finance, Official Journal, 15 July 2022) <https://finance.ec.europa.eu/system/files/2022-02/sustainable-finance-

Commission package goes further to boost private clean-tech investment and grow the Taxonomy's scope.

This is quantified in transactions: Eni issued a €1 billion sustainability-linked convertible bond in 2023 against carbon and renewable targets;[40] Constellium issued €300 million in 2021 on the basis of GHG-reduction and recycling targets.[41] Private equity needs are fueled fuelled by ESG concerns, with many investors seeking ESG-linked investments. Green bonds accounted for over 6.9% of EU corporate and government issuance by 2022,[42] reflecting the trend of linking funding to sustainability metrics.

Under the SFDR and Taxonomy Regulation, reporting on these indicators is mandatory in Europe. EU public policy, such as the CSRD/NFRD and SFDR, requires the integration of ESG in capital raisings. India has no EU-style green taxonomy yet, and therefore "companies, investors and policymakers are in the dark as to what

taxonomy-complementary-climate-delegated-act-factsheet_en.pdf> accessed 6 June 2025 (European Commission Sustainable Finance).

[40] Eni S.p.A, 'Eni Announces the Successful Placement of Its Sustainability-Linked Convertible Bond' (*Eni*, 7 September 2023) <https://www.eni.com/en-IT/media/press-release/2023/09/eni-announces-the-successful-placement-of-its-sustainability-linked-convertible-bond.html> accessed 18 May 2025.

[41] Constellium SE, 'Constellium Launches Proposed Sustainability-Linked Senior Notes Offering, 2021' (*Constellium*, 17 May 2021) <https://www.constellium.com/news/constellium-launches-proposed-sustainability-linked-senior-notes-offering-2021> accessed 18 May 2025.

[42] European Environment Agency, 'Green Bonds in Europe' (*European Environment Agency,* 4 November 2024) <https://www.eea.europa.eu/en/analysis/indicators/green-bonds-8th-eap#:~:text=Bonds%20used%20to%20finance%20activities,of%20the%20European%20Green%20Deal> accessed 21 May 2025.

exactly 'green' means".[43] SEBI requires each year a BRSR for the top 1,000 listed companies, but without enforcement powers or third-party audits. India's ESG framework is voluntary, as opposed to Europe's mandatory framework with supervisory oversight.[44] This lack of direction or oversight for Indian PIPE issuers and investors is much less than for European PIPE issuers and investors.

C. ASIA-PACIFIC REGION (JAPAN, SINGAPORE, AND HONG KONG)

Shifts in administering ways to disclose and practice sustainable finance and ESG have not yet taken place in the Asia-Pacific. Since 2020, Japan, Hong Kong, and Singapore have instituted frameworks aligned with ISSB/SASB/TCFD standards to act as deterrents in protecting sustainability from being misrepresented. In 2021, the corporate governance code was amended by the Tokyo Stock Exchange in Japan to require climate-risk disclosures from prime-market companies in accordance with the TCFD.[45] The Financial Services Agency (hereinafter referred to as **"FSA"**) published IFRS-compliant sustainability standards (ISSB S1/S2) and included climate and human-capital subsections in the FY2023 Annual Securities

[43] J. Sagar Associates, 'India ESG Comparative Guide' (*Mondaq*, 2025) <https://www.mondaq.com/guides/results/54/1100/all/india-esg> accessed 21 May 2025.
[44] European Commission Sustainable Finance (n 39) 10.
[45] Mark Segal, 'Japan Releases Inaugural IFRS-Aligned Sustainability Reporting Standards' (*ESG Today*, 13 March 2025) <https://www.esgtoday.com/japan-releases-inaugural-ifrs-aligned-sustainability-reporting-standards/> accessed 21 May 2025.

Report, with the aim of mandatory reporting by March 2025.[46] 2023 new fund rules establish ESG investment trusts and mandate E, S, G clear disclosures.

This rule is reshaping transactions: private investors have green assets in their sights, and Carlyle acquired JAG Energy in 2021.[47] Canada's CDPQ invested a maximum of $474m in Shizen Energy in 2022.[48] In 2023, the Japanese government issued a transition bond for the first time to fund a Green Transformation policy worth a whopping ¥150 trillion.[49] Climate signalling objectives will define PIPE-like transactions.

Singapore also fights greenwashing with the Monetary Authority of Singapore's environmental risk guidelines for managers (2020) and retail fund ESG disclosures in 2023.[50] Venture and private equity transactions increasingly centre on clean energy, agrotech, and ESG-compliant industries in Singapore.

[46] Kate Hodson and Skip Hashimoto, 'Japan's New Era of Sustainable Finance' (*Ogier*, 12 June 2024) <https://www.ogier.com/news-and-insights/insights/japans-new-era-of-sustainable-finance/> accessed 21 May 2025.

[47] Yasuhiro Kasahara, Masaki Mizukoshi and Yoshitaka Kato, 'Private Equity 2022: Japan' (Lexology GTDT Market Intelligence, Law Business Research 2022) <https://www.noandt.com/wp-content/uploads/2022/10/LGDT_Market-Intelligence-Private-Equity-2022-Japan.pdf> accessed 21 May 2025.

[48] Emily Shain, 'CDPQ Announces $474 Million Investment in Japan Renewables Developer Shizen Energy' (*ESG Today*, 24 October 2022) <https://www.esgtoday.com/cdpq-announces-474-million-investment-in-japan-renewables-developer-shizen-energy/> accessed 21 May 2025.

[49] Hodson and Hashimoto (n 46).

[50] Waystone, 'New ESG Disclosure for Asset Managers in Singapore' (*Waystone*, 17 August 2022) <https://www.waystone.com/new-esg-disclosure-for-asset-managers-in-singapore/> accessed 21 May 2025.

The ESG guidance has been fortifying, with the HKEX guiding about ESG in April 2024, stating that from January 2025, issuers on the Main Board would be required to declare climate information as per the IFRS S2, and the larger ones will comply by 2026.[51] At the same time, the Securities and Futures Commission and the Hong Kong Monetary Authority issued climate risk guidelines to banks and funds to align these with the 2030/2050 target dates.[52] Hong Kong issued a record $5.75B triple-currency green bond in 2023, then the largest in Asia,[53] and issued a Hong Kong Dollar 800M tokenised green bond, the first in the world.[54] New regulations demand climate reporting on SPACs and dual-class listings since 2021, making Hong Kong a green finance hub. In Tokyo, Hong Kong, and Singapore, stricter ESG reporting is pushing private capital transactions towards sustainability.

[51] Financial Services & the Treasury Bureau, 'Roadmap on Sustainability Disclosure in Hong Kong: Ambition.Assurance.Enablement' (December 2024, Financial Services & the Treasury Bureau 2024) <https://www.fstb.gov.hk/fsb/en/publication/report/docs/FSTB_Roadmap2024_eBooklet_EN.pdf> accessed 21 May 2025.

[52] China Briefing, 'Navigating Hong Kong's ESG: Regulations, Trends, and Opportunities' (China Briefing) <https://www.china-briefing.com/doing-business-guide/hong-kong/sector-insights/navigating-hong-kong-s-esg-regulations-trends-and-opportunities> accessed 24 May 2025.

[53] Mark Segal, 'Hong Kong Raises $5.8 Billion in Green Bond Offering' (*ESG Today*, 5 January 2023) <https://www.esgtoday.com/hong-kong-raises-5-8-billion-in-green-bond-offering/> accessed 24 May 2025.

[54] Andrew McGinty, Vanessa Kwok and Joshua Lee, 'An ESG First? The Hong Kong Government Issues Tokenised Green Bonds in a Worldwide Premier' (*Hogan Lovells,* 28 April 2023) <https://www.hoganlovells.com/en/publications/an-esg-first-the-hong-kong-government-issues-tokenised-green-bonds-in-a-worldwide-premier> accessed 24 May 2025.

V. BARRIERS TO EFFECTIVE ESG OVERSIGHT IN INDIA'S PIPE LANDSCAPE

A. DATA TRANSPARENCY ISSUES

In India, top regulators have created uniform templates. SEBI's BRSR is explicitly "intended to have quantitative and standardised disclosures on ESG parameters."[55] BRSR applies mainly to the 1000 largest listed firms; smaller or private companies lack compulsory ESG templates. Multiple frameworks (GRI, SASB/ISSB, NGRBC, etc.) coexist, forcing covered firms to translate standards. Thus, consistent ESG data are rare outside top issuers, with smaller firms reporting inconsistently or not at all. This patchwork and self-reported metrics hinder clear comparisons, confusing investors about comparable performance.

The situation is even worse for privately negotiated deals. In private investments (such as PIPE deals), target companies may be thinly covered by public disclosure or entirely outside SEBI oversight. A recent global study of private equity firms found that average ESG disclosure is very low (around 17%) and drops further at the portfolio and asset level.[56] In other words, most private-equity-owned companies

[55] Haridev Verma, 'Business Responsibility and Sustainability Reporting (BRSR): An Effort to Achieve Sustainability' (2023) 2(1) J Legal Res & Juridical Sci <https://jlrjs.com/wp-content/uploads/2023/07/74.-Haridev-Verma.pdf> accessed 24 May 2025.

[56] Pascal Böni, Jurian Hendrikse and Philip Joos, 'ESG Transparency of Private Equity and Debt Firms' (2022) SSRN Electronic Paper <https1://ssrn.com/abstract=4289573> accessed 5 June 2025.

do not publish detailed ESG data at all. This data scarcity means that due diligence on ESG criteria often relies on unverified promises or spotty reports. Fund managers or PIPE investors can't easily "see" social or environmental risks. The result: a major transparency gap, as private investors depend on self-reported surveys or outdated, inconsistent third-party screens without mandatory public reporting.

B. ENFORCEMENT AND PENALTIES

By design, SEBI's ESG rules focus on listed entities and rely on disclosure-based compliance. If a public company is backed by private equity or taken private, SEBI's LODR no longer apply. This creates a loophole: a firm might briefly acknowledge ESG commitments to satisfy a PIPE investor but then delist or privatise and escape any continuing oversight. Even for continuing listed issuers, SEBI has so far refrained from imposing strict mandates in many areas. For example, in December 2024, SEBI's board deferred mandatory value-chain ESG reporting and explicitly made it "voluntary" for companies.[57] In practice, SEBI can fine a company for flouting general listing rules, but it has no specialised ESG enforcement arm or routine ESG audits. Therefore, compliance in principle would seem to centre more around shareholder pressure and corporate culture and less around the punitive stake.

[57] Securities & Exchange Board of India, 'SEBI Board Meeting' (PR No.36/2024, SEBI 18 December 2024) <https://www.ipoplatform.com/pdf/Board-Meeting-SEBI-18-12-24.pdf> accessed 5 June 2025.

C. LEGAL OVERLAPS AND AMBIGUITIES

India's ESG corporate governance is split across various regulators: SEBI for listed companies; the Ministry of Corporate Affairs, operationalising the Companies Act for all companies (CSR regulations), and sectoral regulators like the RBI for banks and insurance.[58] This results in overlapping ESG demands, inducing ambiguity and potential conflicts for firms in fulfilling SEBI's BRSR, MCA's CSR expenditure, and RBI's climate disclosure requirements. Uncertainty regarding priorities stifles harmonised reporting across frameworks.

VI. BRIDGING THE GAP: POLICY IDEAS TO MAKE ESG COUNT IN PIPE DEALS

As India's capital markets evolve, bridging the ESG divide in PIPE (Private Investment in Public Equity) deals requires both targeted reforms and a clear path forward. Below, the Author proposes six key recommendations and integrates them into a broader conclusion that underscores why harmonised ESG oversight is critical for sustainable private-equity-backed growth and how stakeholders can make it happen.

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[58] European Corporate Governance Institute, 'Corporate Governance in India' (*ECGI*, 2024) <https://www.ecgi.global/publications/codes/countries/corporate-governance-in-india> accessed 6 June 2025.

A. INTRODUCE ESG-SPECIFIC REGULATIONS FOR PIPE DEALS

PIPE transactions have traditionally escaped public-market ESG mandates. SEBI should require companies seeking PIPE finance to disclose a Business Responsibility and Sustainability Report (BRSR) like statement before deal approval. While annual BRSR filings cover the largest 1,000 listed firms with metrics on emissions, labour, and board diversity, a tailored version for PIPE targets would make private-equity-backed firms' ESG commitments visible.[59]

It is also crucial to mandate independent assurance for BRSR assessments. Implementing phased third-party verification is essential for issuers of BRSR Core,[60] PIPE issuers, too, may hire accredited ESG auditors to certify their reports to reduce the risks of so-called "green-washing" through neutral expert review. SEBI may additionally issue a circular providing PIPE-specific ESG guidelines so as to align relevant BRSR principles with those aspects of risk involved in private equity deals, including climate exposure, labour conditions, and governance in family businesses. No PIPE may be allowed to close without transparent and assured ESG disclosures remaining in place.

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[59] Pankaj Sharma, 'The Current State of BRSR at Corporate India: Sustainability Disclosures Improving, but Data Quality Issues Persist' (*CFA Institute Research and Policy Centre*, 24 October 2024) <https://rpc.cfainstitute.org/research/reports/2024/the-current-state-of-brsr-at-corporate-india> accessed 6 June 2025.

[60] SGS, 'ESG Disclosures & Sustainability Report Assurance' (*SGS*, 2025) <https://www.sgs.com/en-in/services/esg-disclosures-and-sustainability-report-assurance> accessed 6 June 2025.

B. ENFORCE ENHANCED ESG DUE DILIGENCE

Along with the disclosures, investors should be required to adhere to ESG due diligence standards, to be enforced by either the SEBI or the MCA, for AIFs' and private-equity funds' PIPE investments. The examination is made in an environmental, social, and governance context in order to minimise risks and maximise value, and as per global requirements as demanded by the PRI.[61] The next step towards diligence would be the establishment of a SEBI-regulated registry of ESG auditors. They would ensure tight checks on carbon footprints and human rights, thereby instilling due diligence as a sustainable process of investment in India.

C. BUILD A CONTINUOUS ESG MONITORING FRAMEWORK

Even after a PIPE deal is concluded, the task is not over. A firm's ESG performance must be tracked over time, not merely assessed at the point of sale. Drawing on SEBI's XBRL-based financial reporting, regulators could require annual post-investment ESG updates for all PIPE-backed companies. These updates could be filed through a digital portal, feeding into a centralized SEBI–MCA dashboard that archives ESG data for every private or listed firm. A machine-processable ESG

[61] Piet Normann Koole & Mette Møller Hansen, 'How ESG Due Diligence Lowers Risk and Boosts Value for Private Equity' (*Ernst & Young*, 15 Mrach 2024) <https://www.ey.com/en_dk/insights/climate-change-sustainability-services/how-esg-due-diligence-lowers-risk-and-boosts-value-for-private-equity> accessed 6 June 2025.

taxonomy (similar to the current BRSR XBRL tags) would facilitate automated comparisons, trend analysis, and cross-company benchmarking.

Not as an immediate step, but for a long-term vision, Technology can further amplify oversight. AI-powered tools trained on satellite imagery, environmental datasets, labour statistics, and media reports can flag emerging ESG red flags in real time (for example, a sudden increase in factory emissions or a spike in workplace safety incidents).[62] If SEBI or a dedicated "Sustainability Unit" monitored these AI alerts, regulators could promptly identify at-risk firms and follow up with targeted inquiries. In effect, PIPE financiers, SEBI, and civil-society groups would have a shared, transparent window into a portfolio company's evolving ESG footprint moving beyond static, self-reported data to a dynamic, continuous monitoring model.

D. HOLD INVESTORS AND STAKEHOLDERS ACCOUNTABLE

PIPE financing is a two-way street, and investors also have ESG obligations. Institutional PIPE investors must report on ESG policies, explaining how they integrate sustainability into valuation, board roles, or exit. The SEBI Stewardship Code can also be made enforceable on private-equity fund managers, requiring them to engage in ESG matters actively, voting on ESG issues, requesting climate-risk disclosures, or

[62] IFRS Foundation, 'ISSB Issues Inaugural Global Sustainability Disclosure Standards' (*IFRS Foundation*, 26 June 2023) <https://www.ifrs.org/news-and-events/news/2023/06/issb-issues-ifrs-s1-ifrs-s2/> accessed 6 June 2025.

exiting companies that chronically underperform from an ESG perspective.

Second, increased shareholder activism in the context of PIPE transactions can nudge firms in the right direction. India has witnessed investor-led governance struggles[63] (Invesco-Nestlé, some Tata-Group conflict) that attest to the influence that engaged shareholders can exercise. Regulators can enable minority holders in PIPE transactions to file ESG resolutions or demand meetings, providing small investors with a vehicle for insisting on accountability. An ESG covenant in share-subscription agreements would ensure sustainability goals are met. It is all well and good if the ESG strategy has a consensus behind it, resulting in a cleaner world, a fairer workplace, and improved long-term returns.

E. HARMONISE INDIAN REGULATIONS WITH GLOBAL STANDARDS

Finally, no ESG regime can afford to be insular. India should align its ESG rules with leading international benchmarks so that PIPE investors operating cross-border face consistent expectations. The ISSB recently issued Sustainability Disclosure Standards (IFRS S1 and S2), which G20 and IOSCO have endorsed as the new global baseline

[63] Team MILR, 'When Corporate Governance Fails: Key Lessons From Major Indian Scandals' https://www.majestyintl.co.in/post/when-corporate-governance-fails-key-lessons-from-major-indian-scandals accessed 22 March 2026.

for ESG reporting.[64] Indian regulators could update their BRSR and PIPE guidelines to incorporate key elements of IFRS S1/S2, such as mandatory disclosure of material climate-related risks, transition plans, and scenario analyses. At the same time, SEBI can study the EU's SFDR, which mandates resources (including private-equity vehicles) to classify themselves by ESG strategy and disclose "principal adverse impacts." By requiring Indian AIFs and mutual funds engaging in PIPE deals to adopt similar disclosure principles, India would signal to global investors that its private-equity space meets world-class sustainability thresholds.

MCA too can play a complementary role. For instance, the Companies Act's CSR provisions (§135) could be reoriented around UN Sustainable Development Goals (SDGs), requiring firms, public or private, to map their CSR activities to SDG indicators. The NGRBC already maps nine principles to international frameworks, but making this mapping mandatory (not only for BRSR) would raise the bar across the board. Harmonisation is about more than "copy-paste"; it's about building interoperable ESG codes so that a company complying with ISSB or SFDR also meets India's requirements. This reduces compliance costs, minimises confusion, and keeps PIPE capital flowing smoothly across borders without compromising on sustainability.

[64] ibid 16.

VII. CONCLUSION

India's PIPEs in the current times stand at a juncture, being seen as highly critical growth capital because of its flexibility, but in the absence of stringent ESG guardrails, deals risk turning into conduits for unregulated social and environmental impacts. The article begins with the question: Do PIPEs in India truly promote sustainable development or merely create a green facade? A review of SEBI regulations in ICDR and LODR, a comparative analysis of international frameworks, and an examination of PIPE transactions between 2020 and 2024 show that current laws emphasise upfront disclosure but lack robust enforcement and ongoing monitoring. Frameworks and an analysis of transactions in PIPE deals between 2020 and 2024 reveal that current legislation talks all about disclosure upfront, yet enforcement and post-enforcement monitoring remain under-regulated.

Findings identify three interconnecting gaps. The first: ESG due diligence remains largely voluntary and patchy; issuers satisfy the letter of reporting obligations but seldom effectuate operational changes. Second, there seems to be no mechanism for continuous monitoring: once funds have been deployed, neither SEBI nor private investors maintains any ongoing verification pathway to ascertain that sustainability outcomes come to pass. Third, investor stewardship in PIPE deals seems paralysed by an ambiguity in law; shareholders as well as private equity sponsors are enticed but never compelled to be guardians of environmental or social commitments. The three gaps thus together serve as fertile soil for a phenomenon they typically call "greenwashing", mitigate investor confidence and jeopardises India's broader sustainability goals.

By integrating these observations, the study highlights the importance of a comprehensive policy response. This includes imposing upon the issuer obligations in terms of ESG disclosure relevant to PIPE transactions, which must be subjected to third-party audit, and digital tools must be deployed to technically track each transaction for compliance against the Indian BRSR model; explicit power must be given to SEBI to impose penalties for non-compliance, while a centralized registry of ESG performance must be created to give teeth to what are otherwise voluntary obligations. Such stewardship obligations under shareholder agreements shall be adopted to encourage private investors to act as catalysts for change rather than just passive providers of capital.

Studies could be extended on how audit models or AI may aid in real-time monitoring of ESG. For the policymakers, it is easy: refine the PIPE framework in India to enable easier fund-raising and impact real environmental sustainability, social justice, and governance. Thus, India will set a second model for responsible private equity, one that nurtures economic growth without compromise for the planet and its people.