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India's Asset Management Industry Yet to Address Climate Risks in their Portfolios

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About Us

Climate Risk Horizons' (CRH) work highlights the systemic risks that disruptive climate change poses to investors, lenders and infrastructure investments. Through a data-driven, research-oriented approach that incorporates a holistic understanding of climate policy, energy infrastructure and regulatory processes, CRH provides advice on risk management strategies to minimise stranded, non-performing assets and economic disruption in the face of climate change.

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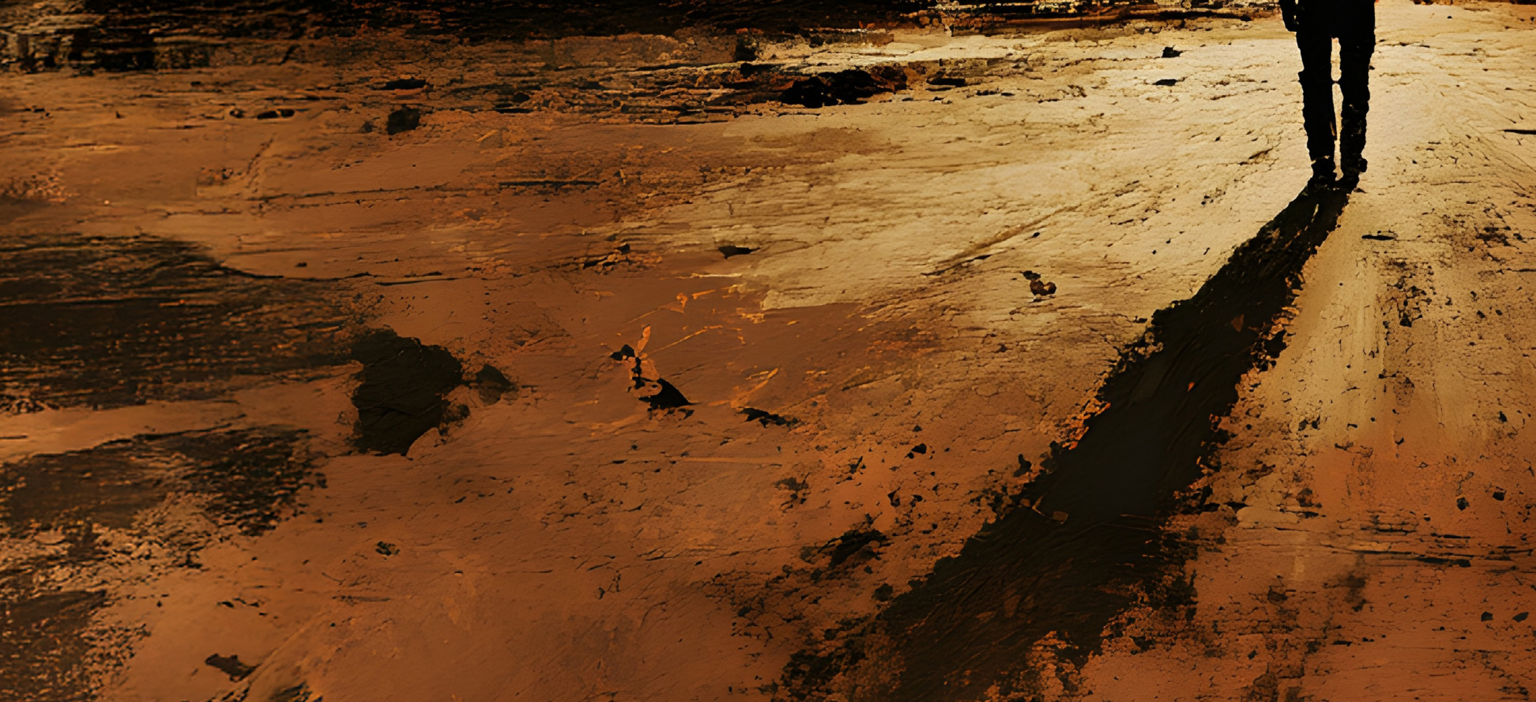

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List of Abbreviations

AMC	Asset Management Company
APRC	Asia-Pacific Regional Committee
AMFI	Association of Mutual Funds in India
AUM	Assets Under Management
BRSR	Business Responsibility and Sustainability Report
CA100+	Climate Action 100+
CDP	Carbon Disclosure Project
CFA Institute	Chartered Financial Analyst Institute
CGT	China-EU Common Ground Taxonomy
CRH	Climate Risk Horizons
CSO	Chief Sustainability Officers
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directive
EMDE	Emerging Market and Developing Economies
ERM	Enterprise Risk Management
ESG	Environment, Social, and Governance
ERPs	ESG Rating Providers
ESMA	European Securities and Markets Authority
ESRS	European Sustainability Reporting Standards
ETF	Exchange Traded Funds
EU	European Union
FI	Financial Institution
FICCI	Federation of Indian Chambers of Commerce and Industry
FSB	Financial Stability Board
FSMA	Financial Services and Markets Authority
FoF	Fund of Funds
GFANZ	Glasgow Financial Alliance for Net Zero
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
GW	Gigawatt
IEA	International Energy Agency
IFRS	International Financial Reporting Standards
Ind AS	Indian Accounting Standards
INDC	Intended Nationally Determined Contributions
InvIT	Infrastructure Investment Trusts

IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IPCC	Intergovernmental Panel on Climate Change
IPSF	International Platform on Sustainable Finance
IRM	Institute of Risk Management
ISSB	International Sustainability Standards Board
KPIs	Key Performance Indicators
MAS	Monetary Authority of Singapore
MT	Million Tonnes
NGFS	Network for Greening the Financial System
NZAM	Net Zero Asset Managers initiative
NZAOA	Net Zero Asset Owners Alliance
NZE	Net Zero Emissions
OECD	Organisation for Economic Co-operation and Development
PCAF	Partnership for Carbon Accounting Financials
RCP	Representative Pathway Concentration
RBI	Reserve Bank of India
R&D	Research and Development
REITs	Real Estate Investment Trusts
RI	Responsible Investment
RMF	Risk Management Framework
SASB	Sustainability Accounting Standards Board
SBTi	Science Based Targets initiative
SEBI	Securities and Exchange Board of India
SEC	Securities and Exchange Commission
SFDR	Sustainable Finance Disclosure Regulation
SIP	Systematic Investment Plan
TCFD	Task Force on Climate-Related Financial Disclosures
UHPC	Unit Holder Protection Committee
UNFCCC	United Nations Framework Convention on Climate Change
UN PRI	United Nations Principles for Responsible Investment

List of Abbreviations for Asset Management Companies (AMCs)

ABSLAMC	Aditya Birla Sun Life Asset Management Company Limited
Axis AMC	Axis Asset Management Company
Bandhan AMC	Bandhan Asset Management Company Limited
DSPAM	DSP Asset Managers Private Limited
HDFC AMC	HDFC Asset Management Company Limited
ICICI Pru AMC	ICICI Prudential Asset Management Company Limited
KMAMC	Kotak Mahindra Asset Management Company Limited
Mirae Asset	Mirae Asset Investment Managers (India) Private Limited
NAM India	Nippon Life India Asset Management Limited
SBIFML	SBI Funds Management Limited
TATA AMC	Tata Asset Management Private Limited
UTI AMC	UTI Asset Management Company Limited

Executive Summary

Global greenhouse gas (GHG) emissions surged to a new record in 2024.[1] The *Emissions Gap Report 2024* issued a stark warning that current trajectories put the world on track for 2.6°C to 3.1°C of warming within the next few decades, far exceeding safe limits for climate stability.[2]

Investments in fossil-fuel-dependent sectors face growing risks of devaluation and potential stranding as India and the global economy push towards a low-carbon future.

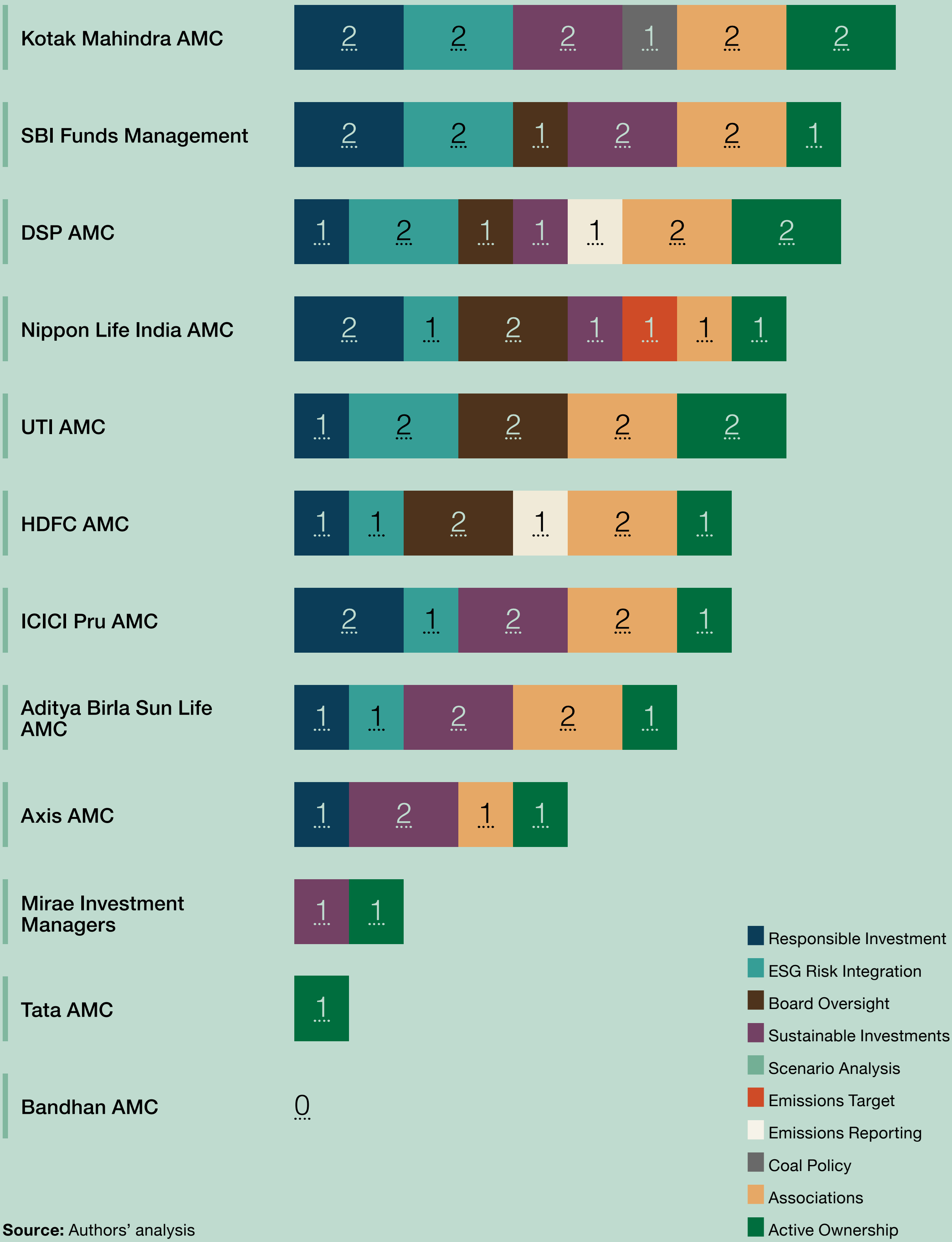
As the global economy grapples with the far-reaching implications of a changing climate, Asset Management Companies (AMCs) in India, which collectively manage billions in mutual fund investments, find themselves at a critical juncture. As climate risks worsen, the financial risks to their portfolios mount. Rising temperatures, unpredictable rainfall patterns, and increasing regulatory and market shifts challenge traditional investment models, exposing AMCs to climate-related financial instability. The climate risks faced by AMCs are mainly of two types: Physical risks and Transition risks.

Physical risks, such as damage to infrastructure and supply chain disruptions, pose significant concern for AMCs, given their exposure to sectors such as petroleum, construction and transportation. In addition, transition risks stemming from regulatory changes, shifts in investor preferences, and technological advancements, require AMCs to rethink portfolio strategies. For instance, investments in fossil-fuel-dependent sectors face growing risks of devaluation and potential stranding as India and the global economy push towards a low-carbon future. Due to these factors, Indian AMCs face increasing pressure to integrate climate-related considerations into their investment strategies and risk management frameworks.

This report offers a detailed analysis of the climate-preparedness of India's top 12 AMCs, each with mutual fund assets under management (AUM) of over ₹1,00,000 crore in every month of the last financial year, FY 2023–24. Of these, four AMCs—HDFC Asset Management Company, UTI Asset Management Company, Aditya Birla Sun Life Asset Management Company and Nippon Life India Asset Management Company—are in the top 1000 companies by market capitalisation on the Bombay Stock Exchange (BSE) as of FY 2023–24. Collectively, these 12 AMCs manage ₹45,63,978 crore of mutual funds as of FY 2023–24.

AMCs were evaluated and ranked based on 10 criteria to assess their climate-preparedness, using publicly available information about their climate risk actions and strategies. The criteria and methodology are explained in detail in the section on Data and Methodology. Each AMC was provided the opportunity to supplement this assessment with relevant non-public information that could impact their scores. Responses from all AMCs were incorporated into the final evaluation, ensuring a thorough and accurate appraisal of their climate risk management efforts.

Figure 1 Performance of India's Top 12 AMCs



Source: Authors' analysis

Key Findings

Responsible Investment

Only four AMCs have a strong Responsible Investment (RI) policy with Environmental, Social, and Governance (ESG) screening factors at the portfolio level. An additional five AMCs have RI policies with limited and fund-specific ESG screening.

ESG Risk Integration

Four AMCs have integrated ESG risks into the overall Risk Management Framework, two of which have done this without a detailed RI policy. Four other AMCs have partially acknowledged ESG risks, but have failed to provide the relevant methodologies.

Board Oversight

Only three AMCs have Board-level oversight on climate-related financial risks. Two other AMCs have established ESG or Sustainability Committees to make decisions around climate risks. The remaining seven AMCs have no formal structure for oversight.

Sustainable Investments

Despite promises of sustainability-themed investments, market demand has remained low. Eight AMCs offer ESG or sustainability-themed mutual funds, three of which fail to disclose the methodology and ESG scoring process which are key to assessing the impact of its strategy.

Scenario Analysis

None of the AMCs have conducted climate-related scenario analysis or stress testing of their portfolios. This is particularly noteworthy as many AMCs encourage and weigh investee companies on climate stress test results.

Emissions Targets

Nippon Life India AMC is the only entity to have established Scope 1 and Scope 2 emission reduction targets for 2030, 2050, and 2070 considering 2019–20 as the base year. None of the other AMCs have adopted any targets for transitioning to low-emission portfolios.

Emissions Reporting

Similarly, none of the AMCs have disclosed Scope 3, Category 15 (financed) emissions. However, DSP has begun measuring and calculating financed emissions by industry, and HDFC AMC has captured multiple other categories within Scope 3 emissions.

Coal Policy

None of the AMCs have a policy to phase out investments in thermal coal and coal-related activities such as mining or power generation. Kotak Mutual Fund is the only AMC that has an exclusion policy on fossil fuels, but is limited its ESG-themed fund.

Associations

Out of 12, seven AMCs have fulfilled requirements for membership to the United Nations Principles for Responsible Investment (UN PRI), and two more AMCs have signed up but have not submitted their Transparency Report yet. The remaining three AMCs viz. Mirae Asset Investment Managers, Tata Asset Management Company and Bandhan Asset Management Company have shown no commitment to becoming signatories to global associations and leveraging their technical expertise to drive business transformation.

Active Ownership

Barring Bandhan AMC, all AMCs have adopted some sort of stewardship code or principles on climate and sustainability, and have formulated voting policies with mechanisms for shareholder engagement. However, these voting policies have not translated into reality. Eight AMCs did not vote on ESG or climate-related topics at all in the last financial year. SBI Funds Management Limited is the only AMC that has disclosed the ESG topics it has engaged on with investee companies. Additionally, three AMCs have demonstrated active ownership of assets and provided case studies that highlight the positive impact of their engagement.

Recommendations for AMCs

Expanding Emissions Reporting

Emissions reporting must move beyond Scope 1 and 2 to include Scope 3 Category 15 emissions, which represents the bulk of AMCs' emissions. This will also help establish meaningful emissions reduction targets and implement frameworks for monitoring and tracking which can encourage measures such as internal carbon pricing, carbon budgeting and carbon offsetting.

Scaling up Sustainable Investments

AMCs should increase the share of sustainability-themed investments and products in their mutual fund portfolios. This will not only diversify risk from traditional instruments but also contribute to climate mitigation and adaptation efforts. It will also help meet the growing demand for sustainable finance at the national, state and municipal levels.

Harnessing Global Alliances for Responsible Investment and Climate Leadership

Joining networks like the UN PRI and leveraging their resources can strengthen AMCs' capabilities for active ownership, stewardship, and shareholder engagement. Beyond complying with the mandatory Transparency Report, AMCs can commit to embedding responsible investment principles into their overall risk management frameworks and business models. Additionally, becoming signatories to other international alliances such as Glasgow Financial Alliance for Net Zero (GFANZ) can further attract foreign investments and facilitate knowledge-sharing with global peers.

Enhancing Transparency around Sustainability Efforts

Public disclosures on climate-related financial materiality issues are critical for assessing investment impact and informing investors about AMCs' risk mitigation strategies. By using Securities Exchange Board of India (SEBI)'s regulations as a springboard, AMCs can progress beyond compliance to adopt active and voluntary disclosures to generate demand amongst institutional and retail investors for sustainable investments. Reporting aligned with international standards and ensuring interoperability with Indian standards such as the Business Responsibility & Sustainability Reporting (BRSR) can serve as a tool to articulate internal initiatives already underway at some AMCs.

Phasing out Coal Investments

Coal power is no longer necessary to meet India's energy demand growth or energy security concerns, nor is it economically competitive with renewable energy in an unregulated market. Setting coal phasing out targets and exclusion timelines for an overall investment and lending portfolio is thus feasible. This would accelerate progress to Net Zero and eliminate investments that are dependent on coal for a future revenue stream.

Building Capacity for Climate Scenario Analyses

AMCs will benefit from undertaking scenario analyses that test their resilience to climate-related physical and transition risks. While national-level regulatory frameworks are under development, internationally accredited models can serve as a starting point. Since many AMCs expect and encourage investee companies to undertake climate-related scenario analysis as part of their stress testing, the sooner AMCs build this capacity to cover different asset classes, the more prepared they will be to absorb potential financial shocks due to the climate crisis.

Developing Robust Exclusion Lists

AMCs should incorporate robust exclusion lists for each of their asset classes. The emphasis should go beyond the statutory requirements of excluding activities such as tobacco, gambling, and weapons to encompass other harmful activities such as deforestation, biodiversity destruction, and human rights violations.

Strengthening ESG Governance

To ensure ESG considerations percolate into financial metrics, Board-level buy-in and oversight is essential. Board-level ESG committees are vital, and these committees must be integrated with investment decision making.

Showcasing Impact

Case studies illustrating the positive impact of engagement with investee companies can create a win-win dynamic for companies, investors, and asset managers. This can also serve to measure the impact of engagement with tangible outcomes beyond short-term financial returns.

Recommendations for SEBI

Sector Classification and Alignment with Climate Finance Taxonomy

SEBI's latest industry classification released in 2022 with detailed sectoral categories (12 Macro Economic Sectors, 22 Sectors, 59 Industries and 197 Basic Industries)[3] is currently applied only at a fund-level, but should be extended to an industry-wide mutual fund classification. Further, this classification should be contextualised for mutual funds and disaggregated into sustainable sectors and hard-to-abate sectors, aligning with the promised Climate Finance Taxonomy announced in the Union Budget 2024–25. This will provide a uniform framework to evaluate investment across funds and align mutual fund sector reporting with national climate goals.

Phased Relaxation of Restrictions on ESG Mutual Funds

SEBI should gradually ease the current investment restriction on ESG Mutual Funds, which requires them to allocate 80% of their portfolio to a single strategy and 65% to companies reporting under BRSR Core (currently limited to 250 companies). This would expand the universe of investable companies and allow fund managers to adopt multi-strategy approaches, thereby enhancing sustainable investment opportunities and addressing diverse ESG objectives more effectively.

Enhanced AMC-specific Disclosure Standards

SEBI should establish AMC-specific disclosure standards that emphasise:

- Portfolio exposure and resilience of asset classes
- Detailed guidance on calculating financed emissions
- Adopting climate-related stress testing and scenario analysis to assess portfolio exposure to climate risks

Strengthening the Mandatory Stewardship Code

SEBI's mandatory Stewardship Code should require AMCs to submit a detailed compliance report, demonstrating how stewardship activities translate into measurable ESG risk mitigation. This should include case studies and specific examples of engagement with investee companies.

Streamlining Policies and Databases across Investment Vehicles

SEBI should introduce regulations to harmonise AMC policies and establish centralised databases across mutual funds, alternative investment funds (AIFs), offshore investment vehicles, and other AMC-managed entities. This will enhance data transparency, operational efficiency, and comparability across the investment ecosystem, while supporting informed decision making by investors and regulators alike.

1.0.
Background

The Indian economy continues to be impacted by the climate crisis, with extreme weather events impacting different parts of the country every year. Safeguarding India's development and its economy from the climate crisis requires not only reducing emissions to reach Net Zero as soon as feasible, but also limiting total cumulative emissions to a defined carbon budget on the path to Net Zero. This requires large-scale redeployment of capital from high GHG emitting assets to zero-emission alternatives.

Global investments required to fund the path to Net Zero by 2050 are estimated at $5 trillion annually by 2030.[4] The International Energy Agency (IEA) estimates that emerging markets and developing economies (EMDEs) will need between $2.2 to $2.8 trillion annually by the early 2030s and continuing through to 2050 to fund this transition towards Net Zero.[5] However, average annual climate finance flows touched only $1.3 trillion in 2021–22 with merely a fraction reaching EMDEs.[6,7]

Financial Institutions, both public and private, have a pivotal role to play in bridging the funding gap through the capital they control. The International Monetary Fund (IMF)'s 2023 *Global Financial Stability Report* estimates that the private sector needs to cover approximately 80% of climate mitigation investment needs in EMDEs because public investment growth is projected to be limited.[8]

For India to meet its climate and sustainability goals, the mutual funds industry needs to ensure that its portfolio is compatible with a Net Zero future. This places the responsibility of steering capital towards a Net Zero future on AMCs, who are entrusted with managing the portfolios of mutual fund companies.

According to estimates, India currently faces a funding gap of over $10 trillion to meet its Net Zero commitment.[9,10] Of the $44 billion raised in climate finance in 2020, 40% was funded directly or indirectly through public finance.[11,12] Nearly 80% of these funds came from domestic sources. While the absence of adequate international climate finance cannot be ignored, mobilising domestic sources of finance is going to be even more critical, and the mutual funds industry is an increasingly big part of this puzzle.

India's mutual funds industry has burgeoned over the last decade, experiencing a seven-fold increase between 2014 and 2024.[13] India's mutual funds AUM to Gross Domestic Product (GDP) ratio is currently under 20%, in comparison to the USA's 140%, UK's 79% and the world average of 63%, pointing to the massive growth potential. India's AUM is projected to double to ₹100 lakh crore by 2030.[14]

For India to meet its climate and sustainability goals, the mutual funds industry needs to ensure that these assets are wisely invested such that its portfolio is compatible with a Net Zero future. This places the responsibility of steering capital towards a Net Zero future on AMCs, who are entrusted with managing the portfolios of mutual fund companies. But to what extent are leading asset managers shaping their portfolios to reduce emissions? As the climate crisis worsens, are fund managers putting in place mechanisms to reduce the financial risk to their clients' funds? Are they taking advantage of the financial opportunities offered by the energy transition? This analysis presents the first ever look at India's asset management industry through the climate-risk lens in an attempt to answer these questions.

2.0.

State of Climate Preparedness among Global Asset Managers

Around 140 countries have made Net Zero pledges as part of the Glasgow Climate Compact.[15,16] The Intergovernmental Panel on Climate Change (IPCC) has underscored the importance of climate-related financial policies to redirect finances towards the transition to low-carbon economies.[17]

A body of laws, regulations and guidance as well as alliances, associations, and initiatives now exist globally with the aim of mobilising and directing the finance required to meet climate goals. This has led to development of critical building blocks that serve as the foundation for Sustainable Finance (SF) frameworks. These include green or sustainable taxonomies, disclosure frameworks as well as tools that support sustainable investment frameworks—labels, standards, and benchmarks.

Green Taxonomies

SF taxonomies are critical to guide AMCs' portfolio alignment with Net Zero goals and to direct funding towards the transition to Net Zero. Appropriate taxonomies can counter rising greenwashing concerns. As of April 2024, 47 SF taxonomies— with international, national and regional scopes—have been issued globally.[18] While national or regional SF taxonomies cover 76% of advanced economies, only 10% of EMDEs have an SF taxonomy.[19] These taxonomies range widely in complexity and degrees of prescriptiveness, from formal regulatory tools to voluntary disclosure standards, including lists of eligible activities such as green bond frameworks.[20] They reflect national or region-specific economic and energy contexts and priorities.

The European Union (EU) Taxonomy has been supported by some of Europe's largest insurers and bankers such as Aviva, Groupe BPCE, BNP Paribas, Banco Bilbao Vizcaya Argentaria, AXA and Allianz, who also have asset management arms.[21] With the spread of taxonomies has emerged the challenge of a lack of comparability across regions and sectors, as well as increased compliance costs for AMCs with cross-border investments. Given the increasing centrality of taxonomies to regulatory frameworks, resolving fragmentation has become crucial. The International Platform on Sustainable Finance (IPSF)'s 'Common Ground Taxonomy' (CGT) exercise, which focuses on identifying commonalities and differences between the Chinese and EU taxonomies, was one such endeavour to improve comparability and future interoperability.[22] It is now building on this work to encompass a wider scope of activities and jurisdictions and promote a shared understanding of SF frameworks.[23]

In India, Quantum Asset Management Company has highlighted the need for the Indian Taxonomy to be well aligned with the EU Taxonomy, in order to attract international green finance smoothly.[24] In China, the market has seen more cases of the CGT being incorporated into onshore and offshore green products. Since the first incorporation of the CGT by the Construction Bank of China Macau Branch in its December 2021 green bond, there have been 219 green bonds that meet the CGT standards, with a combined value of ¥297.4 billion ($41.9 billion). Among these, 59 deals worth ¥54.1 billion ($7.6 billion) were priced in 2023.[25,26]

Disclosure Standards

Disclosure regimes, a key accountability element of SF/RI frameworks, complement taxonomy regulations in preventing greenwashing. They incentivise sustainable investing by ensuring transparency through standardised disclosure formats which enable comparisons.

The Sustainability Accounting Standards Board (SASB),[27] Carbon Disclosure Project (CDP),[28] and Global Reporting Initiative (GRI)[29] all provide voluntary disclosure standards that have now been integrated, aligned and/or made interoperable with the International Sustainability Standards Board (ISSB),[30] which is built upon the framework established by the Task Force on Climate-related Financial Disclosures (TCFD).[31] Over 20 jurisdictions, accounting for nearly 55% of global GDP and more than 40% of global market capitalisation, are at various stages of incorporating ISSB Standards in their legal or regulatory frameworks. Several countries including the UK, Japan, Singapore, Canada and others, have adopted and made TCFD-aligned reporting mandatory. Other mandatory disclosure regimes currently operational include European Sustainability Reporting Standards (ESRS),[32] Corporate Sustainability Reporting Directive (CSRD),[33] Sustainable Finance Disclosure Regulation (SFDR),[34] Sustainability Disclosure Requirements[35] and the Security and Exchange Commission (SEC)'s Enhancement and Standardization of Climate-Related Disclosures for Investors.[36] Disclosure requirements in the SEC rules and ISSB standards are structured across the four pillars of the TCFD recommendations: (i) governance; (ii) strategy; (iii) risk management; and (iv) metrics and targets. ESRS requirements are organised across the same themes, but with slight variations to account for the double materiality approach.[37]

Again, as with taxonomies and with a surfeit of disclosure regimes, lack of interoperability is a key concern. European asset managers with a global presence such as Aviva Investors,[38] Legal & General Investment Management, Mirova and Natixis[39] have engaged in support of climate disclosures across the US, UK and the EU,[40] including advocating for incorporating a double materiality approach in the SEC guidelines. Mirova has additionally called for the inclusion of disclosure of nature-related impacts.[41]

Sustainable Investment Classifications

Sustainable investment classifications and labels address greenwashing concerns by bucketing investment products by set criteria. The Sustainable Finance Disclosure Regulation (SFDR) and the UK Sustainable Finance Disclosure Regulation (UKSDR) regimes both categorise funds. The SFDR categorises investment funds into three types based on the level of their sustainability objectives or lack thereof, while the UKSDR offers four labels based on intentionality and on the level of sustainable investments—it stipulates that at least 70% of a product's assets must align with the label objective. The European Commission is currently working to reform the SFDR to increase its effectiveness.[42]

EU asset managers are currently leading the ambition and action for their sector's Net Zero alignment, propelled by EU's adoption of the 2019 EU Green Deal,[43] a set of policy initiatives aimed at making the EU climate-neutral by 2050 and a 55% reduction in net GHG emissions by 2030. The EU's adoption of the EU Climate Law in 2021 made the Green Deal commitments legally binding. The EU sustainable finance framework comprises the EU Taxonomy,[44] the CSRD, and the SFDR. The three regulations are closely interrelated and work together to support directing investments toward taxonomy-aligned activities.

Climate Scenario Analysis

Climate scenario analysis is used to assess physical and transition related financial risks posed by the climate crisis to investment portfolios. The NGFS has developed seven scenarios to assess both physical and transition risks. Other scenarios include the Net Zero Emissions (NZE) by 2050 Scenario by the IEA and the 26 feasible 1.5°C with no or low overshoot scenarios selected by the International Institution for Sustainable Development from the IPCC's *Sixth Assessment Report (AR6)* which are associated with limited use of negative emissions.[45] Relying on large quantities of negative emissions increases the risk of overshooting the temperature target in case carbon capture technologies and solutions are not deployed effectively at scale and/or do not ensure the permanence of the GHG removals.[46, 47] UK-based Schroders Plc, a joint owner of Axis Mutual Fund in India, uses three of the NGFS climate transition pathways for its transition risk scenario analysis.

Sectoral Policies

Robust sectoral policies, particularly those pertaining to high emitting sectors, are critical for AMCs aiming to transition to Net Zero. These policies ideally set out expectations around phase-out, restrictions on expansions, and exclusion of investee companies based on absolute or relative thresholds of percentage of revenue derived from fossil fuel value chains. AXA Investment Managers (AXA IM) has implemented a coal policy to de-risk its portfolios by reducing exposure to stranded assets.[48] Its coal policy excludes companies where revenues from coal production or coal power generation is higher than 15%, as well as companies with any new mining or power generation project or expansion plan. It excludes power generation companies with more than 10 Gigawatts (GW) of installed coal-based power production, mining companies with at least 20 million tonnes (MT) of coal production, and coal industry partners developing significant new coal assets. To be fully effective, sectoral policies' targets need to be made applicable across all asset classes for which financed emissions are material—they should cover equities and bonds and span both actively and passively managed products. Globally, AMCs have been laxer on applying exclusions from their bond investments. BNP Paribas Asset Management recently announced that it would exclude all new primary markets bonds issued by oil and gas exploration and production companies from its investments.[49]

Decarbonisation requires stemming the flow of finance from fossil fuels while simultaneously increasing financial flows to clean energy systems. Alternative energy, clean technology and other green-focused thematic funds offer an avenue for the latter. Schroders Plc and BNP Paribas Asset Management had green investment holdings that outweighed their fossil fuel holdings in FY 2023. Schroders Plc reported a 1:3.2 fossil fuels-to-green investments ratio while BNP Paribas Asset Management had a 1:1.9 ratio.[50,51]

Ecosystem Influence

As important players in the financial ecosystem, asset managers have the ability to shape regulatory thinking. With increased demands from investors, particularly in advanced economies, to align their portfolios with sustainability and Net Zero goals, it has become incumbent on AMCs to step up their actions through various engagement avenues available to them—stewardship, voting, advocacy, and lobbying.

Asset managers wield considerable influence over their investee companies. Some AMCs have invested in and built in-house engagement capacity on sustainability, ESG, and climate issues. One of the levers that asset managers can use to meet their own Net Zero targets is influencing investee companies to align with their Net Zero commitments. Engagement and escalation frameworks set out climate expectations, select and prioritise companies for engagement, have a regular monitoring mechanism and most crucially, an escalation policy which could end in partial or complete divestment if the company makes no meaningful progress. AXA IM, in order to support its own commitment to exit coal, launched an engagement initiative targeting a selection of issuers that were exposed to coal but lay below its exclusion thresholds. AXA IM informed the issuers of its decisions and requested robust transition plans with science-based carbon reduction targets. Their engagement letters to these issuers also request regular reports on progress.[52]

Stewardship effectiveness can be increased with collaborative engagements through alliances, networks and initiatives like the CA100+ (Climate Action 100+). This allows AMCs to convey consistent and persistent messaging to their investee companies, avoiding multiple individual engagement requests in different forms.[53]

Asset managers' advocacy and lobbying with regulators on sustainability are key indicators of their seriousness to align their investments with Net Zero targets. Examples of such advocacy include Aviva's call for a "paradigm-shifting reorientation of the financial system"[54] in the context of the climate crisis. Aviva has also recommended introducing a statutory secondary objective as part of the UK Treasury's Future Regulatory Framework to facilitate the finance sector's alignment with Net Zero.[55] Aviva advocated for central banks to be provided with Net Zero mandates and for global coordination on stress testing.[56]

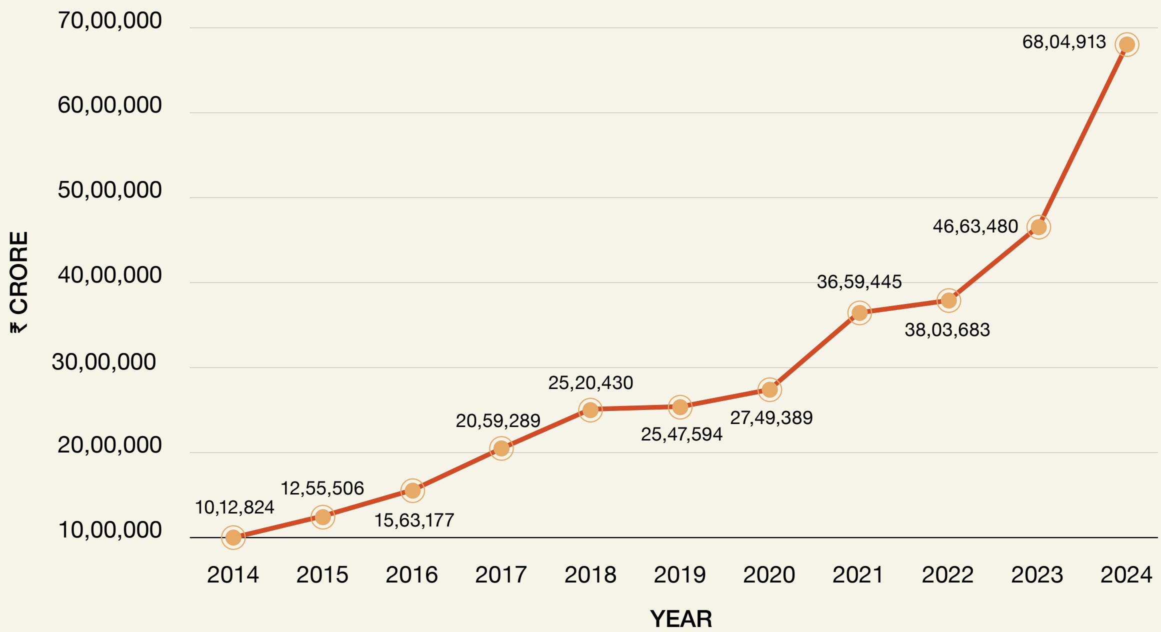
One of the levers that asset managers can use to meet their own Net Zero targets is influencing investee companies to align with their Net Zero commitments.

3.0.

India's Mutual Fund Industry

The Indian mutual fund industry has grown steadily from over ₹9.75 lakh crore in June 2014 to ₹68.05 lakh crore in November 2024 which is a 597.95% increase in the span of a decade.[57] Investments in mutual funds are made through different schemes such as equity-oriented schemes, debt-oriented schemes, hybrid schemes, Exchange-Traded Funds (ETFs), and Fund of Funds (FoFs) amongst others.

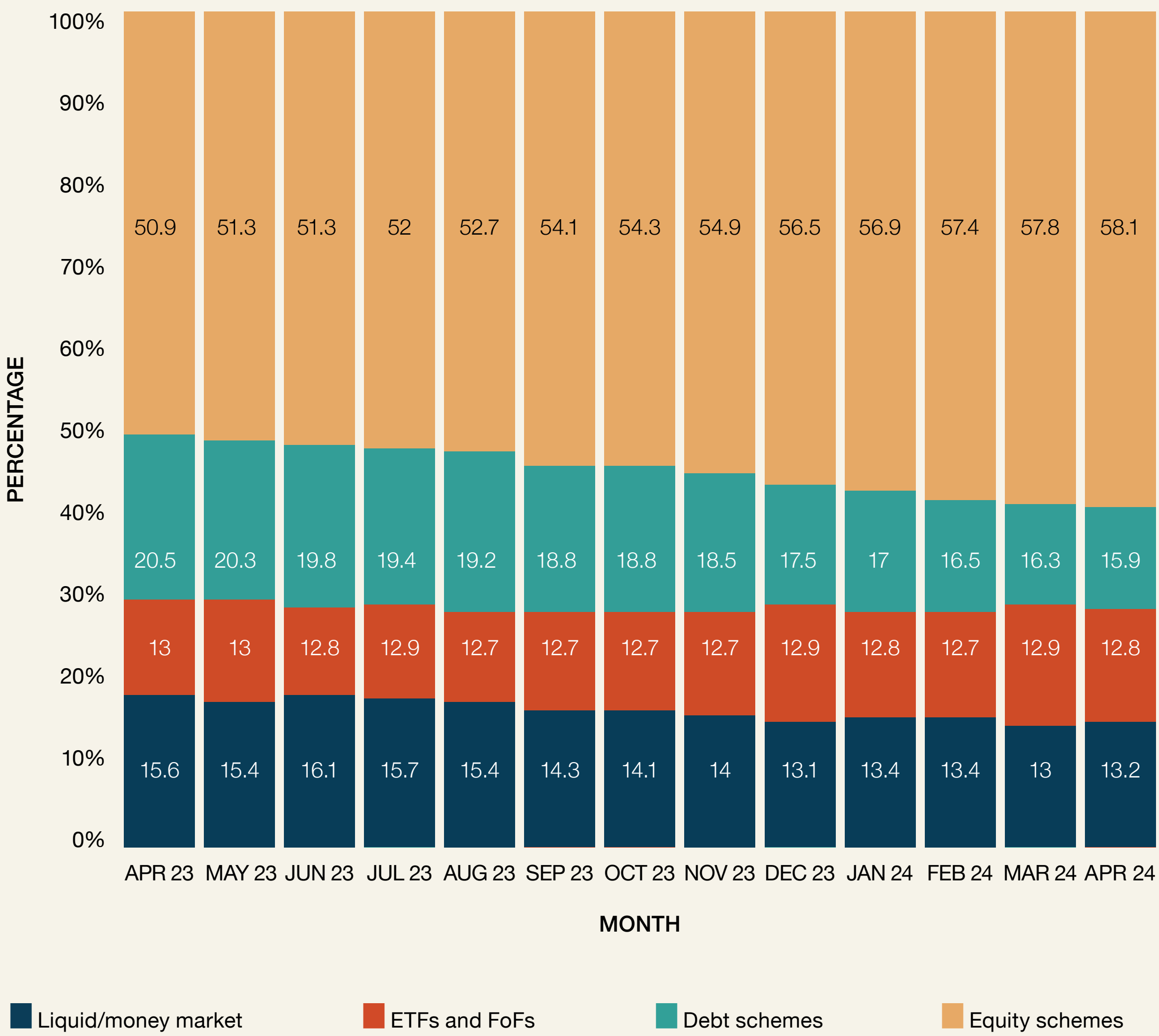
Figure 2 **Annual Growth of the Indian Mutual Fund Industry (2014–2024)**



Source: Compiled by the authors from SEBI (2024)

The Reserve Bank of India (RBI)'s *Annual Report for 2023–24* indicates the net mobilisation of mutual funds spanned ₹45,803 crore for the public sector and ₹3,08,898 crore for the private sector.[58] The net mobilisation by open-ended equity schemes reached ₹1.8 lakh crore[59] and assets of open-ended equity-oriented schemes rose to ₹23.5 lakh crore at the end of March 2024. The average monthly contribution through Systematic Investment Plans (SIPs) reached ₹16,602 crore during that year.[60]

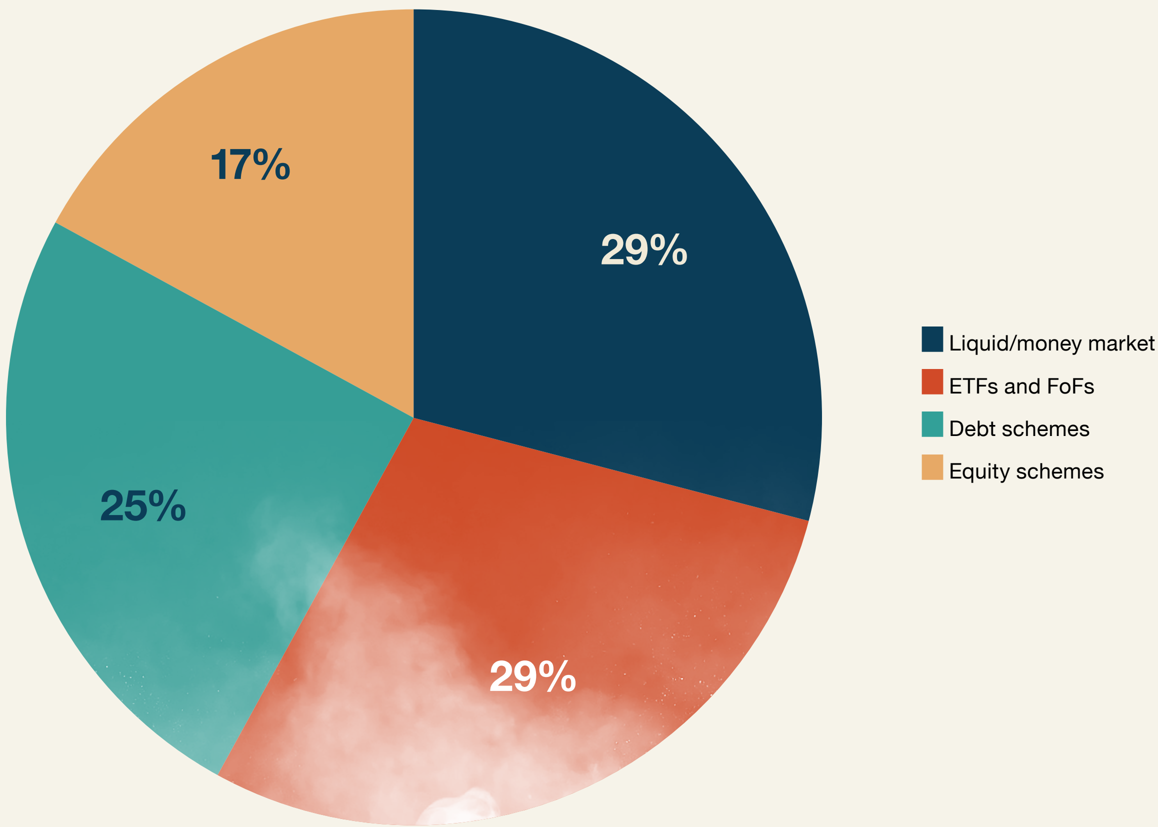
Figure 3 **Distribution of Mutual Fund Schemes, as of April 2024**



Source: AMFI Industry Data Analysis, Industry Trends (2024)

Figure 3 shows that as of April 2024, the proportion of equity-oriented schemes was at 58.1%, debt-oriented schemes at 15.9%, Exchange-Traded Funds (ETFs) at 12.8% and Liquid/Money market at 13.2%.[61] Individual investors (comprising retail and High-Net-Worth Individuals (HNI)) hold 60.5% of assets while institutional investors (comprising institutions and corporates) account for 39.5%, of which corporates are 95% and the rest is held by Indian and foreign banks and institutions.[62]

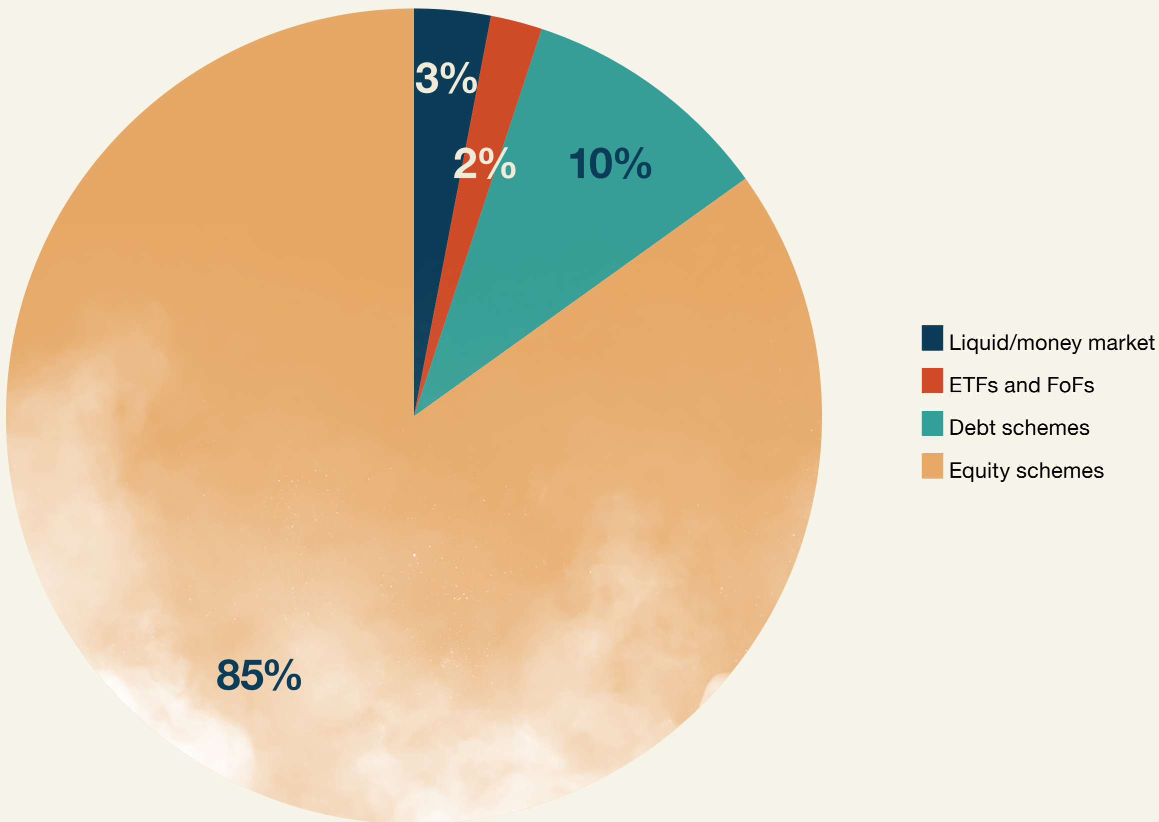
Figure 4 **Industry Trends—Institutional Investors**



Source: AMFI Industry Data Analysis, Industry Trends (2024)

Figure 4 shows that institutional investors have a more evenly spread portfolio comprising 29% of liquid/money market, 25% debt-oriented schemes, 17% equity-oriented schemes and 29% FoFs/ETFs.[63] Further, RBI's *Annual Report 2023–24* highlights a growing trend of net investment in equity by institutional investors, with mutual funds increasingly dominating foreign portfolio investments.[64]

Figure 5 **Industry Trends—Individual Investors**

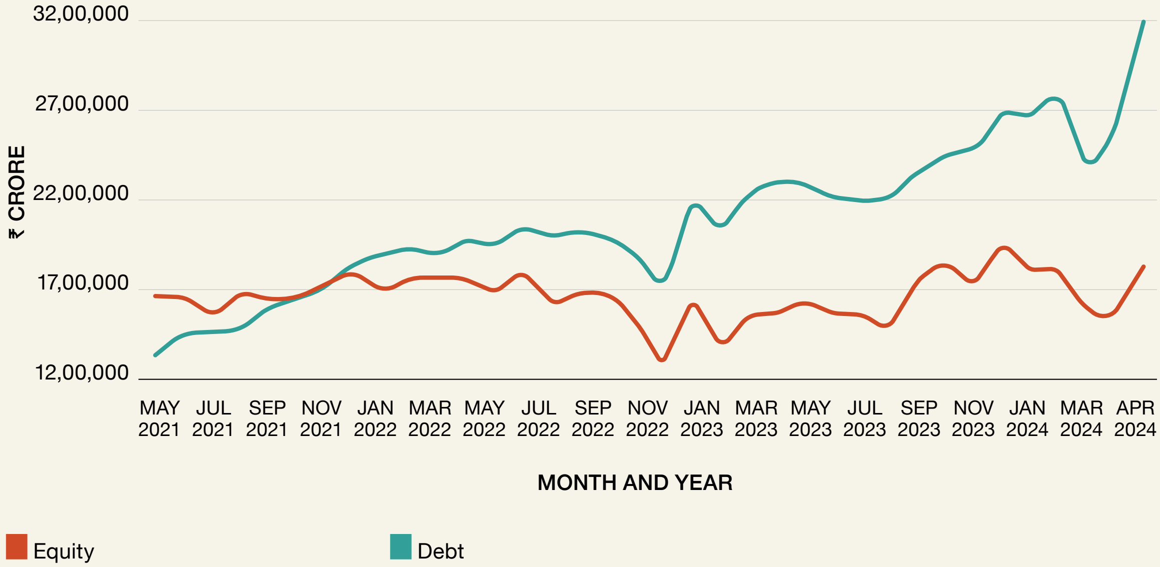


Source: AMFI Industry Data Analysis, Industry Trends (2024)

By contrast, individual investors' portfolios consist of 85% of equity-oriented schemes.[65] The data from Association of Mutual Funds in India (AMFI) shown in **Figure 5** indicates a highly-skewed equity-focused distribution.[66] This concentration in equity puts individual investors at a greater financial risk compared to institutional investors, whose portfolios are spread across different schemes.

It is clear that there is a growing trend of investments in equity funds from both institutional and individual investors. This is also reflected in SEBI's data which highlights the rapid increase in equity investments between 2021 and 2024, as shown in **Figure 6.**[67]

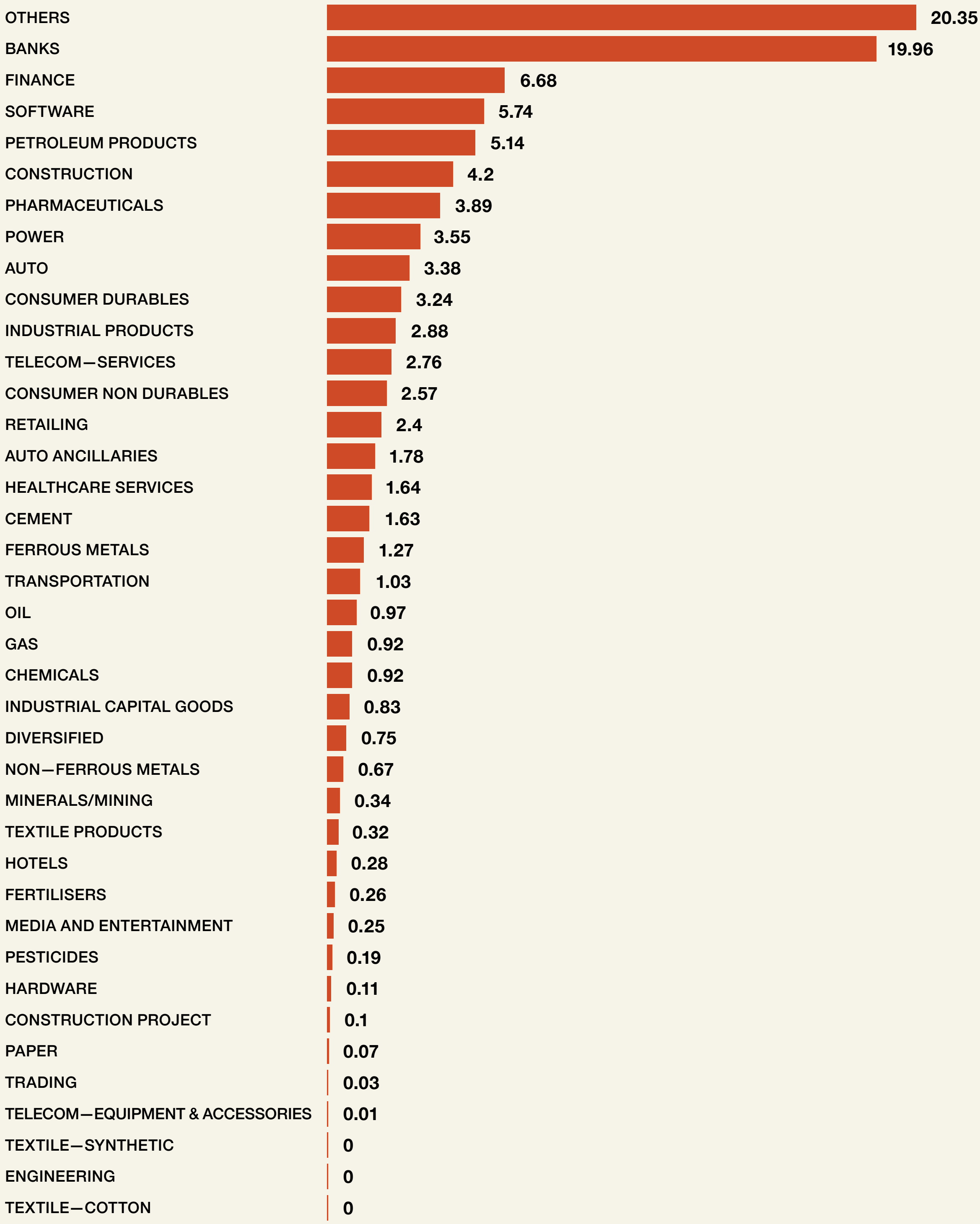
Figure 6 **Debt and Equity Investments of Mutual Funds (2021–2024)**



Source: SEBI Deployment of all Mutual Funds (2024)

AMFI has categorised equity investments into 40 different sectors, depending on the type of company and its activities.[68] While a new classification was developed by SEBI in 2022,[69] it has so far been adopted only at an individual scheme and fund-level disclosure, and has not yet been reflected in the deployment of all mutual funds data. The following figure shows the amount of investments within different equity sectors, as per AMFI's classification.

Figure 7 Sectoral Distribution of Mutual Funds Equity Investments by AMFI Classification, as of March 2024



Source: Compiled by the authors from SEBI (2024)

3.1. Climate Risks and India’s Mutual Funds Industry

International Organisation of Securities Commissions (IOSCO)’s recommendations emphasise the responsibility of asset managers to assess and manage sustainability-related risks, particularly climate risk. Sustainability-related risks can present themselves in the form of credit, market, and liquidity risks in addition to reputation and litigation risks. Measuring risks helps investors and regulators understand how asset managers are dealing with climate-related risks and their own financial stability. SEBI is a member of the IOSCO Board, the governing and standard setting body of IOSCO, but has not taken specific steps to align the mutual funds industry with IOSCO’s sustainable finance regulations.

SEBI is also a member of the Financial Stability Board (FSB), which has highlighted that climate-related risks can be amplified in the financial system across sectors. The FSB created the TCFD and has worked with ISSB and IOSCO to strengthen the reliability, relevance, and comparability of climate-related financial disclosures for financial institutions, including asset managers. Following the takeover of the TCFD by the ISSB, the IFRS S2 Standards now include a specific guidance for asset management activities in Volume 15. Beyond the IFRS S2 climate-related disclosures, a range of disclosure standards and guidelines have been developed based on the TCFD to provide sectoral understanding of climate-related physical and transition risks and their financial implications.

For AMCs to transition and safeguard their investment portfolios, understanding the risk materiality of sectors is critical.

Physical risks are caused by sea level rise, extreme rainfall, coastal erosion, floods, subsidence, heat and water stress. These are associated with damage to infrastructure, disruption of supply chains, and mechanical failures and inefficiencies. These not only threaten the market value of assets, but also increase the cost of maintenance and reparation, insurance claims, risk of default, and the requirement of additional

investments such as cooling or heating. Physical risks in critical sectors such as transportation and power can lead to loss of production through delays in shipping, railway and aviation as well as disruption to energy supplies and other ecosystem services such as food and water.

Transition risks are often more complex and manifest through regulatory changes, policy changes, shifting market preferences, reputation risk, technology innovation, and litigation risk. Regulatory changes are triggered by government policy, national commitments and international climate policies resulting in changes in fossil fuel subsidies, carbon taxes or carbon offsets and energy efficiency certificates.

Technological risks manifest through commercial viability of alternative technologies which can trigger early-write offs or retirement of assets, lock-ins of high carbon infrastructure, stranded assets, market preference for cheaper alternatives, and shifting investor sentiment towards cleaner sources. In fact, technological risks can also emerge across supply chains by increased cost of electrification further affecting demand and supply of clean and conventional technology.

Litigation and reputation risks arise from environmental litigation and public opposition over harmful impacts, loss of employment, insufficient remediation, and a loss of social license for certain projects. More stringent ESG disclosure requirements, due diligence and Net Zero targets within dynamic regulatory landscapes, circular economy business models, and decarbonisation pathways also present risks.

Geo-political risks from conflicts over energy sources, monopolisation of the mining and minerals required for energy transition, and extraction of resources from developing countries also translate into economic and financial risks. Other potential financial impacts of climate-related transition risks include longer timeframes, higher compliance costs, increased budgetary requirement for ESG capacity development, and developing transition plans and low-carbon pathways.

The following table illustrates the risk materiality of various sectors within the equity investments of mutual funds managed by AMCs. We build on the framework adopted in Climate Risk Horizons (CRH)'s *Still Unprepared* report (2023)[70] and expand the scope in terms of sectors, climate risks and financial impacts.

Table 1 Risk Materiality of Indian AMC Sectors

Risk materiality level	AMFI sector	Climate-related risks	Potential financial impacts
Directly exposed to physical risks due to rising mean temperatures and precipitation, and increased severity of extreme weather events	• Construction • Hotels • Transportation • Consumer non-durables (food, beverage, and agriculture)	1. Damaged infrastructure, stranded assets with cascading risks to other systems, socio-political implications of non-resilient infrastructure development, high-carbon locked in capital infrastructure over social and environmental infrastructure 2. High dependence on carbon intensive industries like cement, steel and aluminium, energy performance standards 3. Low agricultural yields from physical stress, such as changing precipitation patterns, heat stress, and extreme weather events	1. Increased costs of loss and damage reparations, devaluation of real estate due to disasters, losses from early retirement of infrastructure, increased operational costs of maintaining buildings in changing climates, higher insurance related costs, payment default risk from debt-financed projects 2. Increased costs of retrofitting or upgrading infrastructure to withstand climate impacts, higher insurance premiums, and reduced asset value due to location-specific vulnerabilities 3. Reduced revenue from lower crop yields, increased costs of irrigation and other adaptive measures, higher volatility in agricultural commodity prices, and potential disruption in food supply chains
Usually, industries associated with fossil fuels and other high carbon emitting firms are highly exposed to transition risks such as political and legal, technology, market, and reputation	• Power • Cement • Auto • Auto ancillaries • Consumer durables • Ferrous metals • Gas • Hardware • Industrial capital goods • Industrial products • Minerals/mining • Non-ferrous metals • Oil • Petroleum products • Textile products • Fertilisers • Pesticides • Retailing • Engineering	1. Transition risks associated with measurement, accounting, disclosures, standards, and climate/green taxonomy 2. Life cycle assessment, circular economy, carbon footprinting and emissions calculations 3. Changes in upstream and downstream regulations, sustainable supply chain requirements 4. Technological innovation and low-carbon alternatives 5. High dependence on fossil fuel industry, geo-political risks, changes in domestic government policy, legal and regulatory changes 6. Investor expectations, commitments to phase-out and phase-down emissions, social licence to operate, political-industrial-energy-mining nexus, divestment movements	1. Increased costs of compliance and disclosures including developing technical expertise and keeping up with changing disclosure requirements 2. Higher costs of integrating recycled materials into processes, implementing changes across life cycle of materials, end-use responsibilities, and recycling of products 3. Increased costs of shifting to sustainable supply chains 4. Increased R&D costs to compete with low-carbon alternatives, reduced revenues from existing high-carbon products due to consumer awareness and market shifts, and capital allocation toward technology innovation over traditional adaptation and mitigation solutions 5. Volatility associated with hard-to-abate sectors such as fossil fuel industry in the long run, international trade bans and geopolitical restrictions resulting in unstable markets, domestic policy shifts leading to market changes 6. Increased expenditure to meet investor expectations, costs associated with fulfilling Net Zero commitments, legal liabilities and litigation costs for environmental non-compliance, and expenses for remediation and restoration efforts due to divestment pressures and reputational risks
Generally, has low exposure to fossil fuels and are lower carbon emitters, however, are exposed to both transition and physical risks	• Chemicals • Banks • Finance • Healthcare Services • Media and Entertainment • Pharmaceuticals • Software • Telecom Services	1. Dependence on fossil fuel industry and sectors prone to physical damage 2. Sustainability related disclosures on emissions, financed emissions, facilitated emissions, hazardous substances and other measurement and accounting of environmental factors, green taxonomy, carbon tax 3. Climate-driven pandemics, heat-related health crises 4. Changes in upstream and downstream regulations, sustainable supply chain requirements 5. Technological innovation and low-carbon alternatives	1. Volatility in hard-to-abate sectors like fossil fuels, driven by trade bans, geo-political restrictions, and policy shifts leading to market instability. Increased operational costs from infrastructure damage and disruptions due to extreme weather events, as well as heightened financial risks including stranded assets, shifting investments, and reduced returns for fossil fuel-exposed sectors 2. Increased costs of compliance and disclosures including developing technical expertise and keeping up with changing disclosure requirements 3. Increased cost for public healthcare systems, rising insurance claims and premiums, workforce productivity losses, and operational disruptions due to health-related crises 4. Increased short-term costs of transitioning to sustainable supply chains, including re-engineering processes and compliance costs, balanced against potential long-term resilience and operational savings 5. High R&D expenses to develop low-carbon technologies, reduced revenues from high-carbon products due to market shifts, and reallocation of capital toward innovation instead of traditional mitigation and adaptation strategies

Source: Authors' analysis

3.2. The Indian Asset Management Landscape

Indian AMCs primarily act as managers for mutual fund companies and their portfolios which include investments in equity, debt, hybrids, Fund of Funds, and offshore funds. SEBI, the primary regulator for the Indian securities market, develops guidelines, rules, regulations, and investor education initiatives and resolves disputes. AMFI is a self-regulatory organisation established by Indian fund houses which operates under the overall directive of SEBI and acts as a bridge between SEBI and the mutual fund industry. Moreover, RBI tracks mutual fund data in its annual reports to assess systemic risk, macroeconomic trends, and the impact of monetary policy on the Indian financial ecosystem.

This section analyzes the disclosures and sustainability practices of both asset management companies and mutual fund companies. Other instruments such as debt funds, alternative investment funds, venture capital funds, Real Estate Investment Trusts (REITs), Infrastructure Investment Trusts (InvITs), Gold ETFs, and offshore funds have not been analysed due to poor data availability. In line with emerging sector and industry-specific disclosures for climate-related financial risks, we map the equity exposure to each industry and sector.

3.3. Regulations Governing India's AMCs

The Mutual Funds Regulations[71] is the main rulebook for governing mutual funds in India. It defines what an Asset Management Company is and sets down guidelines for investment objectives, risk management, and valuation. Except for a brief mention of ESG schemes, the regulations fail to address climate-related financial risks despite frequent amendments. Required disclosures and stewardship responsibilities of key management personnel including risk officer, chief compliance officer, or chief investment officer do not explicitly include ESG risks. Beyond senior management, the absence of ESG risk consideration is also reflected in the Unit Holder Protection Committee (UHPC)[72] constituted by the AMC to ensure compliance, reporting, and disclosures to protect the interest of mutual fund investors.

A separate Risk Management Framework (RMF)[73] provides a more detailed description of the roles and responsibilities of these senior management personnel. However, it fails to address climate-related risks. While reputation, compliance and regulatory risk along with sector-specific development are noted as risk factors, none of the indicators and policies connect the dots to climate risks. Likewise, the scenario analysis and stress-testing as part of the risk assessment process does not recognise climate risks. Instead, traditional risks which include investment, credit, liquidity and governance form the benchmark for fiduciary duty. Interestingly enough, the RMF reiterates SEBI's Stewardship Code[74] for mutual funds which comprises six principles for AMCs covering stewardship policy, reporting disclosure, conflict of interest, voting policy, monitoring and intervention. More importantly, this code mandates institutional investors to monitor their investee companies over ESG risks.

Currently, ESG risks in investee companies are captured through the two principles of BRSR[75]—**Principle 2:** Businesses should provide goods and services in a manner that is sustainable and safe, and **Principle 6:** Businesses should respect and make efforts to protect and restore the environment – around climate-related disclosures. SEBI has made efforts to increase interoperability of the BRSR format[76] with international standards such as GRI, SASB and TCFD. To further strengthen the framework, SEBI introduced the BRSR Core[77] which draws on nine key attributes out of which four are relevant to climate disclosures. These include GHG footprint, water footprint, energy footprint, and circularity. The BRSR Core is a subset of attributes from the BRSR and is applicable to upstream and downstream value chain partners in order to capture Scope 3 emissions. Nevertheless, a recent amendment to facilitate ease-of-doing-business has diluted this framework to reduce the number of value chain partners, and move away from a "comply-or-explain" approach to a voluntary reporting process, which is now postponed to FY 2026–27.[78] As of FY 2024-25, the BRSR framework is mandatory for the top 1000 listed companies and the BRSR Core for the top 250 companies.[79] The point of concern is that this framework is not specifically designed for mutual fund companies or AMCs, and only four AMCs report on the BRSR as they feature in the top 1000 listed companies.

A crucial factor which links AMCs and their use of BRSR and ESG data for the assessment of investee companies are ESG Rating Providers (ERPs). The Master Circular for ESG Rating Providers[80] formalises a methodology on three types of scoring which covers ESG, transition, and combined factors. These are calculated both for the BRSR and BRSR Core. The underlying aim is to capture not just the performance of companies at a point in time, but also mark their performance dynamically as a transition in relation to India's Intended Nationally Determined Contributions (INDC) commitment to reduce emission intensity to Net Zero by 2070. ERPs are themselves required to make disclosures about their methods, frameworks, and standards according to the IOSCO[81] to improve the verifiability, comparability and quality of their assessments. However, there is no data available to suggest that any ERP has actually done this. Third-party ratings are especially important for AMCs in the context of ESG Mutual Funds. SEBI's regulation, titled 'New category of Mutual Fund Schemes for Environmental, Social and Governance Investing and related disclosures by Mutual

Funds',[82] establishes six strategies for ESG funds—exclusion, integration, best-in-class, impact investing, sustainable objectives, and transition or transition related investments that have a measurable environmental, social, and just impact. The latest amendments permit up to six ESG mutual fund schemes for each AMC under the different strategies. The requirements are that a minimum of 80% of assets invested have to be aligned with one of these strategies and 65% of the investments need to be made in companies which are compliant with BRSR and provide a BRSR Core Assurance.

There are additional disclosure requirements for ESG Mutual Funds. For example, AMCs have to obtain an independent assurance on the scheme's portfolio and disclose the BRSR Core scores of each of their investee companies in their monthly portfolio statements.[83] The Fund Manager Commentary[84] needs to disclose the percentage of investments in companies without BRSR disclosures, details of voting rationales, and case studies highlighting how the ESG strategy is actually applied to the fund. The Fund Manager Commentary is also expected to disclose ESG scores provided by ERPs, voting disclosures on E, S and G pillars, obtain an independent reasonable assurance, and submit an Annual Report of the ESG scheme. The Board of the AMC has to carry out an internal ESG audit to certify that the scheme meets the regulatory requirements in line with the Stewardship Reporting and Responsible Investment Policy which came into effect from December 31, 2023.[85]

Beyond the ESG Mutual Fund regulations, SEBI has reconstituted an ESG Advisory Committee[86] which is tasked with mitigating risks of greenwashing and providing a timeline for ESG schemes that are not in compliance with the investment criteria to achieve compliance by September 30, 2025. In its 2022–23 *Annual Report*,[87] SEBI highlights its ESG training sessions in partnership with Japan's Financial Services Agency and international engagements with European Securities and Markets Authority (ESMA), Monetary Authority of Singapore (MAS) and G20, OECD, Financial Services and Markets Authority (FSMA) and Financial Stability Board (FSB). However, despite SEBI being a member of the Asia-Pacific Regional Committee (APRC), one of the four regional committees of IOSCO (considered as the global standard-setter for securities markets), it fails to draw from the Recommendations on Sustainability-Related Practices, Policies, Procedures, and Disclosures in Asset Management[88] which are aligned with TCFD, UN PRI, and SFDR.

The Union Budget 2024–25 announced the creation of a ‘climate finance taxonomy’ aimed at streamlining capital allocation towards climate adaptation and mitigation efforts.[89] This long-promised climate finance taxonomy will be a positive step towards promoting sustainable finance. SEBI can take steps to incorporate India’s climate finance taxonomy with the broader goals of climate finance, fostering a more sustainable and transparent investment ecosystem.

Much remains to be done by SEBI. To mainstream climate-related financial risks for mutual funds and AMCs, a dedicated framework is an urgent need, irrespective of whether AMCs feature in the top 1000 listed companies and file a BRSR.

Much remains to be done by SEBI. To mainstream climate-related financial risks for mutual funds and AMCs, a dedicated framework is an urgent need, irrespective of whether AMCs feature in the top 1000 listed companies and file a BRSR. Other opportunities lie in the anticipated alignments between IFRS and Indian Accounting Standards (Ind AS) as it offers the potential to integrate financial data with associated emissions.[90] It also opens up the possibility for AMCs to go beyond BRSR and current early-state regulations to accelerate sustainable finance to the extent needed to achieve Net Zero targets.

4.0. Data and Methodology

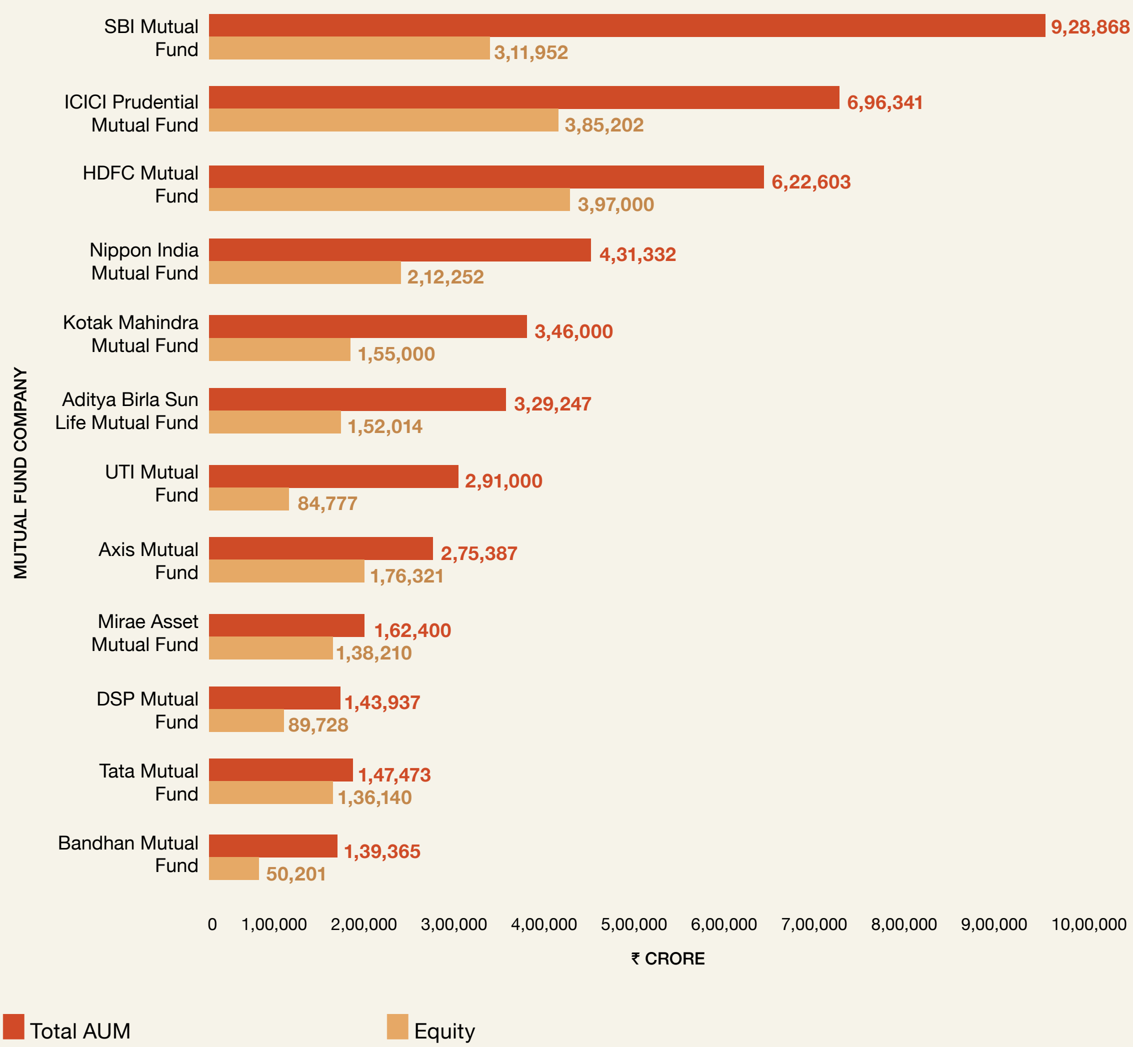
This study is primarily focused on mutual funds as they constitute the majority of AMC portfolios and have more readily available public data as compared to other asset classes.

There are 47 AMCs registered with SEBI as of March 2024.[91] These include bank-sponsored AMCs such as SBI Funds Management Limited, private sector AMCs such as Tata Asset Management, foreign AMCs such as Mirae Asset Investment Managers (India) Pvt. Ltd., joint ventures such as Aditya Birla Sun Life AMC Limited, and institutional AMCs such as LIC Mutual Fund Asset Management Limited. Many of these AMCs offer services across asset classes and manage wealth for a range of activities such as offshore investments, real estate, portfolio management services, alternative investments and mutual funds.

This study is primarily focused on mutual funds as they constitute the majority of AMC portfolios and have more readily available public data as compared to other asset classes. However, it is important to note that AMCs are often subsidiaries of larger financial groups offering diverse services such as banking and insurance along with mutual fund management. As a result, this analysis focuses on the applicability of our criteria to mutual fund portfolios. This should not be interpreted as a proxy for the entire investment activities of AMCs inclusive of their other asset classes, nor should this be seen as an analysis of only Mutual Funds companies. This complexity can be illustrated through an example of Responsible Investment Policies which are often formulated by the AMC but are applicable only to the Mutual Fund Company. At times, the Mutual Fund Company further segregates this policy into two for their equity and debt investments. Within the RI Policy, irrespective of whether it is set up by the AMC or the Mutual Fund Company, a portion can be applicable to all investments or can be limited to a specific fund such as the ESG schemes. Therefore, this report uses a combination of data from the AMCs and from the Mutual Fund Companies to highlight critical gaps in the climate-preparedness of AMCs' management of mutual fund portfolios.

Based on data availability, this analysis looks at AMCs with a mutual fund AUM size of over ₹1,00,000 crore in FY 2023–24 (as per monthly statements of AUM). This ensures fairness in comparative analysis among AMCs in terms of investment portfolio and internal capacity for technical and financial understanding of climate-related risks and opportunities. The resulting 12 AMCs represent over 80% of domestic mutual funds (excluding overseas FoF) and also the highest share of exposure to climate-related financial risks, particularly through equity investments. The following graph compares equity investments with overall AUM of domestic mutual funds of the top 12 AMCs. Actual amounts of Figure 8 are provided in Annexure I of this report.

Figure 8 **Comparison of Equity Investments to the Total AUM of the top 12 AMCs**



Source: AMFI (2024)

Equity-oriented analysis does not capture the full picture, as domestic equity mutual fund portfolios can represent either a majority or a minority of the total portfolios managed by AMCs. For example, SBIFML manages a total portfolio of ₹22.85 lakh crore, of which domestic mutual funds account for ₹9.28 lakh crore, or around 40.6%, reflecting a minority share.[92] Within SBIFML's domestic mutual funds, equity schemes account for 77%.[93] Similarly, UTI AMC's total portfolio is ₹18.48 lakh crore, of which only ₹2.91 lakh crore (15.75%) accounted for domestic mutual funds.[94] In contrast, Kotak Mahindra AMC manages ₹6.81 lakh crore[95] in total, with domestic mutual funds accounting for ₹3.46 lakh crore (50.81%), indicating a majority share inclusive of ₹1.55 lakh crore of equity funds.[96] Nippon AMC also oversees a portfolio dominated by mutual funds, managing ₹4.31 lakh crore of domestic mutual funds including ₹2.12 lakh crore of equity schemes within an overall portfolio of ₹5.24 lakh crore.[97]

4.1. Principles

To conduct a robust, systematic and objective analysis, we built a methodology guided by the following principles:

1. *Data Availability*

AMC assessments should be based on publicly available sources, including annual reports, policy briefs, sustainability reports, ESG reports, integrated reports, scheme information documents, portfolio summaries, and fund fact sheets. Since information on equity investments within mutual funds is more easily accessible across AMCs, these will be given a priority.

2. *Reliability, Verifiability and Objectivity*

AMCs should be ranked with minimal subjective interpretation. All collected data shall be meticulously examined in terms of definitions, classifications, methods, and scoring requirements.

3. *Transparency*

AMCs shall be invited to provide feedback, comments, and suggestions prior to the publication of the final scores and report.

4. *Comparability and Usability*

AMCs' comparative assessment shall be based on similar AUM sizes or within a certain range to avoid comparison of the smallest AMC with the largest. The findings should be useful to academia, policy makers, asset owners, asset managers and industry managers for meaningful comparisons of business models, strategies, risks, and performance across sectors and at the portfolio level and the media and publication houses for accurate and insightful reporting.

5. *Consistency*

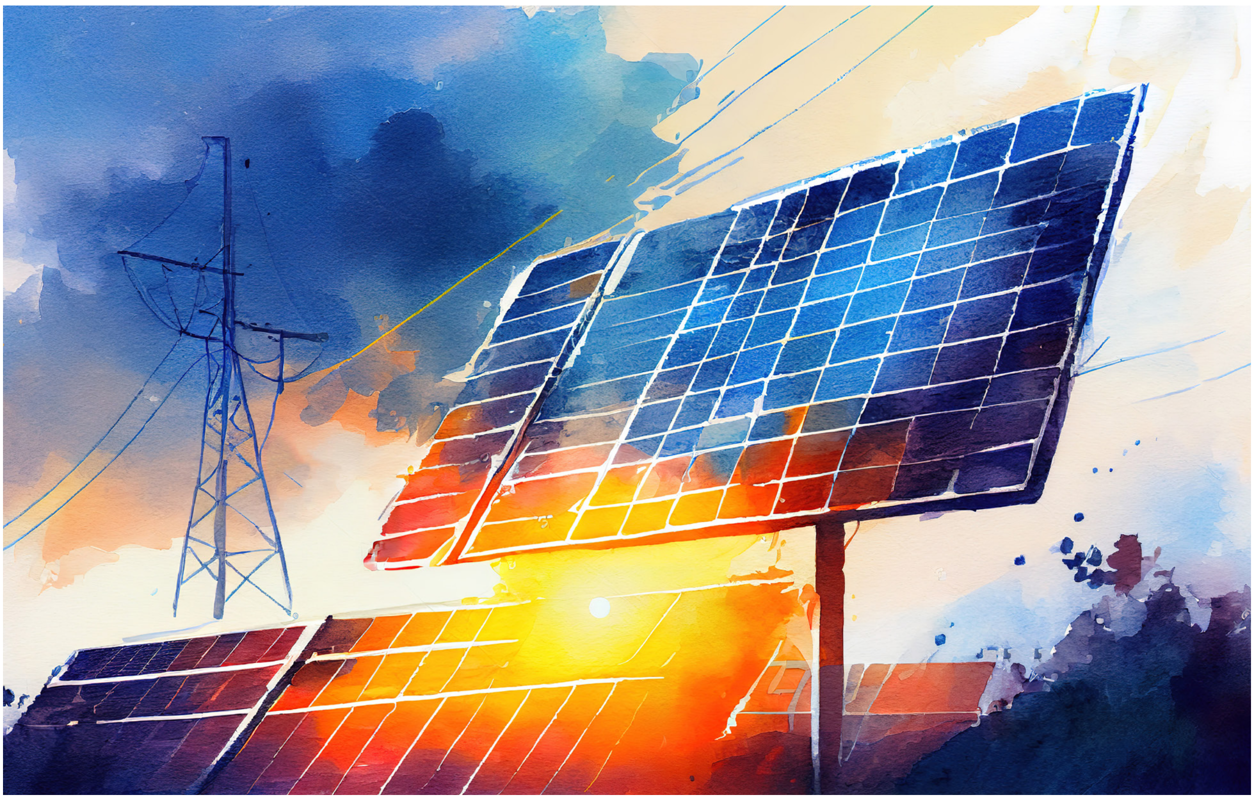
The criteria presented here should link to existing disclosure frameworks such as the IFRS Standards to improve standardisation in the reporting of climate-related financial risks. The AMCs selected for analysis should consistently have a monthly AUM of above ₹1,00,000 crore excluding domestic and foreign FoFs.

6. *Specificity and Completeness*

Scores should be aggregated without additional weighting and should exclusively reflect the AMCs' performance in managing mutual fund portfolios. The assessment criteria should be directly relevant to the AMC's mutual fund management activities, excluding considerations related to subsidiaries, bank partners, or international affiliates.

7. *Decision Relevance*

The criteria should be contextualised to India's sustainable finance landscape and the country's current position at the global level in terms of financial flows and economic development.



4.2. Criteria for Assessment

There are four broad themes on disclosures for climate-related risks and opportunities initially established by the TCFD and later enhanced by ISSB in the IFRS S2 climate-related disclosure standards. Reporting of climate-related financial information is critical to understand the state of play when it comes to the climate-preparedness of the Indian asset management and mutual fund industry.

Governance	Engagement of board and senior management to monitor, oversee, and manage climate-related risks and opportunities.
Strategy	Assessment of climate-related risks and opportunities that could impact an entity's financial position and the attendant business model strategy for resilience.
Risk Management	Integration of climate-related risk into the overall risk management process management process based on identification, assessment, prioritising and monitoring.
Metrics and Targets	Usage of metrics and targets for progressing on climate-related targets, and meeting regulatory requirements.

We build 10 criteria based on these four underlying pillars which are contextualised to the Indian regulatory scenario. A comprehensive mapping of these criteria with the IFRS S2 Standards is available in Annexure II.

Table 2 Criteria and Scoring Methodology

Governance	*Criteria 1: Responsible investment and screening policies*
Scoring	**2 Points:** The AMC has a portfolio-wide/entity-level RI policy with ESG screening of investee companies involved in harmful activities.
	1 Point: The AMC has a fund-specific RI policy addressing harmful activities, with or without ESG screening for high risk sectors, OR a portfolio-wide/entity-level RI policy that addresses harmful activities but lacks ESG screening OR ESG screening in the absence of an RI policy.
	0 Point: The AMC does not currently have a RI policy and does not screen investee companies involved in harmful activities.
Explanation	AMCs are assessed on their responsible investment and screening policies and their coverage of ESG factors. Additionally excluding or ending financing of companies that are credibly involved in deforestation, biodiversity loss, fossil fuels, and human rights violation, etc., is required for a full score. The screening policies at AMC level may include Fund Manager's own policy, client-directed, negative/exclusionary, positive/best-in-class screening, and norms based screenings. AMCs will be scored higher if they take into consideration the implications of exclusion or divestment and have in place the mechanisms to safeguard not handing over financing of these companies to other less prepared financial institutions. Harmful activities include deforestation, biodiversity loss, weapons and ammunitions, fossil fuels, ozone depleting substances, etc.

Risk Management	*Criteria 2: Integration of Climate and/or ESG-related Risks into its Overall Risk Management Framework*
Scoring	**2 Points:** The AMC incorporates ESG/climate related risks into its overall risk management across its entire portfolio. The AMC also discloses the methodology and process for identifying ESG/climate related risks and opportunities along with details for mitigating these risks.
	1 Point: The AMC accounts for ESG/climate related risks as part of their overall organisational risk but does not disclose the methodology or the process for mitigating these risks.
	0 Point: The AMC does not account for climate or ESG-related risk as part of their overall risk management for their portfolio, but may consider them for sustainability themed investments.
Explanation	AMCs will be assessed on their detailed disclosures of identification and management of climate-related risks as part of the organisation's overall risk management approach. Definitions and terminology of climate risks should be clearly mentioned, along with their applicability in relation to other financial and non-financial risks. Additionally, consideration should be given to how upstream and downstream risks associated with climate transitions will be considered.

Governance	*Criteria 3: Board-Level Oversight and Organisational Capacity for Climate-Related Risks and Opportunities*
Scoring	**2 Points:** The AMC has Board-level oversight of ESG and/or climate-related issues. This includes risk management policies, and sustainability-related decision-making. Additionally, the AMC has in place a senior management role such as Chief Sustainability Officer (CSO) and/or dedicated skilled team or Sustainability or ESG committees with clearly defined roles and responsibilities including implementation of Responsible Investment Policy.
	1 Point: The AMC has limited Board-level oversight of ESG and/or climate risks. Decisions on ESG are taken by specific Sustainability Committees or ESG Teams and remain applicable only to sustainability themed investments.
	0 Point: The AMC does not have Board-level oversight for ESG/climate issues, nor does it have clearly defined and delineated responsibilities for its ESG/Sustainability Teams.
Explanation	AMCs are scored on Board-level oversight of ESG/climate decision making within a governance structure comprising ESG/Sustainability teams and committees with clearly delineated roles and responsibilities. The impact of senior management roles such as Chief Sustainability Officer (CSO) are crucial to mainstream ESG into all investment decisions and enhance organisational capabilities beyond sustainability themed products.

Metrics and Targets	*Criteria 4: Issuance of Sustainability themed investments*
Scoring	**2 Points:** The AMC has issued one or more sustainability themed investments with clearly explained methodologies/strategies for incorporating ESG issues.
	1 Point: The AMC has issued sustainability themed investments but lacks details on the methodology, or has announced plans for future sustainability themed investments.
	0 Point: The AMC has currently not issued any sustainability themed investments nor has it announced any plans for issuing any in the near future.
Explanation	AMCs are assessed based on their investment (active and passive) in themes or assets that contribute to addressing sustainability challenges such as climate change adaptation and mitigation, environmental, and social issues (for example, environmental and social themed and sustainability themed investments). These include issuance of ESG Mutual Funds, ESG Exchange-Traded Funds (ETFs), and impact investments, etc.

Strategy	*Criteria 5: Climate-related scenario analysis and stress testing*
Scoring	**2 Points:** The AMC has conducted climate-related stress testing of its portfolio and has adopted climate-related scenario analysis for both physical and transition risks.
	1 Point: The AMC is planning to conduct climate-related stress testing and scenario analysis in the context of climate change; and highlighted their challenges in conducting the same.
	0 Point: The AMC has neither conducted nor has plans for climate-based stress tests or scenario analysis for its investments.
Explanation	Climate scenarios and stress tests that include climate risks enable AMCs to better understand the physical and transition risks across short, medium and long term time horizons impacting their portfolio. Considering multiple scenarios and adopting models recommended by IPCC, IEA, TCFD, NGFS, or other recognised bodies help AMCs develop strategies to enable portfolio resilience and transition towards low-carbon investments. Reporting the details of the approaches, sources, scope, assumptions, and results of scenario analysis and stress tests will result in higher scores.

Metrics and Targets	*Criteria 6: Climate-related or GHG emissions targets*
Scoring	**2 Points:** The AMC has set an absolute target or an intensity target, specifying whether the target is for gross or net emissions, including its timeline for implementation for its entire portfolio. The AMC also discloses details around the use of carbon credits for offsetting emissions or achieving any Net Zero goals.
	1 Point: The AMC has committed to gross emissions reductions or Net Zero goals either for a selected part of their portfolio, or only for specific scope emissions, or lacks either of these details. In addition, the AMC has not provided a timeline for the implementation of its Net Zero goals/emissions reductions.
	0 Point: The AMC has not committed to Net Zero goals or any other absolute emissions or intensity targets.
Explanation	AMCs are assessed based on quantitative or qualitative climate-related targets including disaggregated details on absolute or intensity targets. These targets could include GHG targets achieved through carbon offsets, or Net Zero targets which have qualitative indicators mapped to implementation timelines.

Metrics and Targets	*Criteria 7: Emissions Reporting*
Scoring	**2 Points:** The AMC discloses absolute gross financed emissions (Scope 3 Category 15) broken down by Scope 1, Scope 2 and Scope 3 of investee companies according to total AUM or percentage for each scope. The AMC should also disclose the methodology for calculations and the method for attributing its share of emissions relative to the size of investments.
	1 Point: The AMC discloses verified Scope 1 and Scope 2 emissions and may disclose verified or unverified Scope 3 emissions for upstream and downstream operations, but does not disclose financed emissions or Scope 3 Category 15.
	0 Point: The AMC only discloses unverified Scope 1 and Scope 2 emissions and/or Scope 3 emissions.
Explanation	AMCs are assessed on their disclosures of Scope 3 Category 15 broken down by Scope 1, Scope 2, and Scope 3 emissions. Full points are awarded for disclosing Scope 3 Category 15 or financed emissions which are broken down into Scope 1, Scope 2 and Scope 3 categories. This includes describing in detail the methodology adopted for calculating financed emissions across its share of investments according to asset classes. Since operational upstream and downstream Scope 3 emission is a voluntary indicator in the BRSR report, AMCs reporting this will be given 1 point.

Governance	*Criteria 8: Coal Policy*
Scoring	**2 Points:** The AMC has a policy on phasing out investments in coal mining and thermal coal companies, which is applicable across all or the majority of investments, including sustainability themed investments.
	1 Point: The AMC has committed to phasing out/transition planning for coal mining and thermal coal companies, but this is applicable only to sustainability themed investments.
	0 Point: The AMC has no commitments or policies on phasing out, exclusion, divestment from coal mining and thermal coal companies.
Explanation	AMCs are assessed on their policy commitment and strategy to phase out investments to coal mining companies and thermal power plants across all investments. The AMC should take a clear position on coal investments and explicitly define the extent to which coal mining and thermal coal activities will stop being financed.

Governance	*Criteria 9: Associations and Memberships*
Scoring	**2 Points:** The AMC is a signatory to national/international alliances through sustainable investment associations or memberships. Additionally, the AMC fulfills the requirements of being a signatory such as filing of reports within a stipulated timeline.
	1 Point: The AMC is a member or signatory to sustainable investment alliances, but does not fulfil requirements such as filing reports.
	0 Point: The AMC is not a member or signatory to any climate commitment or initiative.
Explanation	National or international alliances and memberships such as UN PRI, NZAM, CDP, NZAO, GFANZ, etc., can provide AMCs with the technical guidance and help to transition to low-carbon and climate-resilient paths. Subsequently, AMCs are assessed on aligning their climate-related or emissions targets with the requirements of the alliances, including frameworks for disclosure and models of measurement.

Risk Management	*Criteria 10: Active Ownership (Stewardship) and Shareholder Engagement (Voting)*
Scoring	**2 Points:** The AMC demonstrates active ownership of assets and investments through stewardship principles, policies, codes that provide robust guidance on climate and sustainability. Additionally, the AMC leverages voting as a mechanism for shareholder engagement and provides outcomes of these engagement through case studies. The AMC should also have a consistent record of voting in favour of ESG/climate/sustainability issues.
	1 Point: The AMC has in place mandatory stewardship principles, policies, or codes, but they either do not provide robust guidance on climate and sustainability or such guidance is not implemented. The AMC's engagement activities lack detailed descriptions or case studies measuring the impact, or it has voted 'against' climate-related resolutions.
	0 Point: The AMC does not have any stewardship principles, policies, or codes that focus on ESG, climate change or sustainability. The AMC also does not describe any (proxy) voting process or outcomes related to ESG, climate change or sustainability.
Explanation	AMCs are assessed on their active ownership of assets and investments driven by stewardship for climate-related topics. This includes engagement with investee companies on climate issues including appointment of ESG qualified persons, defining materiality, linking remuneration with ESG performance by voting 'for' such resolutions. Additionally, describing the rationale for proxy voting and highlighting the positive outcomes of engagement through case studies that openly communicate its policies to clients result in higher scores.

5.0.
Performance of Indian AMCs

5.1. Kotak Mahindra Asset Management Company (KMAMC)

Figure 9 Kotak Mahindra Asset Management Company Score

Source: Authors' analysis

Kotak Mahindra Asset Management Company (KMAMC) has an RI policy which excludes coal at a fund level for Kotak Mahindra Mutual Fund (KMMF). Additionally, KMMF's ESG Framework mentions fossil fuels in the list of environmental exclusions. Other environmental factors considered in their RI Policy include carbon emissions, energy consumption, extreme weather events, pollution, and alternate energy sources. These factors along with other ESG parameters are integrated into the Business Management and Valuation Model, per disclosures. A specific ESG integration framework comprising Evaluation—Engagement—Exclusion serves as the foundational philosophy and guides the methodology for evaluation of investee companies. However, such methodology is not disclosed, but the strategy adopted integrates the ESG materiality into risk management to arrive at risk-adjusted returns at a portfolio level. KMMF has also entered into an agreement with a third-party provider for inputs on ESG scores.

There is no information on whether KMAMC has a dedicated ESG Committee with Board-Level oversight. KMAMC is a signatory to UN PRI and CA100+ which has shaped key elements of the mutual fund company's RI Policy such as incorporating ESG risks into investment analysis and portfolio scenarios, reporting, and disclosures of ESG issues. The AMC's PRI *Transparency Report* is publicly available and reveals multiple sources from Kotak Global and the Kotak AMC (Singapore) when it comes to sustainability initiatives. KMMF has a Voting Policy and a Stewardship Policy which guide engagement with investee companies over ESG practices. Case studies are provided to illustrate the Fund's contribution towards helping companies establish Net Zero targets.

Kotak Mahindra Asset Management Company (KMAMC) has an RI policy which excludes coal at a fund level for Kotak Mahindra Mutual Fund (KMMF). Additionally, KMMF's ESG Framework mentions fossil fuels in the list of environmental exclusions.

KMMF offers a sustainability themed investment option—the ESG Exclusionary Strategy Fund. The PRI *Transparency Report* acknowledges that no climate-related scenario analysis or stress testing has been carried out due to challenges in quantitative modeling. There is no explanation as to why the Fund or the AMC managing the fund has not set emissions targets or disclosed Scope 1, Scope 2, or Scope 3 Category 15 emissions.

5.2. SBI Funds Management Limited (SBIFML)

Figure 10 **SBI Funds Management Limited Score**

Source: Authors' analysis

SBI Funds Management Limited (SBIFML) manages the mutual fund portfolio of SBI Mutual Funds (SBIMF). SBIFML has an RI Policy that aims to integrate ESG within its equity portfolio through an internal assessment with 50 parameters on a 1-100 scale. It also has partnerships with rating providers like CRISIL. The ESG Committee includes the Chief Investment Officer and ESG analysts. Per available disclosures, only the internal ESG audit for the ESG Mutual Fund Scheme is subject to Board-level certification. Case studies indicate that SBIMFL has engaged with nine companies amounting to 31% of the ESG fund's AUM.[98]

SBIMFL's stewardship principles around social and environmental responsibilities are integrated into the RI policy. According to publicly available information, this is supported by the 222 corporate engagements SBIMFL carried out on topics such as ESG ratings, divestment, stress-testing, SBTi pathways, and TCFD-aligned voluntary disclosures.

In addition to the SBI Exclusionary ESG Fund (the oldest ESG Fund in India launched in 1991), SBIMF supports impact investment initiatives by financing entrepreneurs working on the Sustainable Development Goals (SDGs).[99] Under the Exclusionary ESG Fund, SBIFML carried out a total of 105 corporate engagements related to ESG disclosures.[100]

SBIFML is a committed signatory to UN PRI and CA100+ and has submitted the PRI *Transparency Report*. However, claims made in the report are not supported through references or weblinks. The AMC has voluntarily adopted CFA Institute's Asset Manager Code of Conduct, is a supporter of the Paris Agreement and the TCFD, and is part of the India-UK Sustainable Finance Working Group.

SBIMFL's stewardship principles around social and environmental responsibilities are integrated into the RI policy. According to publicly available information, this is supported by the 222 corporate engagements[101] SBIMFL carried out on topics such as ESG ratings, divestment, stress-testing, SBTi pathways, and TCFD-aligned voluntary disclosures. The Stewardship Report presents case studies which illustrate the positive impact of engagement across multiple sectors. SBIFML has also engaged in non-corporate initiatives by playing an active role in the SEBI ESG Advisory Committee, the AMFI ESG Committee, and the Federation of Indian Chambers of Commerce and Industry (FICCI) ESG Committee on topics such as just transition, green hydrogen, green building, energy efficiency, and sustainability finance. Proxy Voting data reveal that SBIMFL voted against the resolutions on Reporting of Climate Risk in Retirement Plan Options for Microsoft and Netflix, while supporting the resolution calling for transparency on Alphabet's lobbying activities in line with the Paris Agreement goals.

SBIFML has not disclosed Scope 1, Scope 2, Scope 3 or Category 15 emissions. The AMC has not set any emission reduction targets or a Net Zero goal. There is no coal policy in place and climate scenario analysis and climate stress testing have not yet been conducted.

5.3. DSP Asset Managers Private Limited (DSPAM)

Figure 11 DSP Asset Managers Private Limited Score

Source: Authors' analysis

DSPAM's Equity Investment team employs a proprietary, risk-opportunity based ESG framework featuring qualitative and quantitative scoring criteria, along with analytical data points that include climate-specific indicators overseen by the board.

While amongst the smallest of the funds evaluated, DSPAM has outperformed many of its peers. The AMC has an RI policy that applies to all its equity investments, but does not extend to other asset classes. The policy covers the integration of ESG in its investment process via various protocols, and procedures. It, however, does not have any exclusions or negative screening factors.

DSPAM's Equity Investment team employs a proprietary, risk-opportunity based ESG framework featuring qualitative and quantitative scoring criteria, along with analytical data points that include climate-specific indicators overseen by the board. While this framework integrates ESG risk within the investment process, there is no clear indicator of a Board-level ESG Committee.

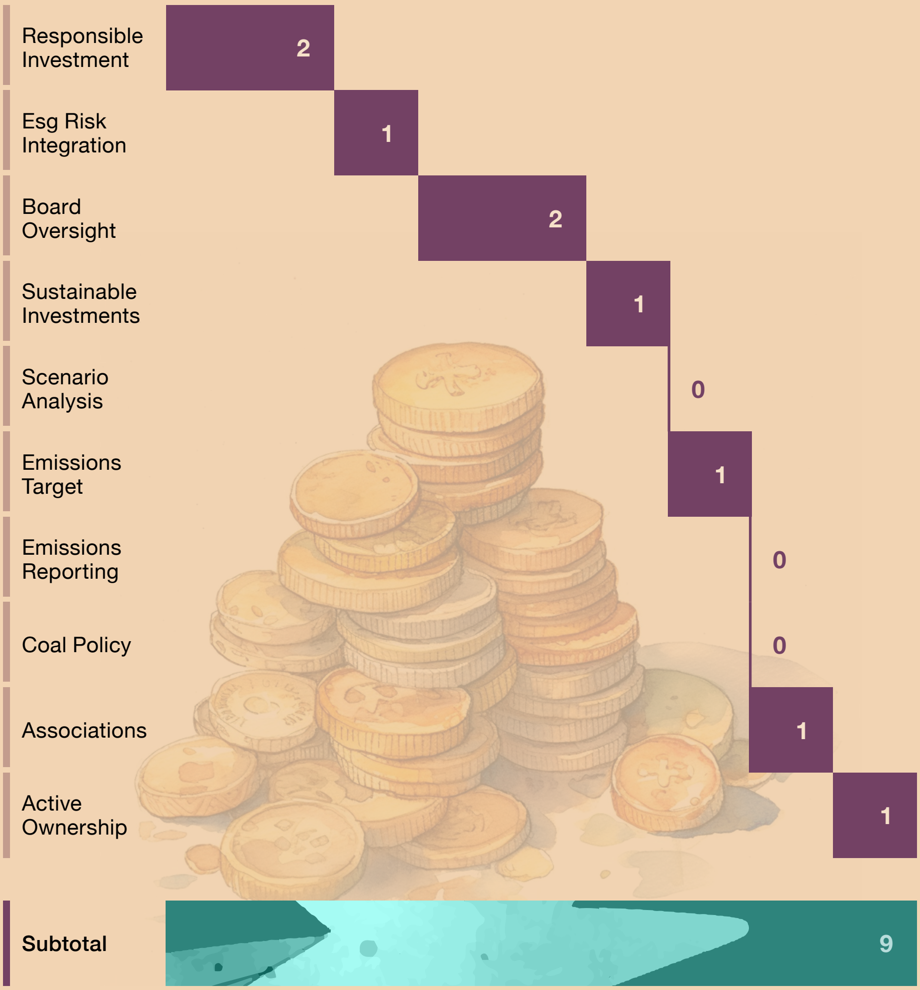
While DSP Mutual Fund does not offer a fully sustainability themed investment, its DSP Global Clean Energy Fund of Funds (formerly the DSP World Energy Fund) is invested in two global energy funds of Blackrock, one of which invests 70% of its total assets in sustainable energy companies.[102] Similarly, the DSP Natural Resources and New Energy Fund has an allocation to traditional natural resources and alternative energy.[103] This effectively means that green energy investments continue alongside fossil fuel investments like oil and gas.

In terms of active ownership, the AMC has implemented a Proxy Voting Policy overseen by the Stewardship Committee. This approach encourages investee companies to adopt sustainable and responsible practices through periodic engagement on ESG issues. These efforts are supported by case studies of engagement under the AMC's CA100+ platform.

In addition to CA100+, DSPAM also supports Nature Action 100 and has been a signatory to the UN PRI since 2021, submitting a detailed and comprehensive *Transparency Report*. While the report clearly indicates that the AMC has not disclosed Scope 1, Scope 2 or Scope 3 (Category 15) emissions, it also fails to provide publicly available sources to substantiate other information, such as on the ongoing financed emissions calculations. Furthermore, the AMC has yet to establish emission reduction targets, Net Zero goals, or a coal phase-out policy. Similarly, it has not conducted a climate scenario analysis or stress testing to evaluate its portfolio's exposure to climate-related financial risks.

5.4. Nippon Life India Asset Management Limited (NAM India)

Figure 12 Nippon Life India Asset Management Limited Score



Source: Authors' analysis

Nippon Life India Asset Management Limited (NAM India) has adopted separate RI policies that cover equity and debt schemes. The aim of these policies is to de-risk their portfolio and enable long-term value creation. This encourages portfolio companies to demonstrate ESG performance as part of the AMC's overall responsible investment values, which is a part of its fiduciary duty. The AMC follows a three-step approach which includes third-party sustainability rankings, sector-specific considerations, and a proprietary risk rating mechanism that includes topics such as financing environmental impact, product carbon footprint, climate change strategy, renewable energy, and sustainable finance.

In addition to the RI policies, NAM India also has a specific Human Rights Policy and an Environmental Policy for its operations which is supported by TCFD metrics, SDG goals, and monitoring and reporting considerations which include Scope 1, Scope 2 and Scope 3 emissions. While the AMC has reported on its Scope 1, 2 and 3 (but not specifically Category 15) emissions as part of its mandated BRSR report, none of these figures have been verified by a third party. Therefore, the AMC has failed to score at all on this criterion.

NAM India's ESG framework discusses a Risk Management Committee of the Board of AMC and Trustees, a Risk Management Committee of Executives, and a Board approved Risk Management policy which includes climate risk and is applicable across the organisation. The ESG Committee works with individual Chief Investment Officers or Heads of Investment Teams, Fund Managers for all asset classes, and Research Analysts, each with their set of responsibilities. Moreover, the ESG framework has stated that it plans to establish guidelines and control mechanisms to mitigate climate risks.

NAM India became a signatory to the UN PRI in 2021 and many of its policies and frameworks are guided by the UN PRI. However, it has yet to submit a *Transparency Report*. NAM India has created a dedicated Proxy Voting Policy for Nippon India Mutual Fund (NIMF) which fails to include climate and ESG as one of the topics to cast votes on. NIMF's Stewardship Policy is built around six principles of the UN PRI including engagement with and monitoring of ESG topics, but fails to provide any examples of a positive impact. The AMC has voted in favour of Federal Bank and Axis Bank's proposal to raise funds through different types of bonds including ESG Bonds.

NMIF is the only Fund amongst those evaluated to have stated carbon emissions reductions targets with timelines. In line with India's NDCs, NMIF has committed to achieving Net Zero by 2070 and has set interim targets of achieving 45% reductions in net CO_2 emissions by 2030 and 70% by 2050. The base year for these reductions is 2019 and the targets are applicable across the company's operations covering Scope 1 and Scope 2 emissions.[104]

5.5. UTI Asset Management Company

Figure 13 UTI Asset Management Company Score

Source: Authors' analysis

UTI Asset Management Company (UTI AMC) has a RI policy with a set of principles to monitor and assess investee companies. 97% of its equity investment portfolio has already been brought under the ambit of ESG monitoring, according to the company's disclosures.[105] The ESG Committee is a cross functional Board-Level committee with roles and responsibilities for compliance and oversight of the Fiduciary Duty Policy.

UTI AMC is a committed signatory of UN PRI and Climate Action 100+. The Transparency Report 2023 submitted to UN PRI discloses ambitious plans of sector-specific ESG materiality assessment along the lines of GRI and SASB

However, there is an inconsistency between the applicability of the RI policy which is stated at an investment-level, and environmental parameters which are limited to the AMC's operations. While these environmental parameters are articulated through specific policies covering climate, water, and energy, the overall focus of the RI Policy and the Fiduciary Duty Policy is on corporate governance and business strategy. The insufficient focus on environmental objectives is evident in the absence of a coal policy and the lack of climate-related scenario analysis and stress testing.

UTI AMC is a committed signatory of UN PRI and Climate Action 100+. The *Transparency Report 2023* submitted to UN PRI discloses ambitious plans of sector-specific ESG materiality assessment along the lines of GRI and SASB. UTI AMC has also filed a BRSR Report which covers GHG emissions for Scope 1 and Scope 2, but these figures are not verified by an external agency. No details of Scope 3 emissions or financed emissions have been disclosed and the company has no GHG emissions targets or climate-related targets.

Although UTI AMC provides a stewardship report, the Stewardship Code excludes environmental or climate-related principles. Similarly, the AMC did not vote on any environmental or climate-related topics in FY 2023–24, but claims to factor ESG into its nomination of board committee members and links remuneration to ESG. The AMC has engaged with seven Indian companies that are recognised as high carbon emitters and has illustrated positive impacts through case studies.

According to UTI AMC's *Annual Report*, an improvement in its ESG rating by Sustainalytics moved the AMC from a High Risk category to a Medium Risk Category. Similarly, UN PRI's annual assessment of the AMC's RI Policy received a score of 4 out of 5. However, the Investing in Climate Chaos dataset drawn from Refinitiv indicates that UTI AMC has invested a total of $3,591 million in Indian companies associated with fossil fuels.[106]

5.6. HDFC Asset Management Company

Figure 14 HDFC Asset Management Company Score

Source: Authors' analysis

HDFC Asset Management Company (HDFC AMC) has a Board approved RI policy which covers equity, fixed income and REITs and InvITs. The stated objective of this policy is to prioritise long-term interests based on a fiduciary duty that goes beyond short-term profit maximisation. However, the policy does not screen for harmful activities. Some of the environmental parameters include GHG emissions, energy consumption, water stewardship, pollution and biodiversity. As per its disclosures, the AMC's proprietary ESG Policy Framework is integrated through the RI Policy into activities such as voting, engagement, and reporting. However, the Voting Policy by itself does not mention ESG and there were no votes on environmental topics in FY 2023–2024.

The AMC has a dedicated Stewardship Code and Voting Policy for HDFC Mutual Fund which loosely includes environmental issues and promotes systematic engagement with investee companies with the aim of limiting ESG risks, improving scores, and benefitting society at large. However, neither HDFC AMC nor HDFC Mutual Fund provides any case studies to show that these commitments have translated into tangible impact.

An ESG oversight group consisting of the Chief Investment Officers, an ESG Analyst, the Chief Risk Officer, and the Managing Director & Chief Executive Officer are tasked to ensure that ESG is integrated in the responsible investing process and continues to be aligned with changing regulatory requirements. HDFC AMC has a functional ESG and CSR Committee and an ESG Task Committee with clearly defined roles and responsibilities. These include strengthening ESG disclosures, ensuring compliance, reviewing guiding principles such as UN PRI and Principles of CFA Institute Asset Manager Code, and taking cognisance of best practices. However, since no details are provided for identifying ESG risks and opportunities, it is not clear how the RI Policy and the ESG Policy Framework are embedded into the overall risk management. A recent press release[107] announced that the Institute of Risk Management (IRM) India Affiliate has entered into a partnership with HDFC AMC to elevate Enterprise Risk Management (ERM) and to pay closer attention to an understanding of risk which includes ESG risk.

HDFC AMC has been a UN PRI signatory since 2023, but it has not yet submitted a Transparency Report. It has filed a BRSR Report which discloses verified Scope 1, Scope 2 and Scope 3 emissions which include GHG Protocol Categories such as purchased goods and services, capital goods, fuel and energy, upstream transportation and distribution, waste generated in operations, business travel, and employee commute. However, the AMC fails to disclose financed emissions (Scope 3, Category 15). HDFC AMC neither has a coal policy, nor has issued any sustainability themed products. The AMC has not set any Net Zero targets at an entity level and has not conducted any climate-related scenario analysis and stress testing.

5.7. ICICI Prudential Asset Management Company

Figure 15 ICICI Prudential Asset Management Company Score

Source: Authors' analysis

ICICI Pru AMC has developed an ESG framework for evaluating sector-specific issues and is committed to monitoring ESG parameters alongside financial and business performance.

ICICI Prudential Asset Management Company (ICICI Pru AMC) has an RI policy that applies only to specific schemes with a limited set of exclusion criteria. While the RI policy attempts to explain how ESG is integrated into the overall investment process, the scope of its applicability remains vague and unclear.

Interestingly, the RI policy and ESG Fund lack the support of a Board-level committee to oversee and drive ESG efforts within the AMC. However, ICICI Pru AMC has developed an ESG framework for evaluating sector-specific issues and is committed to monitoring ESG parameters alongside financial and business performance. The ICICI Prudential Mutual Fund offers a sustainability themed investment option—ICICI Prudential ESG Exclusionary Strategy Fund. This fund incorporates a minimal exclusion list, including weapons and gambling, and refrains from investing in thermal or coal-based energy generation companies, as indicated in its monthly portfolio disclosures, but lacks a formal coal policy.

The AMC has been a signatory to the UN PRI since February 2022. The AMC's Stewardship Code makes broad claims about incorporating ESG considerations into monitoring and engagement with investee companies. While the AMC has undertaken several initiatives to engage with investee companies in hard-to-abate sectors, the Stewardship Report lacks publicly available details on the activities carried out in this regard. Notably, ICICI Prudential AMC is one of three AMCs that have voted in favour of an ESG-related proposal to obtain a third-party review of Intel's China business for ESG congruence—contrary to the recommendation of the investee company.

Despite such steps, the AMC has not disclosed its Scope 1, Scope 2, or Scope 3 (Category 15) emissions. Moreover, the AMC lacks emission reductions goals, Net Zero timelines, and has not undertaken climate-related scenario analysis or stress testing.

5.8. Aditya Birla Sun Life Asset Management Company

Figure 16 **Aditya Birla Sun Life Asset Management Company Score**

Source: Authors' analysis

Aditya Birla Sun Life Mutual Fund has adopted the RI policy of Aditya Birla Sun Life AMC (ABSLAMC) for its ESG fund. The policy includes an internal ESG assessment framework with 40 parameters. However, it lacks sufficient detail to explain how indicators like carbon emissions are factored into investment decisions. The AMC acknowledges ESG risks in its overall risk management framework; it provides no further details—an omission that is particularly notable given the absence of Board-level oversight for ESG and climate risks. Nonetheless, as a first step, ABSLAMC has identified ESG-related risks and opportunities in the Risk Management materiality disclosures of its BRSR Report.

The ESG Integration Strategy Fund offered by Aditya Birla Sun Life Mutual Fund (ABSLMF) leverages empanelled third-party ratings to guide investment decisions. The ESG Analysis Framework includes both sector-level screening and stock-level screening. However, beyond these broad claims and minimal exclusions, such as weapons, no further details are provided. ABSLMF has also stated that it is in the planning stages of launching two additional ESG funds.

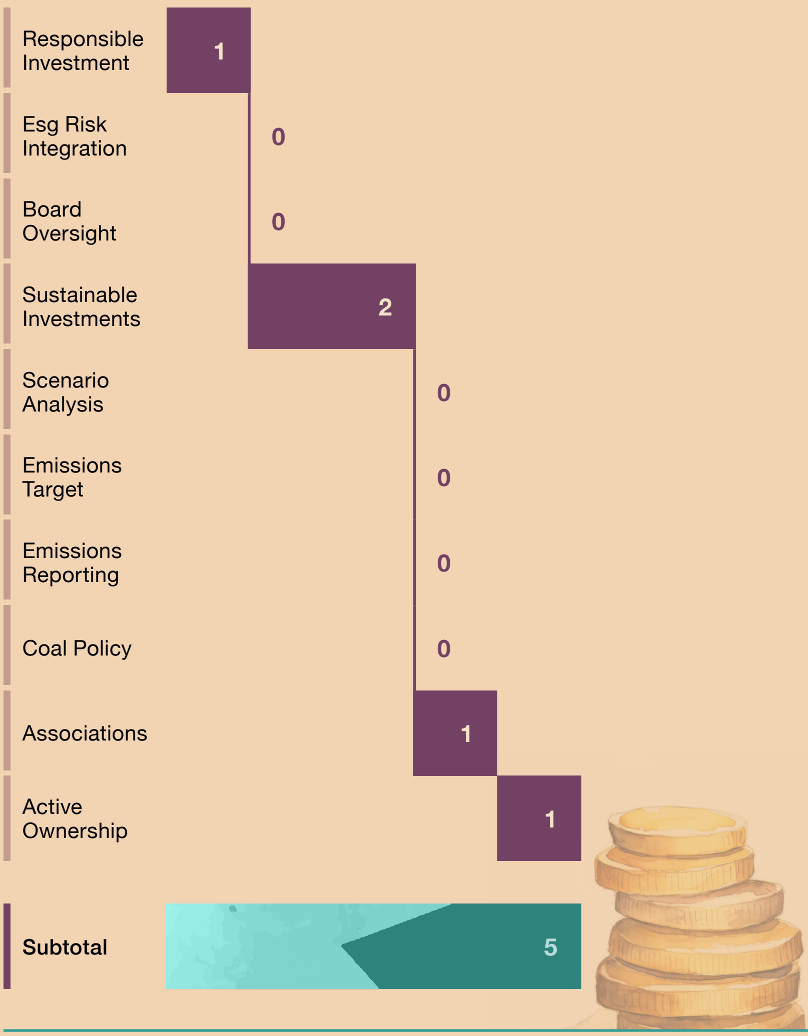
ABSLAMC has identified ESG-related risks and opportunities in the Risk Management materiality disclosures of its BRSR Report.

ABSLAMC became a signatory to the UN PRI in May 2024 and is not yet required to submit a *Transparency Report*. However, the UN PRI guidelines have not been integrated into its Stewardship Code, which is based solely on SEBI's directives. While the Code refers to ESG risks for engagement and monitoring of investee companies, there are no case studies highlighting such efforts, either in the BRSR or the in the *Annual Report 2023–24.*

ABSLAMC has not disclosed Scope 1, Scope 2, or Scope 3 (Category 15) emissions. The AMC has also not set any emission reduction targets, Net Zero goals, a coal phase-out policy or conducted climate-related stress testing and scenario analysis.

5.9. Axis Asset Management Company

Figure 17 **Axis Asset Management Company Score**



Source: Authors' analysis

Axis Asset Management Company (Axis AMC) has formulated an RI policy for Axis Mutual Fund which emphasises the limitations of ratings and quantitative screenings, cautioning that they risk oversimplying ESG considerations. Based on this approach, the AMC employs sector- and stock-level screening using a quintile scale for grading stocks. Its portfolio construction is claimed to follow a bottom-up, benchmark-agnostic approach, with a minimum of 80% of the domestic portfolio allocated to the top three highest-scoring quintiles. However, the AMC does not clarify whether the RI policy applies to its entire portfolio and whether it excludes harmful sectors or activities. Furthermore, there is no process for integrating ESG risk into the overall risk management framework, nor is there any Board-level oversight of its implementation.

The Axis ESG Integration Strategy Fund uses a proprietary model for ESG scoring of investee companies. Environmental factors such as resource intensity, GHG emissions, and water usage are included, but no thresholds or detailed criteria are provided. Despite incorporating these considerations, the AMC has not disclosed Scope 1, Scope 2, or Scope 3 (Category 15) emissions and has not set any emissions reduction or Net Zero targets.

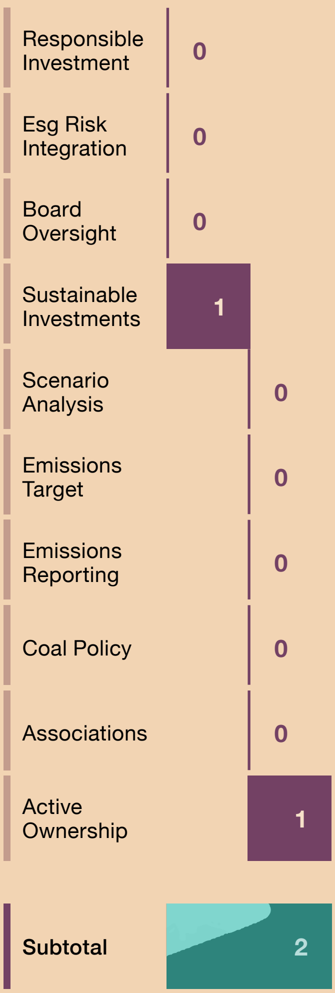
Axis Asset Management Company (Axis AMC) has formulated an RI policy for Axis Mutual Fund which emphasises the limitations of ratings and quantitative screenings, cautioning that they risk oversimplying ESG considerations.

Axis AMC has a Stewardship Code for Axis Mutual Fund that refers to engagement with investee companies over ESG, sustainability, climate change, and environmental and social responsibility. However, its Stewardship Report lacks case studies or examples to illustrate these. While Axis Mutual Fund has voted in favour of basic ESG-related topics such as remuneration and green bonds issuances, its voting record does not extend to more substantive ESG issues.

The AMC has been a signatory to the UN PRI since July 2021, but has yet to submit a Transparency Report. Additionally, it has failed to establish a coal phase-out policy or conduct climate-related scenario analysis and stress testing.

5.10. Mirae Asset Investment Managers (India)

Figure 18 Mirae Asset Investment Managers (India) Score



Source: Authors’ analysis

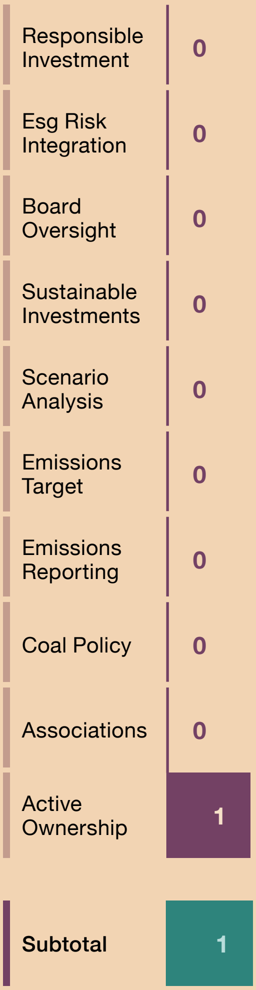
Mirae Asset Investment Managers (India) considers ESG a key area for engagement and voting as established in their Stewardship Code, but there are no case studies to support this.

Mirae Asset Investment Managers (India) manages the portfolio of Mirae Asset Mutual Fund which factors ESG issues such as biodiversity, emissions and energy only for sustainability themed products. These include two schemes, namely, Mirae Asset ESG Sector Leaders ETF which tracks the NIFTY 100 ESG Sector, and the Mirae Asset ESG Sector Leaders Fund of Funds, both of which are passive instruments. Although Mirae Asset Investment Managers (India) considers ESG a key area for engagement and voting as established in their Stewardship Code, but there are no case studies to support this. There were no votes cast on matters pertaining specifically to ESG in FY 2023–24, and the voting approach for ESG matters will be declared only from FY 2024–25 onwards.

Beyond these two initiatives, the AMC fails to establish a RI Policy, integrate ESG into its investment decisions or ensure Board-level oversight. There is no reporting on emissions, and no steps have been taken to establish targets or to conduct climate-scenario analysis. Similarly, no commitments have been made towards associations such as the UN PRI.

5.11. Tata Asset Management Company

Figure 19 Tata Asset Management Company Score



Source: Authors' analysis

The only step Tata Asset Management Company (Tata AMC) has taken towards climate-preparedness is voting in favour of investee company proposals that link remuneration to ESG related metrics. However, the Voting Policy and Stewardship Policy set out for Tata Mutual Fund by Tata AMC lack an ESG focus and therefore do not translate into active ownership. The AMC has no policy on phasing out coal, issuing sustainability themed products or signing up for memberships with associations like the UN PRI. The absence of an RI Policy, GHG targets, emissions reporting and scenario analysis is concerning. More worrisome is the absence of Board-level oversight on ESG issues and integration of climate risks within the overall risk management framework.

5.12. Bandhan Asset Management Company

Figure 20 **Bandhan Asset Management Company Score**

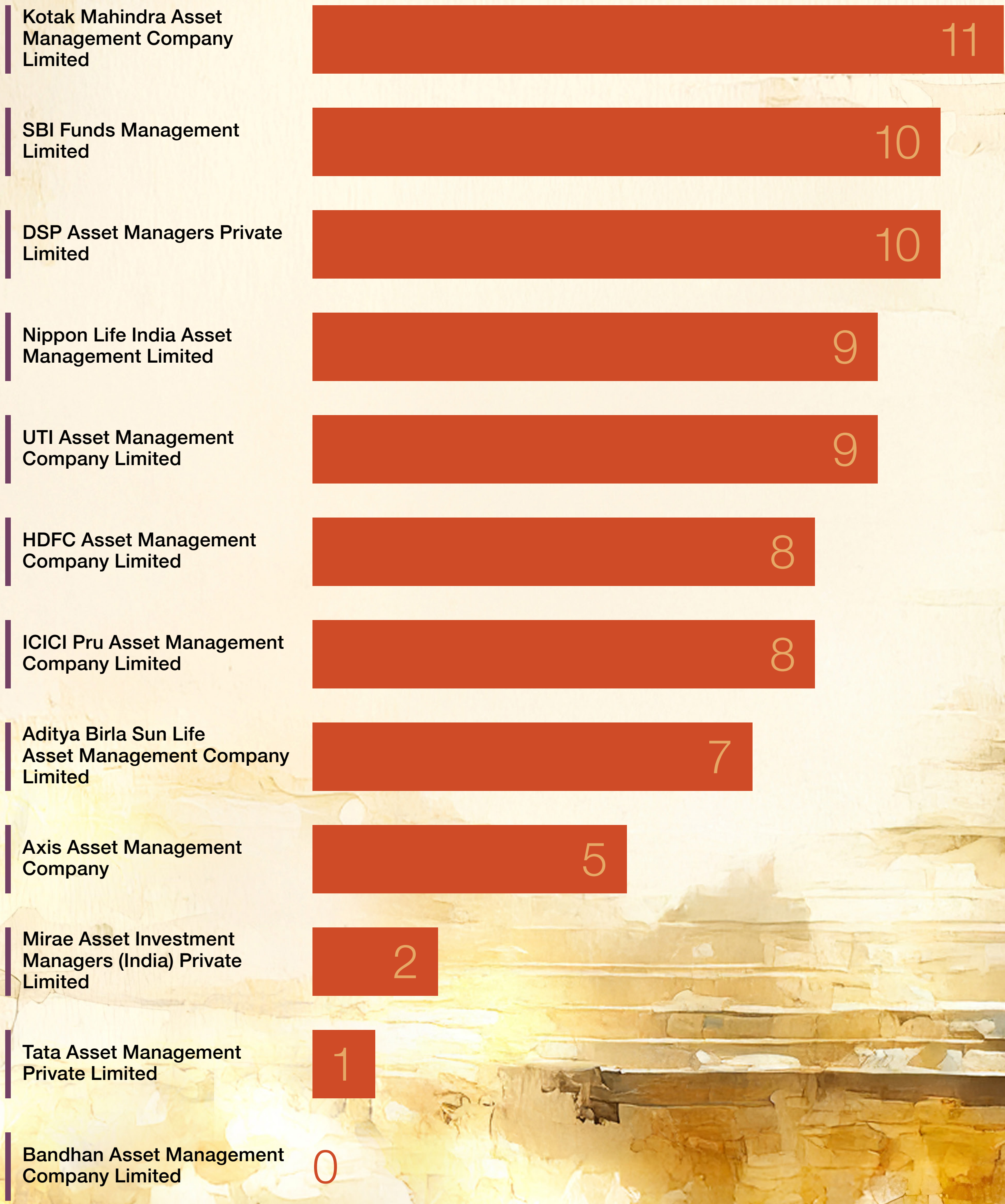
Responsible Investment	0
Esg Risk Integration	0
Board Oversight	0
Sustainable Investments	0
Scenario Analysis	0
Emissions Target	0
Emissions Reporting	0
Coal Policy	0
Associations	0
Active Ownership	0
Subtotal	0

Source: Authors' analysis

Bandhan Asset Management Company (Bandhan AMC) has failed to take any step towards climate action. It has no initiatives around responsible investing and has not incorporated ESG or climate-preparedness considerations. Its latest ***Annual Report*** makes no mention of any of these critical considerations, raising questions on its ability to responsibly uphold its fiduciary duty to its investors in the face of increasing climate-induced financial disruption. Bandhan does have a Stewardship Code as mandated by SEBI **(N.B.)***.

*Updated, June 2, 2025: A previous version of this report stated that Bandhan had not adopted a Stewardship Code. This statement was based on an exhaustive search conducted by CRH as of August 2024, during which no link to Bandhan AMC's Stewardship Code was found on their website or in any other public disclosure. CRH shared the draft scores with Bandhan AMC via email and physical letter seeking feedback in August 2024, but did not receive any response prior to publication. A link to Bandhan AMC's Stewardship Code is now publicly available on their website at ***https://assets.bandhanmutual.com/2024/09/Stewardship-Policy-Equity.pdf.*** According to the document, the Stewardship Code has been in existence since February 2020. This section of the report has been updated to reflect this publicly available information.

Figure 21 Scores of Top 12 AMCs



Source: Authors' analysis

6.0.

Key Challenges and Implications for Sustainable Finance in Indian AMCs

Over the course of this analysis, we identified several key challenges facing the Indian asset management industry and its move towards climate-readiness.

Lack of Data Availability

The Indian asset management sector grapples with significant challenges in data availability and regulatory consistency—critical issues that directly impact the industry's ability to effectively manage climate-related risks. Limited regulatory mandates and low investor demand for transparent and standardised reporting have led to inconsistent data collection and disclosure practices. Current regulations, such as SEBI's BRSR and ESG Mutual Fund requirements, result in fragmented sustainability disclosures that often lack standardisation. This gap is evident in scattered reports labelled under 'Investor Knowledge' or 'Corporate Social Responsibility (CSR)', as well as outdated stewardship and voting policies.

Gaps in Regulatory Oversight

The present regulatory focus on ESG funds primarily covers equity investments, leaving out other critical areas like portfolio management services, alternative investments, debt funds, and real estate. This lack of oversight and consistency hinders AMCs from assessing sectoral exposures comprehensively across their asset classes, limiting climate-resilient investment opportunities. The industry's reliance on third-party data, proprietary ESG strategies, and delayed fund manager commentary further risk greenwashing and prevent a transparent approach to climate risks.

Lack of Coal Exclusion Policies

Scientific literature frames climate risk as a long-term systemic threat to financial stability—a concept known as the 'tragedy of the horizon'.[108] Financial models that inadequately integrate climate risks perpetuate this issue, as they often rely on past performance, undervalue climate risks, and favour profit-driven, short-term gains.[109] As a result, 11 out of 12 AMCs in our study did not have any kind of exclusionary coal policy. Most AMCs adhere only to SEBI-mandated exclusions, like tobacco, gambling, and weapons. This highlights that most adopt a weighted approach rather than outright exclusions for managing risk, balancing profit with ESG considerations.[110] This often leads to continued investments in fossil fuels, based on assumptions that ESG risks are addressed in separate organisational divisions.[111]

Inadequate Engagement on ESG Issues

Engagement strategies with high-carbon companies show potential, as evidence suggests that proactive stewardship can improve environmental performance.[112,113] However, these efforts are hampered by small, under-resourced teams within AMCs, resulting in low engagement and voting on ESG issues, despite voluntary commitments to frameworks like the UN PRI.[114,115] Nine Indian AMCs have adopted the UN PRI, with the top performing firms integrating climate risk into their risk frameworks, signaling a shift toward active ownership and stewardship. Only four AMCs had voted on ESG related proposals and only four AMCs supported their claims of stewardship and engagement through case studies. There were only two associations, the UN PRI and the CA100+ which emerged during our study, that mobilise collective action through standards, reporting, and Net Zero commitments. Collaborative alliances such as the NZAOA, NZAM, GFANZ's Asia-Pacific Network, and the AIGCC provide essential technical support, helping AMCs establish emissions targets, measure financed emissions, and navigate the transition to a low-carbon economy.[116]

Inadequate Demand for Sustainable Investments

Sustainability themed investments such as ESG Mutual Funds backed with robust disclosure requirements are not only tools for diversification, but also help shift investments from high-risk sectors towards climate-resilient opportunities. So far only eight Indian AMCs are offering ESG Mutual Funds, seven of which have been covered in our study. This indicates that the present disclosures are insufficient to create a strong demand and therefore are resulting in nominal returns. Since regulation remains the primary driver for advancing sustainable finance, SEBI has a critical role in establishing a robust institutional framework specifically for AMCs.[117]

Conclusion

The Indian Asset Management industry is currently not addressing the systemic risks posed by the climate crisis to the entirety of its investments and operations. Additionally, as a sector, it has, as yet, not explicitly stepped up to either acknowledge or articulate its role in supporting India's goal of achieving Net Zero by 2070. Committing to Net Zero is a key first step that will lead the sector to concertedly put in place all the mechanisms and measures necessary to attain it. Acting in the absence of a clear goal will lead to unstrategic, fragmented and unaligned actions, the sum of which is ultimately unlikely to achieve the goal or fulfil long-term fiduciary duties.

All AMCs analysed in this study have primarily acted on criteria where there is a mandate or guidance to do so by SEBI specifically for mutual fund activities. This can be seen in the case of adopting stewardship codes, the issuance of ESG funds, and limited emissions disclosure. Some action has been taken to fulfil the requirements of being signatories to international networks such as the UN PRI. AMCs should more broadly tap into the expertise and support provided by the global sustainability alliances they are a part of, while also learning about best practices from their international partner AMCs, where applicable.

Some key issues need addressing for any serious movement on ESG and climate preparedness:

i. SEBI, as the markets regulator, will need to play a proactive role in creating an environment where Asset Management Companies are strongly supported to start addressing the climate crisis in a concerted manner. This includes mandating more comprehensive disclosures and providing tools and guidance on the various aspects of transition planning. A mandate from SEBI will also create a level playing field across the industry.

ii. AMCs should be required to ramp up their respective Boards' and overall organisational capacities on climate and ESG-related issues on an ongoing basis, as well as, set responsible investment-related Key Performance Indicators (KPIs) and objectives that are linked to remuneration. Board-level buy-in of the criticality of sustainability issues is crucial.

iii. ESG teams must be adequately staffed, resourced and integrated into all investment processes.

The coming years will see significant climate-related impacts on the Indian economy and society. If India is to adapt, mitigate or otherwise manage these impacts while also leveraging the economic opportunities, it needs its financial sector to play an active and climate risk-informed role.

Endnotes

1. World Meteorological Organization (WMO). (2024). Record carbon emissions highlight urgency of Global Greenhouse Gas Watch, World Meteorological Organization. Retrieved from https://wmo.int/media/news/record-carbon-emissions-highlight-urgency-of-global-greenhouse-gas-watch.

2. United Nations Environment Programme (UNEP). (2024). Emissions Gap Report 2024. United Nations Environment Programme. Retrieved from https://www.unep.org/resources/emissions-gap-report-2024.

3. Securities and Exchange Board of India (SEBI). (2022). Standardization of industry classification—Applicability to Credit Rating Agencies (CRAs). Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/legal/circulars/apr-2022/standardization-of-industry-classification-applicability-to-credit-rating-agencies-cras-_57531.html.

4. Reuters. (2021). World needs $5 trillion annual climate finance by 2030 with rapid action. Reuters. Retrieved from https://www.reuters.com/business/cop/world-needs-5-trillion-annual-climate-finance-by-2030-rapid-action-2021-10-28/.

5. International Energy Agency (IEA) & International Finance Corporation (IFC). (2021). Scaling up private finance for clean energy in emerging and developing economies. International Energy Agency and International Finance Corporation. Retrieved from https://iea.blob.core.windows.net/assets/a48fd497-d479-4d21-8d76-10619ce0a982/ScalingupPrivateFinanceforCleanEnergyinEmergingandDevelopingEconomies.pdf.

6. Climate Policy Initiative (CPI). (2023). Global landscape of climate finance 2023. Climate Policy Initiative. Retrieved from https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/.

7. World Bank Blogs. (2024). 5 ways to unlock private capital to tackle climate change. World Bank. Retrieved from https://blogs.worldbank.org/en/voices/5-ways-to-unlock-private-capital-to-tackle-climate-change.

8. International Monetary Fund (IMF). (2024). Chapter 3: Financial sector policies to unlock private climate finance in emerging market and developing economies. In Global Financial Stability Report. International Monetary Fund. Retrieved from https://www.imf.org/-/media/Files/Publications/GFSR/2023/October/English/ch3.ashx.

9. CarbonCredits.com. (2024). Over $10 trillion funding gap looms for India's carbon trading net-zero goal. CarbonCredits.com. Retrieved from https://carboncredits.com/over-10-trillion-funding-gap-looms-for-indias-carbon-trading-net-zero-goal/#:~:text=India%20is%20confronting%20a%20substantial,support%20the%20country's%20economic%20advancement.

10. Down To Earth. (2024). Scaling up private finance is crucial to bridge funding gap for climate change projects. Down To Earth. Retrieved from https://www.downtoearth.org.in/climate-change/scaling-up-private-finance-is-crucial-to-bridge-funding-gap-for-climate-change-projects-95042.

11. Climate Policy Initiative (CPI). (2022). Landscape of green finance in India 2022. Climate Policy Initiative. Retrieved from https://www.climatepolicyinitiative.org/publication/landscape-of-green-finance-in-india-2022/.

12. Down To Earth. (2024). Scaling up private finance is crucial to bridge funding gap for climate change projects. Down To Earth. Retrieved from https://www.downtoearth.org.in/climate-change/scaling-up-private-finance-is-crucial-to-bridge-funding-gap-for-climate-change-projects-95042.

13. Association of Mutual Funds in India (AMFI). (2024). Indian mutual fund industry: Average assets under management (AAUM). Association of Mutual Funds in India. Retrieved from https://www.amfiindia.com/indian-mutual#:~:text=Average%20Assets%20Under%20Management%20(AAUM)%20of%20Indian%20Mutual%20Fund%20Industry,the%20month%20of%20May%202021.

14. Moneycontrol. (2024). AUM sweet AUM: MF industry's assets under management to double to Rs 100 lakh cr by 2030, says Axis Capital. Moneycontrol. Retrieved from https://www.moneycontrol.com/news/business/personal-finance/aum-sweet-aum-mf-industrys-assets-under-management-to-double-to-rs-100-lakh-cr-by-2030-says-axis-capital-12348701.html.

15. United Nations Framework Convention on Climate Change (UNFCCC). (2022). Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its second session, held in Glasgow from 31 October to 12 November 2021. Addendum. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/sites/default/files/resource/cma2021_10_add1_adv.pdf.

16. United Nations. (2024). For a livable climate: Net-zero commitments must be backed by credible action. United Nations. Retrieved from https://www.un.org/en/climatechange/net-zero-coalition#:~:text=Yes%2C%20a%20growing%20coalition%20of,halve%20global%20emissions%20by%202030.

17. Intergovernmental Panel on Climate Change (IPCC). (2022). Chapter 15: Financing climate action. In IPCC Sixth Assessment Report, Working Group III: Mitigation of Climate Change. Intergovernmental Panel on Climate Change. Retrieved from https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter15.pdf.

18. International Finance Corporation (IFC). (2024). SBFN toolkit: Sustainable finance taxonomies. Sustainable Banking and Finance Network. Retrieved from https://www.sbfnetwork.org/wp-content/uploads/2024/05/SBFN-Toolkit_Sustainable-Finance-Taxonomies.pdf.

19. World Bank. (2024). Finance & Prosperity 2024. World Bank. Retrieved from https://openknowledge.worldbank.org/server/api/core/bitstreams/06f02e01-b4d1-4bb5-8a6c-0199d51cf84c/content.

20. International Finance Corporation (IFC). (2024). SBFN toolkit: Sustainable finance taxonomies. Sustainable Banking and Finance Network. Retrieved from https://www.sbfnetwork.org/wp-content/uploads/2024/05/SBFN-Toolkit_Sustainable-Finance-Taxonomies.pdf.

21. InfluenceMap. (2019). Who's influencing the EU's taxonomy? InfluenceMap. Retrieved from https://influencemap.org/report/Who-s-Influencing-the-EU-s-Taxonomy-c78635abb8cf94597e0af16a5831275a.

22. European Commission. (2022). Common Ground Taxonomy – Climate Change Mitigation Instruction Report. International Platform on Sustainable Finance. Retrieved from https://finance.ec.europa.eu/document/download/82ef826b-b962-4ce1-b346-f7dd8067c978_en?filename=220603-international-platform-sustainable-finance-common-ground-taxonomy-instruction-report_en.pdf.

23. European Commission. (2024). Webinar on Common Ground Taxonomy (CGT) project. European Commission. Retrieved from https://finance.ec.europa.eu/events/webinar-common-ground-taxonomy-cgt-project-2024-07-15_en.

24. Responsible Investor. (2024). Indian investor calls for interoperability with EU as government sets out taxonomy plans. Responsible Investor. Retrieved from https://www.responsible-investor.com/indian-investor-calls-for-interoperability-with-eu-as-government-sets-out-taxonomy-plans/.

25. Climate Bonds Initiative. (2024). China solidifies leadership in green finance in 2023. Climate Bonds Initiative. Retrieved from https://www.climatebonds.net/resources/press-releases/2024/05/china-solidifies-leadership-green-finance-2023.

26. Institute of Finance and Sustainability (2021) China Construction Bank issues the world's first demonstration Green Bond based on the China-EU Common Ground Taxonomy. https://en.ifs.net.cn/news/117#:~:text=On%20December%2013%202021%2C%20China%20Construction%20Bank,raising%20$500%20million%20for%20a%20three%2Dyear%20term.

27. Sustainability Accounting Standards Board. (2023). SASB Standards. Sustainability Accounting Standards Board. Retrieved from https://sasb.ifrs.org/standards/.

28. CDP. (2024). Guidance for companies. CDP. Retrieved from https://www.cdp.net/en/guidance/guidance-for-companies.

29. Global Reporting Initiative (GRI). (2024). GRI standards. Global Reporting Initiative. Retrieved from https://www.globalreporting.org/standards/.

30. International Financial Reporting Standards (IFRS). (2023). IFRS Sustainability Standards Navigator. International Financial Reporting Standards. Retrieved from https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/.

31. Task Force on Climate-related Financial Disclosures (TCFD). (2017). Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures. Task Force on Climate-related Financial Disclosures. Retrieved from https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf.

32. European Commission. (2023). Commission adopts European sustainability reporting standards. European Commission. Retrieved from https://finance.ec.europa.eu/news/commission-adopts-european-sustainability-reporting-standards-2023-07-31_en.

33. European Union. (2022). Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting. Official Journal of the European Union. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464.

34. European Commission. (2024). Sustainability-related disclosure in the financial services sector. European Commission. Retrieved from https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en.

35. Government of the United Kingdom. (2024). Sustainability Disclosure Requirements (SDR): Implementation update 2024. Government of the United Kingdom. Retrieved from https://assets.publishing.service.gov.uk/media/66505ba9adfc6a4843fe04e5/Sustainability_Disclosure_Requirements__SDR__Implementation_Update_2024.pdf.

36. U.S. Securities and Exchange Commission (SEC). (2024). The enhancement and standardization of climate-related disclosures for investors: Delay of effective date. Federal Register. Retrieved from https://www.federalregister.gov/documents/2024/04/12/2024-07648/the-enhancement-and-standardization-of-climate-related-disclosures-for-investors-delay-of-effective.

37. Principles for Responsible Investment (PRI). (2024). Climate Disclosure Rules and Standards: A Comparative Analysis. Principles for Responsible Investment. Retrieved from https://www.unpri.org/download?ac=21434.

38. Aviva Investors. (2022). Letter to the SEC: Comment on Climate Disclosure Rules. Aviva Investors. Retrieved from https://content.influencemap.org//site/data/000/958/Aviva_Investors_SEC_disclosures_letter_April_2022.pdf.

39. Natixis. (2022). Navigating the Sea of Proposed Climate-Related Disclosures: A Deep Dive into the SEC's, ISSB's, and EFRAG's Proposals. Natixis. Retrieved from https://content.influencemap.org//site/data/001/104/Natixis_Navigating_the_sea_of_proposed_climate-related_disclosures__A_deep_dive_into_the_SEC's,_ISSB's_and_EFRAG's_proposals_January_2023.pdf.

40. Securities and Exchange Commission (SEC). (2023). Mirova's Comments on SEC Proposed Rulemaking on Climate-Related Disclosures. Securities and Exchange Commission. Retrieved from https://www.sec.gov/comments/s7-10-22/s71022-20131832-302277.pdf.

41. InfluenceMap. (2023). Asset Managers & Climate Change 2023. InfluenceMap. Retrieved from https://influencemap.org/report/Asset-Managers-Climate-Change-2023-22976.

42. Responsible Investor. (2024). Major SFDR overhaul could cause ESG investing backslide, says Mirova. Responsible Investor. Retrieved from https://www.responsible-investor.com/major-sfdr-overhaul-could-cause-esg-investing-backslide-says-mirova/.

43. European Commission. (2024). The European Green Deal. European Commission. Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.

44. European Commission. (2023). EU Taxonomy for sustainable activities. European Commission. Retrieved from https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en

45. Reclaim Finance. (2023). Recommendations for Asset Managers. Reclaim Finance. Retrieved from https://reclaimfinance.org/site/wp-content/uploads/2023/02/0_All-recommendations-for-Asset-managers_February-2023-_V1.pdf.

46. Intergovernmental Panel on Climate Change (IPCC). (2000). Emissions Scenarios. Intergovernmental Panel on Climate Change. Retrieved from https://archive.ipcc.ch/pdf/special-reports/emissions_scenarios.pdf.

47. Reclaim Finance. (2023). All recommendations for asset managers. Reclaim Finance. Retrieved from https://reclaimfinance.org/site/wp-content/uploads/2023/02/0_All-recommendations-for-Asset-managers_February-2023-_V1.pdf.

48. AXA Investment Managers. (2023). Responsible Investing: AXA IM Climate Risks Policy. AXA Investment Managers. Retrieved from https://www.axa-im.com/document/6139/view.

49. Reuters. (2024). BNP Paribas fund arm to exclude new oil and gas bonds. Reuters. Retrieved from https://www.reuters.com/business/finance/bnp-paribas-fund-arm-exclude-new-oil-gas-bonds-2024-11-27/.

50. InfluenceMap. (2023). Asset Managers & Climate Change 2023. InfluenceMap. Retrieved from https://influencemap.org/report/Asset-Managers-Climate-Change-2023-22976.

51. BNP Paribas Asset Management. (2023). 2023 Sustainability Report. BNP Paribas Asset Management. Retrieved from https://docfinder.bnpparibas-am.com/api/files/f25fbc8f-d674-419f-93ca-78f1fa3a3ca5. AXA Investment Managers. (2023). Responsible Investing: AXA IM Climate Risks Policy. AXA Investment.

52. AXA Investment Managers. (2023). Responsible Investing: AXA IM Climate Risks Policy. AXA Investment Managers. Retrieved from https://www.axa-im.com/document/6139/view.

53. Responsible Investor. (2024). Phoenix Group "not convinced" by explanations from CA100+ leavers. Responsible Investor. Retrieved from https://www.responsible-investor.com/phoenix-group-not-convinced-by-explanations-from-ca100-leavers/.

54. Aviva Investors. (2022). Act Now: A Climate Emergency Roadmap for the International Financial Architecture. Long Finance. Retrieved from https://www.longfinance.net/media/documents/a-climate-emergency-roadmap-for-the-international-financial-architecture-en.pdf.

55. WWF and Aviva. (2022). Aligning the UK Financial System to Net Zero. WWF UK. Retrieved from https://www.wwf.org.uk/sites/default/files/2022-05/Aligning-the-UK-Financial-System-to-Net-Zero.pdf.

56. LobbyMap. (2022). Aviva in Sustainable Finance. InfluenceMap. Retrieved from https://lobbymap.org/company/Aviva-e4fd82803f0b1a07550acf2854cdc54b/projectlink/Aviva-in-Sustainable-Finance-34b35daeb2458f361439eddd92a57bb4.

57. Association of Mutual Funds in India (AMFI). (2024). Indian Mutual Fund Industry's Average Assets Under Management (AAUM) stood at ₹ 68.05 Lakh Crore (INR 68.05 Trillion). Association of Mutual Funds in India. Retrieved from https://www.amfiindia.com/indian-mutual.

58. Reserve Bank of India (RBI). (2023-24). Annual Report. Reserve Bank of India. Retrieved from https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/0ANNUALREPORT202324_FULLDF549205FA214F62A2441C5320D64A429.PDF.

59. Ibid.

60. Ibid.

61. Association of Mutual Funds in India (AMFI). (2024). Industry Data Analysis: Industry Trends (At a broad level). Association of Mutual Funds in India. Retrieved from https://www.amfiindia.com/Themes/Theme1/downloads/home/Industry-Trends.pdf.

62. Ibid.

63. Association of Mutual Funds in India (AMFI). (2024). Industry Data Analysis: Industry Trends (At a broad level). Association of Mutual Funds in India. Retrieved from https://www.amfiindia.com/Themes/Theme1/downloads/home/Industry-Trends.pdf.

64. Reserve Bank of India (RBI). (2023-24). Annual Report. Reserve Bank of India. Retrieved from https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/0ANNUALREPORT202324_FULLDF549205FA214F62A2441C5320D64A429.PDF.

65. Association of Mutual Funds in India (AMFI). (2024). Industry Data Analysis: Industry Trends (At a broad level). Association of Mutual Funds in India. Retrieved from https://www.amfiindia.com/Themes/Theme1/downloads/home/Industry-Trends.pdf.

66. Ibid.

67. Securities and Exchange Board of India (SEBI). (2024). Deployment of Funds by all Mutual Funds. Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/statistics/mutual-fund/deployment-of-funds-by-all-mutual-funds.html.

68. Securities and Exchange Board of India (SEBI). (2015). Deployment of Equity Funds Monthly Report. Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/mf/equitydec15.html.

69. Securities and Exchange Board of India (SEBI). (2022). Standardization of industry classification—Applicability to Credit Rating Agencies (CRAs). Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/legal/circulars/apr-2022/standardization-of-industry-classification-applicability-to-credit-rating-agencies-cras-_57531.html.

70. Climate Risk Horizons. (2023). Still Unprepared. Climate Risk Horizons. Retrieved from https://climateriskhorizons.com/research/Still-Unprepared.pdf.

71. Securities and Exchange Board of India (SEBI). (2023). Securities and Exchange Board of India (Mutual Funds) Regulations 1996 [Last amended on February 07, 2023]. Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/legal/regulations/feb-2023/securities-and-exchange-board-of-india-mutual-funds-regulations-1996-last-amended-on-february-07-2023-_69213.html.

72. Securities and Exchange Board of India (SEBI). (2023). Roles and responsibilities of Trustees and board of directors of Asset Management Companies (AMCs) of Mutual Funds. Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/legal/circulars/jul-2023/roles-and-responsibilities-of-trustees-and-board-of-directors-of-asset-management-companies-amcs-of-mutual-funds_73613.html.

73. Securities and Exchange Board of India (SEBI). (2021). Risk Management Framework (RMF) for Mutual Funds. Securities and Exchange Board of India. Retrieved from https://www.sebi.gov.in/legal/circulars/sep-2021/risk-management-framework-rmf-for-mutual-funds_52943.html.

74. Securities and Exchange Board of India (SEBI). (2019). Stewardship Code for all Mutual Funds and all categories of AIFs, in relation to their investment in listed equities. Securities and Exchange Board of India. Retrieved from *https://www.sebi.gov.in/legal/circulars/dec-2019/stewardship-code-for-all-mutual-funds-and-all-categories-of-aifs-in-relation-to-their-investment-in-listed-equities_45451.html*.

75. Securities and Exchange Board of India (SEBI). (2021). Business Responsibility and Sustainability Reporting Format: Annexure I. Securities and Exchange Board of India (SEBI). Retrieved from: *https://www.sebi.gov.in/sebi_data/commondocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1_p.PDF*.

76. Securities and Exchange Board of India (SEBI). (2021). Guidance Note for Business Responsibility and Sustainability Reporting Format: Annexure II. Securities and Exchange Board of India (SEBI). Retrieved from: *https://www.sebi.gov.in/sebi_data/commondocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure2_p.PDF*.

77. Securities and Exchange Board of India (SEBI). (2023). BRSR Core - Framework for assurance and ESG disclosures for value chain. Securities and Exchange Board of India (SEBI). Retrieved from: *https://www.sebi.gov.in/legal/circulars/jul-2023/brsr-core-framework-for-assurance-and-esg-disclosures-for-value-chain_73854.html*.

78. Securities and Exchange Board of India (SEBI). (2024). Meeting files - December 2024. Securities and Exchange Board of India. Retrieved from *https://www.sebi.gov.in/sebi_data/meetingfiles/dec-2024/1735040682024_1.pdf*.

79. Securities and Exchange Board of India (SEBI). (2021). Business responsibility and sustainability reporting by listed entities. Securities and Exchange Board of India. Retrieved from: *https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html*.

80. Securities and Exchange Board of India (SEBI). (2023). Master circular for ESG rating providers (ERPs). Securities and Exchange Board of India. Retrieved from: *https://www.sebi.gov.in/legal/master-circulars/jul-2023/master-circular-for-esg-rating-providers-erps-_73856.html*.

81. International Organization of Securities Commissions (IOSCO). (2021). Environmental, Social and Governance (ESG) ratings and data products providers, Final Report. International Organization of Securities Commissions. Retrieved from: *https://www.iosco.org/library/pubdocs/pdf/IOSCOPD690.pdf*.

82. Securities and Exchange Board of India (SEBI). (2023). New category of mutual fund schemes for Environmental, Social and Governance ("ESG") investing and related disclosures by mutual funds. Securities and Exchange Board of India. Retrieved from: *https://www.sebi.gov.in/legal/circulars/jul-2023/new-category-of-mutual-fund-schemes-for-environmental-social-and-governance-esg-investing-and-related-disclosures-by-mutual-funds_74186.html*.

83. Ibid.

84. Ibid.

85. Ibid.

86. Securities and Exchange Board of India (SEBI). (2022). SEBI constitutes advisory committee on Environmental, Social and Governance (ESG) matters. Securities and Exchange Board of India. Retrieved from: *https://www.sebi.gov.in/media/press-releases/may-2022/sebi-constitutes-advisory-committee-on-environmental-social-and-governance-esg-matters_58794.html*.

87. Securities and Exchange Board of India (SEBI). (2023). Annual Report 2022-23. Securities and Exchange Board of India. Retrieved from: *https://www.sebi.gov.in/reports-and-statistics/publications/aug-2023/annual-report-2022-23_74990.html.*

88. International Organization of Securities Commissions (IOSCO). (2021). Recommendations on sustainability-related practices, policies, procedures, and disclosure in asset management: Final report. International Organization of Securities Commissions. Retrieved from: *https://www.iosco.org/library/pubdocs/pdf/IOSCOPD688.pdf*.

89. Ministry of Finance, Government of India. (2023). Budget Highlights 2023-24. Union Budget. Retrieved from *https://www.indiabudget.gov.in/doc/bh1.pdf*.

90. PricewaterhouseCoopers (PwC). (2017). IFRS, US GAAP, Ind AS, and Indian GAAP - Similarities and differences. PricewaterhouseCoopers. Retrieved from: *https://www.pwc.in/assets/pdfs/publications/2017/ifrs-us-gaap-ind-as-and-indian-gaap-similarities-and-differences.pdf*. Ernst & Young (EY). (2023). ISSB issues IFRS S2 new climate-related disclosure standard. Ernst & Young. Retrieved from: *https://www.ey.com/en_gl/ifrs/what-you-need-to-know-about-new-issb-standard-ifrs-s2*.

91. Securities and Exchange Board of India (SEBI). (2024). Recognised Foreign Portfolio Investors (FPIs). Securities and Exchange Board of India. Retrieved from *https://www.sebi.gov.in/sebiweb/other/OtherAction.do?doRecognisedFpi=yes&intmId=23*.

92. SBI Funds Management Limited. (2024). SBI Funds Management Annual Report 2023-24. SBI Mutual Fund. Retrieved from *https://www.sbimf.com/annual-financial-reports*.

93. Ibid.

94. UTI Asset Management Company. (2024). Annual Report 2023-24. UTI Mutual Fund. Retrieved from *https://d3ce1o48hc5oli.cloudfront.net/s3fs-public/2024-06/UTI%20AMC%20AR%202023-24_C2C_2962024_v4_compressed_hyperlinked.pdf?VersionId=bbjCT4aWgZ-rg7EzJx3RyhnQBKvc_wOc9*.

95. Kotak Mahindra Mutual Fund. (2024). About Us. Kotak Mahindra Mutual Fund. Retrieved from *https://www.kotakmf.com/aboutus*.

96. Kotak Mahindra Asset Management Company Limited. (2024). Annual Report FY 2023-24. Kotak Mahindra Mutual Fund. Retrieved from *https://www.kotak.com/content/dam/Kotak/investor-relation/Financial-Result/Annual-Reports/FY-2024/subsidiaries/Kotak-Mahindra-Asset-Management-Company-Limited_FY2023-24.pdf*.

97. Nippon Life India Asset Management Limited. (2024). Annual Report 2023-2024. Nippon India Mutual Fund. Retrieved from *https://mf.nipponindiaim.com/AboutUs/FinancialReports/FinancialReports/Nippon-Life-India-Asset-Management-Limited-Annual-Report-2023-2024.pdf*.

98. SBI Mutual Fund. (2023). Annual Report 2022-23. SBI Mutual Fund. Retrieved from https://www.sbimf.com/docs/default-source/scheme-portfolios/default-library/scheme-annual-report-2022-23210267ce86e74e4b97761d439a564384.pdf?sfvrsn=bae52901_2.

99. SBI Mutual Fund. (2024). SBI ESG Exclusionary Strategy Fund. SBI Mutual Fund. Retrieved from: https://www.sbimf.com/sbimf-scheme-details/sbi-esg-exclusionary-strategy-fund-1.

100. https://www.sbimf.com/docs/default-source/esg-fund-documents/stewardship-report-2023-24.pdf.

101. SBI Mutual Fund. (2023). Annual Report 2022-23. SBI Mutual Fund. Retrieved from https://www.sbimf.com/docs/default-source/scheme-portfolios/default-library/scheme-annual-report-2022-23210267ce86e74e4b97761d439a564384.pdf?sfvrsn=bae52901_2.

102. DSP Mutual Fund. (2022). SID of DSP World Energy Fund. DSP Mutual Fund. Retrieved from https://www.dspim.com/media/pages/downloads/f64b744749-1723479226/sid-of-dsp-world-energy-fund.pdf.

103. DSP Investment Managers. (2022). KIM of DSP Natural Resources & New Energy Fund. DSP Mutual Fund. Retrieved from https://www.dspim.com/media/pages/downloads/29c5f0ff57-1723479157/37.-kim_dsp-natural-resources-new-energy-fund.pdf.

104. Nippon India Mutual Fund. (2023). Consolidated Financial Statements 2022-23. Nippon India Mutual Fund. Retrieved from https://mf.nipponindiaim.com/AboutUs/FinancialReports/FinancialReports/Nippon-C2C-190623-low-res.pdf.

105. UTI Asset Management Company. (2023). ESG Progress Report: December 2023. UTI Mutual Fund. Retrieved from https://d3ce1o48hc5oli.cloudfront.net/s3fs-public/2024-02/UTI%20ESG%20PROGRESS%20DEC%202023.pdf?VersionId=dAo24p3XppyNBpDIRMahAsA1Ht-58LMEF.

106. Investing in Climate Chaos. (2024). Data on Sustainability and Climate Change Investments: UTI Asset Management Co. Ltd. Investing in Climate Chaos. Retrieved from: https://investinginclimatechaos.org/data?org=UTI+Asset+Management+Co+Ltd.

107. HDFC Asset Management Company. (2023). HDFC AMC & IRM Press Release. HDFC Asset Management Company. Retrieved from: https://files.hdfcfund.com/s3fs-public/media-center/2023-12/HDFC%20AMC%20%26%20IRM%20Press%20Release.pdf.

108. Mok, K. (2018). Environmental Beta or How Institutional Investors Think about Climate Change and Fossil Fuel Risk. Journal of Sustainable Finance & Investment, 8(3), 233-253. Retrieved from: https://www.tandfonline.com/doi/epdf/10.1080/24694452.2018.1489213?needAccess=true.

109. Khan, S. et al. (2020). Climate Change and the Role of Financial Institutions in Transition Risk: A Review of Policy, Literature, and Practice. Climatic Change, 162(2), 591-607. Retrieved from: https://link.springer.com/article/10.1007/s10584-019-02542-2.

110. Ibid.

111. Mok, K. (2018). Environmental Beta or How Institutional Investors Think about Climate Change and Fossil Fuel Risk. Journal of Sustainable Finance & Investment, 8(3), 233-253. Retrieved from: https://www.tandfonline.com/doi/epdf/10.1080/24694452.2018.1489213?needAccess=true.

112. McDonnell, C., Rempel, A., & Gupta, J. (2022). Climate action or distraction? Exploring investor initiatives and implications for unextractable fossil fuels. Energy Research & Social Science, 92. Retrieved from: https://www.sciencedirect.com/science/article/pii/S2214629622002729?ref=pdf_download&fr=RR-2&rr=8f2953664d6e415e.

113. McDonnell, C., & Gupta, J. (2024). Beyond divest vs. engage: A review of the role of institutional investors in an inclusive fossil fuel phase-out. Climate Policy, 24(3). Retrieved from: https://www.tandfonline.com/doi/epdf/10.1080/14693062.2023.2261900?needAccess=true.

114. Ibid.

115. Balp, G., & Strampelli, G. (2022). Institutional investor ESG engagement: The European experience. European Business Organization Law Review, 23. Retrieved from: https://link.springer.com/content/pdf/10.1007/s40804-022-00266-y.pdf.

116. McDonnell, C., Rempel, A., & Gupta, J. (2022). Climate action or distraction? Exploring investor initiatives and implications for unextractable fossil fuels. Energy Research & Social Science, 92. Retrieved from: https://www.sciencedirect.com/science/article/pii/S2214629622002729?ref=pdf_download&fr=RR-2&rr=8f2953664d6e415e.

117. Mok, K. (2018). Environmental Beta or How Institutional Investors Think about Climate Change and Fossil Fuel Risk. Journal of Sustainable Finance & Investment, 8(3), 233-253. Retrieved from: https://www.tandfonline.com/doi/epdf/10.1080/24694452.2018.1489213?needAccess=true.

118. Morningstar. (2024). AMFI average AUM by fund house. Morningstar. Retrieved from: https://www.morningstar.in/tools/mutual-fund-amfi-average-aum-by-fund-house.aspx.

Annexures

Annexure I: AUM of Mutual Fund Companies as of March 2024[118]

Table 3 Top 12 AMCs' Total AUM and Equity

Mutual Fund Company	Total AUM (excluding overseas FoF) (₹ crore)	Equity Mutual Fund AUM (₹ crore)
SBI Mutual Fund	928,868	311,952
ICICI Prudential Mutual Fund	696,341	385,202
HDFC Mutual Fund	622,603	397,000
Nippon India Mutual Fund	431,332	212,252
Kotak Mahindra Mutual Fund	346,000	155,000
Aditya Birla Sun Life Mutual Fund	329,247	152,014
UTI Mutual Fund	291,000	84,777
Axis Mutual Fund	275,387	176,321
Mirae Asset Mutual Fund	162,400	138,210
DSP Mutual Fund	143,937	89,728
Tata Mutual Fund	147,473	136,140
Bandhan Mutual Fund	139,365	50,201

Source: Compiled by authors from SEBI and AMFI

Annexure II. Mapping of CRH Criteria with IFRS S2 Climate-related Disclosures

Table 4 Criteria Mapping to IFRS S2 Climate-related Disclosures

CRH mapping	Criteria	Description	IFRS S2—climate
Governance	Criteria 1	Responsible Investment	IFRS S2 Volume 15. Metrics FN-AC-410a.1. Para 1.1.2, 1.3, 1.4 IFRS S2 Strategy 9(d), 16 (d)
Risk Management	Criteria 2	ESG Risk Integration	IFRS S2 Risk management Para 24, 25(c) IFSR Volume 15 FN-AC-410a.2 4, 4.1, 4.1.1, 4.1.2, 4.1.3, 9, 9.1, 9.2, 9.3, 10, 10.1.3, 13, 13.1, 13.1.1, 13.1.2
Governance	Criteria 3	Board Oversight	IFRS S2 Governance. Para.6.(a)(i), (iv), Para.6.(b)(i),(ii) IFRS S2 Volume 15. FN-AC-410a.2. Para. 5, 5.1, 5.1.1, 5.1.2, 5.1.3, 10.1, 10.1.1, 10.1.2
Metrics	Criteria 4	Sustainable Investment	IFRS S2 Volume 15 FN-AC-410a.1. Para 1, 1.2, 1.3, 1.4, 1.5, 3 FN-AC-410a.2. Para 1, 1.3, 1.3.1, 1.3.2, 1.3.3, 1.3.4 IFRS S2 Strategy 16 (c) IFRS S2 Risk Management 29 (e)
Strategy	Criteria 5	Scenario Analysis	IFRS S2 Strategy Para 22. (b). (i) (1), (2), (3), (4), (5), (6), (7), (ii) (1), (2), (3), (4), (5) (iii) IFRS S2 Risk Management Para 25 (a) (ii), (b) IFRS S2 Volume 15 Metrics FN-AC-410a.2. Para 6
Strategy	Criteria 6	Emissions Targets	IFRS S2 Strategy Para 9 (c), Para 14 (a) (iv), (v) IFRS S2 Metrics Para 33 (a), (b), (c), (d), (e), (f), (g), (h), 34 (a), (b), (c), (d), 36 (a), (b), (c), (d), (e) (i), (ii), (iii), (iv)
Metrics and Target	Criteria 7	Emissions Reporting	IFRS S2 Metrics Para 29 (a) (i) (1), (2), (3), (iii) (1), (2), (3), (vi) (1), (2) Asset Management B61 (a), (b), (c), (d)
Governance	Criteria 8	Coal Policy	IFRS S2 Strategy Para.14.a.(i), 16 (c) (i)
Governance	Criteria 9	Associations	IFRS S2 Metrics Para 33 (h)
Risk Management	Criteria 10	Active Ownership	IFSR S2 Volume 15 Metrics FN-AC-410a.3. 1, 1.1, 1.1.1, 1.1.2, 1.2, 1.2.1, 1.3, 1.3.1, 2, 3 , 4, 4.1, 4.1.1, 4.1.2, 4.1.3, 4.2, 4.2.1, 5, 6.1, 6.1.1, 6.1.2,. 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.7, 6.1.8, 8, 8.1, 8.2

Source: Authors' analysis

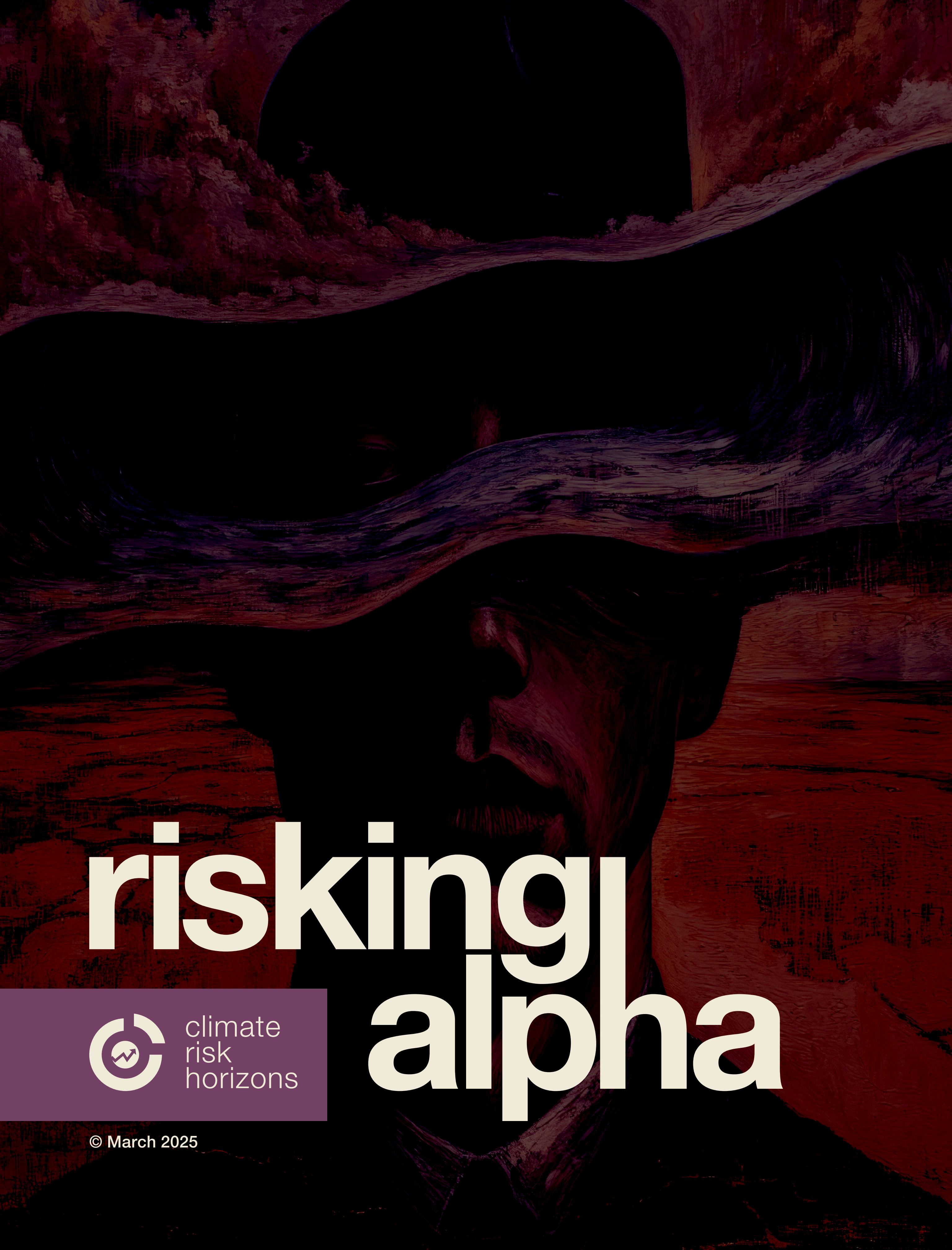
Glossary

Terminology	Description	Source
Absolute Emissions	Emissions attributed to a financial institution's lending and investing activity. Expressed in tonnes CO_2e.	*PCAF Global GHG Accounting*
Active Ownership	Active ownership is the use of the rights and position of ownership to influence the activity or behaviour of investees. This can be applied differently in each asset class. For listed equities it includes both engagement and (proxy) voting (including filing shareholder resolutions). For other asset classes (e.g. fixed income), engagement may still be relevant while (proxy) voting may not.	*PRI Reporting Framework Main definitions*
Climate Stress Test	A climate stress test is a forward-looking exercise designed to measure a financial institution's exposure to climate risks, using scenario analysis including severe climate risks, to assess the potential impact of climate change on the institution's business model.	*UNEP FI - Comprehensive Good Practice Guide to Climate Stress Testing*
Climate-Related Risks	Potential negative impacts of climate change on an organisation, divided into two major categories: physical risks and transition risks. Physical risks can be event-driven (acute), such as increased severity of extreme weather events, e.g., cyclones, droughts, floods, and fires. They can also relate to longer-term (chronic) shifts in precipitation and temperature, increased variability in weather patterns or other long-term changes such as sea level rise. Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses and reputational considerations. This definition is in line with the 2021 TCFD guidance document "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures".	*UNPRI Reporting Framework Glossary*
Emission Scopes	The GHG Protocol Corporate Accounting and Reporting Standard classifies an organization's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting organization, including both upstream and downstream emissions	*PCAF Global GHG Accounting*
Engagement	Interactions and dialogue conducted between an investor, or their service provider and a current or potential investee (e.g. company), or a non-issuer stakeholder (e.g. an external investment manager or policy maker) to improve practice on an ESG factor, make progress on sustainability outcomes, or improve public disclosure. In private markets, engagement also refers to investors' dialogue with management teams and/or Board of portfolio companies and/or real assets.	*UNPRI Reporting Framework Glossary*
Equity	The ownership of banks or investors in a company or project. There are various types of equity, but equity typically refers to shareholder equity, which represents the amount of money that would be returned to a company's shareholders if all company assets were liquidated and all company debt were paid off.	*PCAF Global GHG Accounting*

Terminology	Description	Source
ESG Audit	The testing and verification of claims on ESG factors and sustainability outcomes for an organisation's fund, product, or policy, by someone independent of that organisation.	*UNPRI Reporting Framework Glossary*
ESG Factors	Environmental, social and governance issues that are identified or assessed in responsible investment processes. • Environmental factors are issues relating to the quality and functioning of the natural environment and natural systems. • Social factors are issues relating to the rights, well-being, and interests of people and communities. • Governance factors are issues relating to the governance of companies and other investee entities.	*UNPRI Reporting Framework Glossary*
ESG Integration	Ongoing consideration of ESG factors within an investment analysis and decision-making process with the aim to improve risk-adjusted returns.	*UNPRI Reporting Framework Glossary*
ESG Opportunities	An ESG opportunity arises due to changes in ESG factors that might stem from regulation, technology, consumer demand development, or from other drivers that affect the current and future financial, economic, reputational and legal prospects of an investment opportunity. The ESG opportunity may also result in an improved sustainability outcome for the environment, the community or society.	*UNPRI Reporting Framework Glossary*
ESG Risks	An environmental, social or governance risk is a factor or issue that may expose a security, issuer, investment or asset class to unexpected changes in its current and future financial, economic, reputational and legal situation. Investors could reasonably expect an ESG risk to be disclosed at a corporate or issuer level, as its omission would result in an incomplete understanding of current or future financial prospects.	*UNPRI Reporting Framework Glossary*
ESG/ Sustainability Marketed Funds or Products	Investment products that are explicitly marketed, labelled, or in other ways claimed as considering ESG factors or sustainability outcomes in their objectives, investment process, or stewardship activities. These products could be segregated or pooled products for either the retail or institutional market.	*UNPRI Reporting Framework Glossary*
Financed Emissions	Absolute emissions that banks and investors finance through their loans and investments.	*PCAF Global GHG Accounting*
Greenhouse Gas (GHG) Emissions	The seven gases mandated under the Kyoto Protocol and to be included in national inventories under the United Nations Framework Convention on Climate Change (UNFCCC)—carbon dioxide (CO_2), methane (CH4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF), and nitrogen trifluoride (NF_3).	*PCAF Global GHG Accounting*
Net Zero	Net Zero means cutting carbon emissions to a small amount of residual emissions that can be absorbed and durably stored by nature and other carbon dioxide removal measures, leaving zero in the atmosphere.	*UN Climate Action*

Terminology	Description	Source
Physical (climate) Risks	Physical risks emanating from climate change can be event-driven (acute), such as increased severity of extreme weather events, e.g. cyclones, droughts, floods, and fires. They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns or other long-term changes such as sea level rise. These risks may often be more easily identifiable in alternative assets, such as infrastructure and property. This definition is in line with the 2021 TCFD guidance document "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures".	*UNPRI Reporting Framework Glossary*
Proxy Voting	The exercise of voting rights on management and/or shareholder resolutions to formally express approval, or disapproval, on relevant matters. This includes being responsible for how votes are cast on topics that management raises and submitting resolutions as a shareholder for other shareholders to vote on, in jurisdictions where this is possible. Investors can vote in person during an Annual General Meeting (AGM), or by proxy – using a person or firm, such as an investment manager, to vote on their behalf.	*UNPRI Reporting Framework Glossary*
Responsible Investment Policy	A policy capturing an organisation's intention and approach to incorporating ESG factors in investment decisions and stewardship and/or to take action on sustainability outcomes in line with global goals and thresholds. An organisation's responsible investment policy can take many shapes. It may involve embedding responsible investment considerations into the organisation's main investment policy. It could also consist of a standalone responsible investment policy. Alternatively, it could be captured in high-level specific public statements, commitments, or codes of business practice to which the organisation adheres.	*UNPRI Reporting Framework Glossary*
Risk Management	The processes the organisation uses to identify, assess and manage risks.	*UNPRI Reporting Framework Glossary*
Scenario Analysis	Identifying and assessing the potential implications of plausible future states, under conditions of uncertainty. Scenarios are hypothetical constructs and not designed to deliver precise outcomes or forecasts. Instead, they provide a way for organisations to consider how the future might look if certain trends continue or certain conditions are met. For example, in the case of climate change, scenarios allow an organisation to explore and understand how various combinations of climate-related risks, both transition and physical risks, may affect its businesses, strategies, and financial performance over time. Scenario analysis can be qualitative, relying on descriptive and written narratives, or quantitative, relying on numerical data and models, or some combination of both.	*UNPRI Reporting Framework Glossary*
Scope 1 Emissions	Direct GHG emissions that occur from sources owned or controlled by the reporting company—i.e., emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc	*PCAF Global GHG Accounting*
Scope 2 Emissions	Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company. Scope 2 emissions physically occur at the facility where the electricity, steam, heating, or cooling is generated.	*PCAF Global GHG Accounting*
Scope 3 Category 15 (investments) Emissions	This category includes scope 3 emissions associated with the reporting company's loans and investments in the reporting year, not already included in scope 1 or scope 2.	*PCAF Global GHG Accounting*

Terminology	Description	Source
Scope 3 Emissions	All other indirect GHG emissions (not included in Scope 2) that occur in the value chain of the reporting company. Scope 3 can be broken down into upstream emissions and downstream emissions: Upstream emissions include all emissions that occur in the life cycle of a material/product/service up to the point of sale by the producer, such as from the production or extraction of purchased materials. Downstream emissions include all emissions that occur as a consequence of the distribution, storage, use, and end-of-life treatment of the organization's products or services.	*PCAF Global GHG Accounting*
Screening of Investments	The definitions of the three types of screening in the Reporting Framework are: a. **Negative/exclusionary screening:** The exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria; b. **Positive/best-in-class screening:** Investment in sectors, companies or projects selected for positive ESG performance relative to industry peers; c. **Norms-based screening:** Screening of investments against minimum standards of business practice based on international norms. Norms-based screening involves either: • Defining the investment universe based on investees' performance on international norms related to responsible investment/ESG issues, or • Excluding investees from portfolios after investment if they are found following research, and sometimes engagement, to contravene these norms. • Such norms include but are not limited to the UN Global Compact Principles, the Universal Declaration of Human Rights, International Labour Organization standards, the United Nations Convention Against Corruption and the OECD Guidelines for Multinational Enterprises.	*PRI Reporting Framework Main definitions*
Stewardship	The use of influence by investors to protect and enhance overall long-term value, including the value of common economic, social and environmental assets, on which returns and client and beneficiary interests depend.	*UNPRI Reporting Framework Glossary*
Stranded Asset	The premature write-off of assets incompatible with a sustainable economy.	*UNEP FI - Comprehensive Good Practice Guide to Climate Stress Testing*
Sustainability Themed Investing	Investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture).	*PRI Reporting Framework Main definitions*
Third-party Assurance	An evaluation of an organisation's data and/or processes against an appropriate standard, using pre-defined criteria, conducted by an independent entity or individual. This evaluation should result in a written conclusion, stating the level of confidence that the intended audience can have in the data or process.	*UNPRI Reporting Framework Glossary*
Transition Risks	Climate-related risks associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses and reputational considerations. This definition is in line with the 2021 TCFD guidance document "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures".	*UNPRI Reporting Framework Glossary*



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