

# The Evolution of ESG Credit at Apollo (Volume II): Driving Value Creation at Scale

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We believe that a credible environmental, social, and governance (ESG) platform is rooted in the fundamental investment process, aligned with Apollo’s investment philosophy and fiduciary obligations of driving value creation and responding to diverse stakeholder needs. Accordingly, we have built a platform that empowers all investment professionals, not only those with ESG and sustainability in their title. Our integrated platform enables investment team collaboration with a dedicated ESG team to identify applicable risks and assess emerging opportunities. This whitepaper, which provides a comprehensive update to our inaugural ESG Credit Whitepaper (published in May 2023), builds on Apollo’s longstanding commitment to transparency and expertise in credit strategies by providing an in-depth look into the ESG credit platform’s foundation and development.

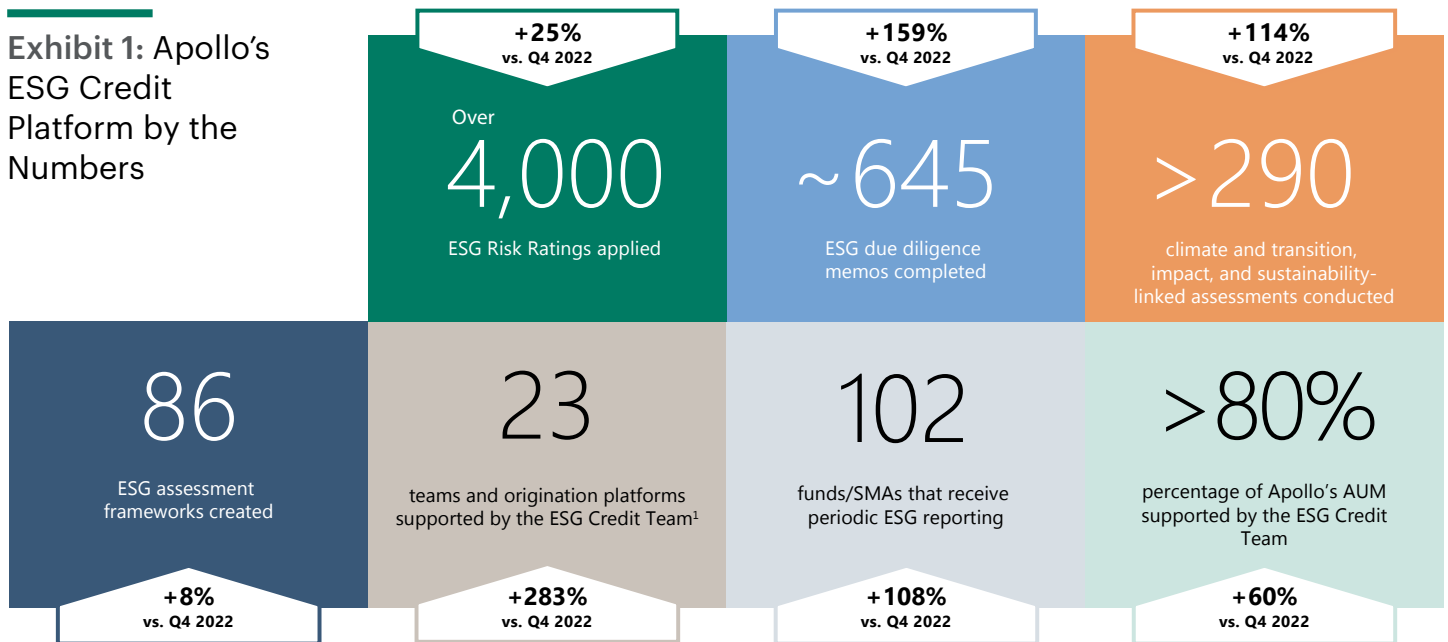
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KEY TAKEAWAYS

- ➔ **Since the publication of our inaugural ESG Credit Whitepaper, the Apollo ESG Credit Team has significantly scaled coverage and support of teams and strategies across Apollo and many of its origination platforms. This scale has been achieved by adapting existing frameworks and expanding our partnership with additional teams across the firm and our platforms.**
- ➔ **Apollo’s ESG Risk Rating framework is robust and scalable in its assessment process, designed to capture material ESG issues to investments. In addition to corporate, infrastructure, aviation, credit real estate, and sovereign holdings, Apollo’s ESG Risk Rating is now also being utilized for many asset-backed finance deals and a broader set of real estate transactions, as well as across Apollo’s AAA and S3 Platforms.**
- ➔ **With enhanced ESG due diligence, Apollo’s investment teams are equipped to assess an issuer’s ESG strategy, performance, risks, and opportunities at an early stage in the investment life cycle. In 2023, we evolved our ESG due diligence process to have greater relevance across a wider variety of sectors, teams, and investment disciplines, underscoring the flexibility of our framework.**
- ➔ **We believe that the credit markets in which Apollo participates can play a meaningful role in encouraging change in issuer disclosure, behavior, and decision-making,**

- thereby driving value creation. In 2023, Apollo’s ESG Credit Team established four key engagement pillars: transparency and disclosure, thematic engagement, financing the energy transition, and value creation.**
- ➔ **Apollo remains steadfast in our commitment to utilize our deep experience to provide capital solutions that can drive the transition to a more sustainable future and expand opportunities for companies and communities. Apollo’s credit platform led on a number of opportunities and introduced innovative financing structures in 2023 that helped contribute towards Apollo’s climate and transition financing targets.**
- ➔ **Apollo remains committed to participating in initiatives that aim to advance ESG integration across the private credit markets and support our clients’ reporting needs. This is demonstrated by Apollo’s work as the inaugural chair of the ESG Integrated Disclosure Project (“ESG IDP”), a private credit initiative which continues to gain momentum and receive support from a growing number of financial market participants.**
- ➔ **As part of our longstanding commitment to transparency, Apollo’s credit business continues to expand the scope of reporting, leveraging both internal and external data to generate periodic ESG reporting for an increasing number of Apollo-managed funds and accounts.**

Exhibit 1: Apollo’s ESG Credit Platform by the Numbers

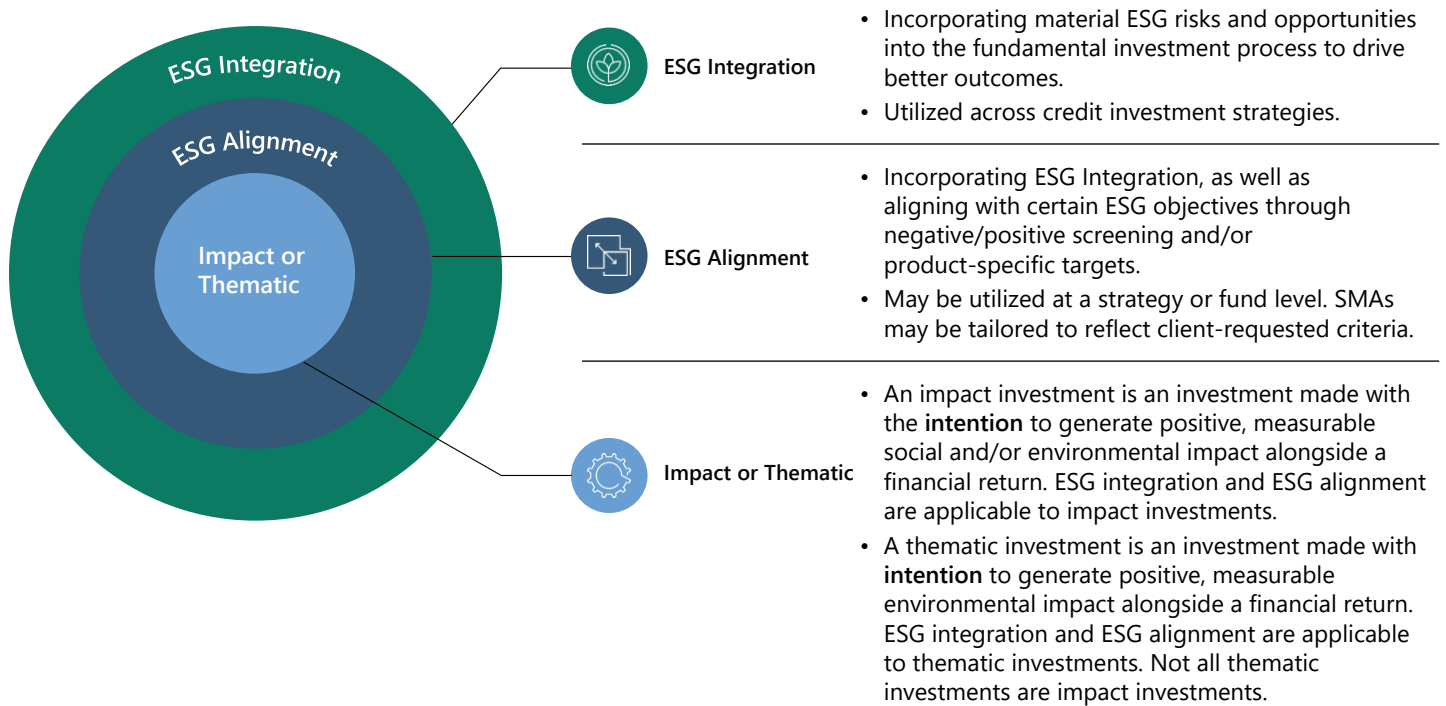


As of December 31, 2023. There can be no assurance that the goals and targets described herein will be achieved as expected or at all. (1) Teams include: Multi-credit, Opportunistic, Direct Origination/Performing, Asset Backed Finance, Credit Real Estate, Hybrid Value, Infrastructure, S3 platform, AAA platform, and various real estate strategies. Origination platforms include Midcap, Redding Ridge, Eliant, Petros PACE, Capteris, PK AirFinance, MaxCap, Atlas, and Apterra.

## ESG credit philosophy and key definitions

At Apollo, our ESG credit platform is fundamentally rooted in value creation and meeting stakeholder needs. We take a clear and concise approach to ESG by defining its various facets and relevance to our credit business (Exhibit 2). Apollo recognizes that environmental, social, and governance issues can affect the investment risk and performance of the companies in which Apollo-managed funds invest. Where applicable and appropriate, these considerations are incorporated as one of the core components of the investment process, and in some cases, certain strategies may also employ ESG alignment, thematic, or impact approaches. We believe this can enable investment teams to better incorporate such material risks and opportunities into the fundamental investment process, encourage positive change in issuer behavior and disclosure, and help provide robust solutions that enable clients to pursue their diverse range of objectives.

### Exhibit 2: Apollo’s approach to ESG within the credit platform



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## Apollo's ESG credit platform

We believe a high level of coordination and strategic alignment is vital to the success of Apollo's ESG strategy. While the ESG Credit Team provides guidance, training, and support, the investment teams are responsible for fundamental oversight of investment decisions. Likewise, ESG Credit frameworks are created and implemented via a highly iterative and collaborative partnership between the investment teams and ESG Credit Team (Exhibit 3).

### Exhibit 3: Apollo's ESG credit platform capabilities

Capability	Ownership	Support and Review
ESG Risk Rating Framework	Investment teams apply ESG Risk Rating frameworks or methodology to holdings	ESG Credit Team oversees framework development/rating application and provides feedback to investment teams
ESG Due Diligence Framework	Investment teams apply ESG Due Diligence to new private and direct origination deals	ESG Credit Team oversees due diligence framework development and application and provides feedback to investment teams
ESG Stewardship and Engagement	Engagement may be done unilaterally or collectively by the ESG Credit Team and investment teams	ESG Credit Team provides engagement topic suggestions to investment team
Sustainability-Linked Ambition Assessment Framework	ESG Credit Team applies Sustainability-Linked Ambition Assessment	Investment teams provide supporting information and insight
Impact and Sustainable Investment Assessment Framework <sup>(1)</sup>	ESG Credit Team applies Impact and Sustainable Investment Assessments	Investment teams provide supporting information and insight
Climate and Transition Assessment Framework <sup>(1)</sup>	ESG Credit Team applies Climate and Transition Investment Assessments	Investment teams provide supporting information and insight

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## SECTION 1

### ESG Risk Ratings: A Materiality-Based Framework

Apollo’s ESG Risk Rating framework was designed with a focus on sector-specific, materiality-based considerations, and relativity to sub-sector peers. The framework covers more than 80 sub-sectors and draws upon internationally recognized materiality frameworks and standards, including the Sustainability Accounting Standards Board (SASB) and United Nations Sustainable Development Goals (SDGs).

Our ESG Risk Rating framework initially covered corporate credit, credit real estate, infrastructure, aviation, collateralized loan obligations, and certain other securitized structures. In 2023, we adapted our ESG Risk Rating process to additional asset classes, including many hard-asset and financial-asset backed finance transactions, a broader set of real estate transactions, Apollo’s Sponsor and Secondary Solutions (S3) Platform, and the Apollo Aligned Alternatives (AAA) platform. Apollo’s ESG Credit Team has also worked closely with many of our affiliated credit platforms in seeking to deliver a more harmonized assessment of ESG risk across Apollo’s credit ecosystem.

### Case Study: ESG Risk Ratings (Corporate Credit)

<b>5.00–4.01</b> Very High ESG Risk	<b>4.00–3.01</b> High ESG Risk	<b>3.00–2.01</b> Average ESG Risk	<b>2.00–1.01</b> Low ESG Risk	<b>1.00–0.00</b> Very Low ESG Risk
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- 1** Sub-sector materiality map/scorecard selected and peer set established
- 2** ESG Risk Ratings assigned to subthemes most material to investment risk for the selected sector
- 3** Momentum scores assigned to pillars, enabling reflection of forward-looking trajectory
- 4** Overall and Pillar ESG Risk Ratings automatically generated by weight
- 5** Brief commentary provided to support individual pillar ratings and overall ESG rating assigned

### Subsector: Banks 1

	WEIGHT	ESG RISK RATING	RATING VALUE	MOMENTUM
		(Very High, High, Average, Low, Very Low)	0–5	(Very Positive, Positive, Neutral, Negative or Very Negative)
<b>Sector-Based ESG Overall Score and Momentum</b>	<b>100%</b>	<b>Low</b>	<b>1.75</b>	<b>Neutral</b>
<b>ESG Overall Score Comments</b>	Company is a leading bank in South America controlled by its parent (>67% stake). The company has good governance structures in place and best-in-class environmental risk management. The bank’s governance and cyber risk management benefit from its parent.			
<b>Environmental Pillar Overall Score and Momentum</b>	<b>20%</b>	<b>Average</b>	<b>2.25</b>	<b>Neutral</b>
<b>Environmental Score Comments</b>	The company provides GHG reporting and has a commitment to net zero as part of the parent. The bank offers a good suite of products to capitalize on demand for green loans.			
<b>Environmental Themes</b>				
GHG Emissions (Carbon) & Trajectory	5%	Low	1.5	
Energy Management	15%	Average <span style="font-size: 1.5em; font-weight: bold; color: #0070c0;">2</span>	2.5	
<b>Social Pillar Overall Score and Momentum</b>	<b>30%</b>	<b>Low</b>	<b>1.83</b>	<b>Neutral <span style="font-size: 1.5em; font-weight: bold; color: #0070c0;">3</span></b>
<b>Social Score Comments</b>	The company has low turnover and good diversity relative to other emerging market (EM) banks. The bank’s cyber risk management benefits from its parent.			
<b>Social Themes</b>				
Human Capital Management (Engagement & DEI)	10%	Low	1.5	
Cyber Security & Data Privacy	10%	Low	1.5	
Product Social/Societal Impact	10%	Average	2.5	
<b>Governance Pillar Overall Score and Momentum</b>	<b>50%</b>	<b>Low</b>	<b>1.50</b>	<b>Neutral <span style="font-size: 1.5em; font-weight: bold; color: #0070c0;">4</span></b>
<b>Governance Score Comments</b>	The quality of management is high as evidenced by the bank’s historically agile strategy in the face of economic cycles. >50% of board members are independent which is high vs EM peers. The bank has a solid governance framework, which is further strengthened by the oversight of its parent.			
<b>Governance Themes</b>				
Board or Management Quality	20%	Low	1.5	
Business Ethics and Transparency	15%	Low	1.5	

As of January 2023. The case studies provided herein have been provided for illustrative purposes only and were selected using an objective non-performance based criteria to illustrate our ESG Risk Rating approach and capabilities. Additional information is available upon request.

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## Case Study: ESG Risk Ratings (Aircraft Securitization)

	E	S	G	High ESG Risk Score Rationale
Airline 1	Average	Average	Average	No High ESG Risk scores.
Airline 2	High	Average	Average	1x 10.5-year-old current tech widebody aircraft.
Airline 3	Average	High	Average	Currently being investigated over flight cancellations and delays. Had a recent engine malfunctioned and runway incident, although no injuries were reported.
Airline 4	Average	Average	Very High	The Airline is 100% owned by the [REDACTED] government. In [REDACTED], decision-making remains centralized under the ruling party, and policy responses are difficult to predict.
Airline 5	Average	Average	Average	No High ESG Risk scores.
Airline 6	Average	Average	High	The company is locally listed and controlled by the [REDACTED] family. The board and audit committee lack independence and the roles of the CEO and Chair are combined.
Airline 7	Average	Average	Average	No High ESG Risk scores.
Airline 8	High	High	Average	4 aircrafts at average age of 11.5 years old. 3x current tech narrowbodies and 1x current tech widebody. The company has a history of accidents, and its safety rating was recently downgraded by the local Ministry of Land, Infrastructure and Transport.
Airline 9	High	Low	Low	2x 737-800 aircrafts with an average age of 10.5 years old. Current tech narrowbody aircraft.
Airline 10	Average	High	Average	The Federal Aviation Administration (FAA) scored the airline relatively poorly in their International Civil Aviation Organization (ICAO) Safety Assessment.
Airline 11	High	Average	Average	2x 737-900ER aircrafts with an average age of 10.5 years. Current tech narrowbody aircrafts.
Airline 12	Low	Low	Average	No High ESG Risk scores.
Airline 13	Low	Low	Average	No High ESG Risk scores.
Airline 14	Average	Average	Average	No High ESG Risk scores.
Airline 15	Average	Average	High	State owned with [REDACTED] government retaining majority ownership of the airline group. 2/3 independent board of directors; 100% male.
Airline 16	Average	Low	Average	No High ESG Risk scores.
Airline 17	High	Average	Average	2x 787-8 aircrafts with an average age of 11.5 years. Next gen widebody aircraft.
<b>Total<sup>1</sup></b>	<b>Average</b>	<b>Average</b>	<b>Average</b>	
<i>PK Air ESG Risk Rating Weighting</i>	<i>40%</i>	<i>40%</i>	<i>20%</i>	
<b>Overall ESG Risk Rating</b>	<b>Average</b>			

As of June 2023. The case studies provided herein have been provided for illustrative purposes only and were selected using an objective non-performance based criteria to illustrate our ESG Risk Rating approach and capabilities. Additional information is available upon request. Certain High ESG Risk Score rationales have been abbreviated.

## Sovereign credit: A materiality-based data-driven ESG rating framework

Apollo’s Sovereign ESG Risk Rating framework has evolved to a data-driven weighted rating system based on material E, S, and G subthemes. Apollo’s ESG Credit Team, sovereign economists and investment risk teams partnered to identify ESG subthemes and related indicators that represent potential risks and opportunities for sovereign creditworthiness. The sovereign ESG Risk Ratings are designed to be comparable to sovereign peers’ ratings, with Developed Market (DM) countries assessed against other DM countries and Emerging Market (EM) countries assessed against other EM countries.

### Case Study: Sovereign ESG Risk Rating



		Weight	ESG RISK RATING (Very High, High, Average, Low, Very Low)	MOMENTUM (Very Positive, Positive, Neutral, Negative or Very Negative)
<b>ESG Overall Score and Momentum</b>		100%	Average	Positive
ESG Overall Score Comments				
<b>Environmental Pillar Overall Score and Momentum</b>			Average	Neutral
Environmental Score Comments				
Environmental Themes				
Energy Transition <b>1</b>			Low	
			Average	
			Low	
	Physical Climate Risk & Pollution		Average <b>2</b>	
			High	
Biodiversity		High		
<b>Social Pillar Overall Score and Momentum</b>			Average <b>3</b>	Neutral
Social Score Comments				
Social Themes				
Demographic Imbalance			Low	
			Very Low	
Income/Opportunity and Inequality			High	
			Very Low	
Access to Basic Services			Average	
			Low	
Human Rights and Political Freedoms			High	
			High	
<b>Governance Pillar Overall Score and Momentum</b>			Average	Positive <b>4</b>
Governance Score Comments <b>5</b>				
Governance Themes				
Institutional Quality			Very High	
			High	
			High	
			High	
Transparency			Very Low	
Sanctions			Average	
			No	

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## SECTION 2

### ESG due diligence and transaction structuring

We believe our enhanced ESG Due Diligence process for new directly originated and private credit transactions – which is performed using Apollo’s ESG Due Diligence Memo – goes beyond just evaluating ESG risks, and can provide a deeper understanding of an issuer’s ESG strategy and performance early in the investment life cycle. This enables investment teams, in collaboration with the ESG Credit Team, to engage with issuers on potential risks and opportunities that could be addressed by embedding a sustainability feature directly into the deal structure.

In 2023, we added features to our ESG Due Diligence Memo to make it more relevant for securitized transaction structures. Under this evolved approach, investment teams determine whether the environmental, social, and governance risks of the securitization differ meaningfully from those of the corporate entity involved in the transaction (i.e. parent, originator, manager, etc.). Where the ESG risks are largely the same, Apollo’s view of ESG risk on the securitization would be aligned with that of the corporate entity. Where the risks differ materially, investment teams have the flexibility to conduct additional due diligence with a focus on the underlying securitization.

### Case Study: Apollo ESG Due Diligence

- 1** Revenue exposure to high-risk activities assessed
- 2** ESG regulatory, compliance, or reputational concerns that may result in material credit risk evaluated

1 Exposure to Certain Sectors or Revenue Involvement	% Revenue
a) Thermal Coal Energy Generation	0%
b) Thermal Coal Mining/Extraction	0%
c) Thermal Coal Transportation (ports, trains, etc.)	0%
d) Metallurgical coal mining	0%
e) Arctic Oil/Gas Drilling and/or Extraction	0%
f) Oil & Gas Shale and Tight Reservoirs	0%
g) Oil Sands	0%
h) Oil and gas pipelines	0%
i) Oil and gas extraction	0%
j) Conventional Weapons	0%
k) Nuclear Weapons	0%
l) Controversial Weapons	0%
m) Private Prisons	0%
n) Nuclear Generation	0%
o) Large-scale hydroelectric power generation	0%
p) Tobacco production	0%
q) Tobacco sales	0%
r) Alcohol production	0%
s) Recreational Cannabis	0%
t) Opioids	0%
u) Adult Entertainment	0%
v) Gambling	0%
w) Payday Lending	0%
x) Debt Collection	0%
y) Non-Sustainable Palm Oil - including palm oil plantation farming	0%
z) Animal Testing (non-pharma) and Fur Trade	0%
aa) Endangered Wildlife	0%
ab) Sovereigns under U.S. or International Sanctions	0%
ac) Activities that threaten biodiversity and/or land use controversies – including large plantations and lumber & pulp (forest logging)	0%
ad) Banned pesticides or chemicals	0%
ae) Speculative soft commodity trading (excludes agricultural and trading companies)	0%
2 Assessment of ESG Regulatory, Litigation/Compliance, and/or Reputational Risks	
a) Has the direct or parent issuer recently been identified in the media for any ESG issue that could pose a reputational risk for stakeholders in the transaction?	No
b) Have any existing or proposed regulations that may result in a material ESG risk for the direct or parent issuer been identified?	No
c) Have any existing or prior litigation/compliance issues that may result in a material ESG risk for the issuer been identified?	No
d) To the best of your knowledge, has the company violated the United Nations Global Compact (UNGC) principles?	No

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## Case Study: Apollo ESG Due Diligence (continued)

- 3** ESG Risk Rating summarized
- 4** Investment teams may leverage existing relationships with issuers and/or sponsors to conduct engagement on ESG issues and gather information on an issuer's ESG strategy, relevant KPIs, and/or performance
- 5** Investment teams identify and incorporate ESG characteristics directly into deal structures, as applicable and appropriate
- 6** Investment teams incorporate ESG considerations into their views on repayment or refinancing risk

### 3 Application of Apollo ESG Risk Rating

a)	Has the preliminary and/or final Apollo ESG Risk Rating and Momentum been assigned to the direct issuer?	Yes
	<b>Please provide overall ESG Risk Rating.</b>	<b>Average ESG Risk</b>
	<b>Please provide overall Momentum.</b>	<b>Neutral</b>
	Please provide rating template rationale.	
	<p>The Manager is an investment firm focused on public and private companies in the global internet, software, consumer and financial technology industries.</p> <p style="text-align: right;">The portfolio is quite diverse, mitigating company-specific risk.</p> <p>The Manager is generally a passive, minority investor, which means that their opportunity for input and influence on ESG-related issues can be limited. However, the Manager has made a push to integrate ESG practices into its investment decisions.</p>	

	Please explain why the rating was applied at the transaction level or parent/originator/manager level.	The fund in scope is the company's flagship fund and therefore we view the ESG risk of the fund to be generally aligned with our view of ESG risk for the manager.
b)	Does the direct issuer have any ESG subthemes that are identified as a High ESG Risk (3.01 to 4.00) or a Very High ESG Risk (4.01 to 5.00)?	Yes
	Please identify those subthemes and whether they are High or Very High ESG Risk (ESG sector must be selected above).	
	Cyber Security & Data Privacy	High ESG Risk
	Board or Management Quality	High ESG Risk

### 4 Disclosure of Material ESG Key Performance Indicators (KPIs)

a)	Has the direct or parent entity proactively disclosed any material ESG Key Performance Indicators (KPIs) relative to the entity's subsector?	No
b)	Has engagement been initiated to obtain material ESG KPIs?	Yes
	Please detail the ESG KPIs requested and whether the engagement was successful in acquiring this information.	
	We have sent the Manager the ESG IDP questionnaire. They came back with DEI and ESG policy and mentioned "we do not provide ESG reporting to investors at this time, but we plan to periodically communicate our ESG-related progress and performance to investors and other key stakeholders." We have asked for an update on any info they can share.	

### 5 Identification of ESG Opportunities within Deal Structuring

a)	Can the Transaction potentially be identified as a Green, Social, Sustainability (based on company or project-level), Green or Social Sustainability-Linked, or Energy/Climate Transition (company/project level or sustainability-linked)?	No
b)	Has the transaction classification been reviewed by the ESG Credit Team?	N/A
c)	Are there any other sustainability-related aspects of the transaction structure?	No
d)	Have any sustainability-linked KPIs been offered as a term of the loan/bond?	No
e)	Have any other recommended changes to the initial structure of the deal been offered to encourage positive change in the entity's ESG performance or behavior?	No

### 6 Evaluation of Collateral and Exit Viability

a)	Has the evaluation undertaken to determine the value of the loan/bond collateral or the ability to refinance the loan factored in current/evolving ESG risks?	Yes
b)	Have ESG factors been evaluated in relation to Apollo's position and future potential buyers in the event of an entity's default and collateral possession by loan/bond holders?	Yes

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## SECTION 3

### ESG engagement within credit: A key element of the lending process

Apollo believes engaging with issuers can be an integral part of the investment process and that lenders can play a meaningful role in encouraging positive changes in issuer disclosure, behavior, and decision-making that can positively impact financial performance.

In 2023, Apollo's ESG Credit Team established four key engagement pillars to further refine our engagement approach (Exhibit 4).

#### Exhibit 4: Apollo's ESG Engagement Pillars

Transparency and Disclosure	Financing the Energy Transition	Thematic Engagement	Value Creation
Engagement to improve the availability and consistency of ESG disclosure.	Engagement to provide tailored energy transition financing solutions to issuers.	Engagement on an evolving set of financially-material ESG themes.	Engagement on material ESG risks/opportunities to financial performance.
Development of tools which aid issuers or their representatives in the disclosure process.	Helps address the significant gaps that exist in the capital markets for climate and transition financing.	Our thematic engagement themes currently include human & labor rights and circular economy.	Apollo leverages its ESG Risk Rating to identify priority ESG engagement areas tailored to individual issuers.

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Apollo’s ESG Credit Team continues to develop infrastructure to more effectively track and report on engagement activity. As a result of these efforts, we are now able to capture more granular details of engagement activities and associated outcomes (Exhibit 5).

## Exhibit 5: Documenting engagements

**Third-Party Platform**

*Meeting with Aviation Company*

**Subject** 1 [Edit](#)

ESG Engagement with Aviation Company

**Entered By** [add entered by](#)

Bill Smith

**Internal Attendees** [add internal attendees](#)

Bill Smith

Ashley Thompson

**Companies** 2 [add companies](#)

Aviation Company

**Contacts** [add contacts](#)

No entries found

**Deals** [add deals](#)

Aviation Company Deal 2023

**Attachments**

No entries found

**Third-Party Platform**

*Meeting with Aviation Company*

**Type**

Phone Call 3 [v](#)

**Topics Discussed** [?](#)

Environment 4 [v](#)

**Engaged or Attempted to Engage With?**

Investor Relations 5 [v](#)

**Company Responded?**

Yes 6 [v](#)

**Entity took/will take actions due to engagement?**

Yes - Improved Disclosure 7 [v](#)

**Notes**

The company provided an overview of the key pillars of its sustainability strategy. The company has committed to a reduction in GHG emissions by 2030. The first lever in the company's decarbonization plan is the renewal of its fleet with cleaner more fuel-efficient aircraft. To this end, it has set an ambitious fleet renewal target. According to the company, the acquisition of new engines is key to supporting the company's fleet renewal goals. We therefore engaged with the company to better understand how engines added to a collateral pool financed by Apollo will contribute to the company's sustainability and decarbonization goals.

1 Engagement can be logged for meetings, calls, or emails

2 Company and internal stakeholders can be associated

3 Analysts determine engagement type

4 ESG topics discussed

5 Company stakeholder and response

6 Engagement milestone

7 Engagement details and outcomes

The illustrations provided herein have been provided for discussion purposes only and were selected using an objective non-performance-based criteria to illustrate our ESG engagement approach and capabilities. Additional information is available upon request.

## SECTION 4

### Apollo's Sustainability-Linked Assessment Framework: Evaluation of KPI relevance, SPT ambition, and ratchet structure/sophistication

Apollo-managed funds may participate in the syndication of deals with sustainability-linked features when an attractive opportunity arises and may also seek to incorporate ESG considerations directly into structures that we originate privately. To provide greater transparency around sustainability-linked deals that Apollo-managed funds may participate in, Apollo has developed an assessment framework. This framework allows us to evaluate most transactions with a sustainability-linked provision, and assesses KPI relevance, sustainability-performance target (SPT) ambition, and ratchet structure/sophistication holistically to form an overall view of ambition.

#### Case Study: Sustainability-Linked Assessment

- 1 Level of ambition identified based on rigorous evaluation of the SPTs and transaction structure      2 Ratchet structure and sophistication      3 KPI relevance, measurement, and comparability      4 SPT ambition and benchmarking



The company is a major player in the global food ingredients market and services personalized ingredient solutions for the food industry in fish, meat, nutrition, ready meals, and snacks.

ESG Risk Rating	Low ESG Risk
Overall Ambition Level	Moderately Ambitious 1
Target(s) Classification	Social

#### Sustainability-Linked Instrument Assessment

Target/Ratchet(s) Overview	KPI/TARGET(S) DESCRIPTION	RATCHET(S) DESCRIPTION
	<ol style="list-style-type: none"> <li>Increase % of revenues from "Better for you" food solutions.</li> <li>Increase annual proportion of women among members of the Leadership Team.</li> </ol>	<ul style="list-style-type: none"> <li>Two-way issuer coupon adjustment at the end of 7 years if sustainability targets are met or not met.</li> </ul>
	<ul style="list-style-type: none"> <li>Two targets, annual interim targets.</li> <li>Two-way, coupon adjustment penalty if targets are not met.</li> </ul>	2
KPI #1 Relevance	Core	<ul style="list-style-type: none"> <li><b>KPI Relevance:</b> Increasing revenue from "Better for you" food solutions is material to company's business. The unique definition of the KPI limits comparability to peers but strongly aligns with the company goal of providing innovative and sustainable food solutions that meet evolving customer needs and help customers make informed choices more easily.</li> </ul>
SPT #1 Ambition	Moderately Ambitious	<ul style="list-style-type: none"> <li><b>SPT Ambition:</b> The target is benchmarked against the company's historical performance. While the targeted increase in revenue derived from the food solutions over the lifetime of the loan is small, its measurement as a proportion of total revenue increases ambition. Additionally, the company has outlined a clear pathway to achieving the goal in its sustainability report, including increasing resources in areas of expertise, research, and development for innovative product solutions.</li> </ul>
KPI #2 Relevance	Secondary	<ul style="list-style-type: none"> <li><b>KPI Relevance:</b> The proportion of women among members of the leadership team is considered a secondary KPI for the industry in which the company operates. That said, it is a metric that is widely reported across the industry which enables comparability and is a fundamental pillar and focus of the group's Diversity &amp; Inclusion strategy for the coming years.</li> </ul>
SPT #2 Ambition	Moderately Ambitious	<ul style="list-style-type: none"> <li><b>SPT Ambition:</b> The target is benchmarked against the company's historical performance; no peer benchmarking has been performed. That said, we view the company's benchmark performance to be relatively strong which increases ambition of the target. The company has also laid out a clear plan to achieve the target in its sustainability report including the creation of a new diversity and inclusion working group, continuous review and improvement of its hiring selection process, and promotion of a positive working environment.</li> </ul>

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## SECTION 5

### Apollo’s Impact and Sustainable Investment Assessment Framework

While ESG integration is a foundational element of Apollo’s investment decision-making processes, in our credit business, certain investments may be classified as “Impact” or “Sustainable”. Potential Impact or Sustainable credit opportunities are identified within Apollo’s investable universe after receiving approval by the relevant investment committees. Identified investments are then evaluated through an Impact or Sustainable Investment Assessment.

#### Case Study: Impact and Sustainable Investment Assessment – Social

- 1 Transaction achieves positive outcomes aligned with the UN SDGs
- 2 Collinearity demonstrated
- 3 Activities benefit underserved populations
- 4 Scale and depth of the impact determined
- 5 Unique or unreplaceable role in supporting impact mission
- 6 Potential risks to the company achieving the positive impact and associated mitigants
- 7 Apollo may engage with issuer on disclosure of core KPIs



The company is a healthcare research and consulting firm with expertise in publicly funded healthcare, specializing in Medicaid services.

<b>ESG Risk Rating</b>	Average ESG Risk
<b>Impact category</b>	Impact Enabling
<b>Classification</b>	Social
<b>Entity/Use of Proceeds</b>	Entity

#### 5 Dimensions of Impact Screen

What	COMPANY OUTPUT	INTERMEDIATE OUTCOMES	TARGET OUTCOMES & SDG ALIGNMENT
	<ul style="list-style-type: none"> <li>Provides consulting services in strategy and operations, procurement advisory, finance, policy and regulatory and more for Medicaid programs.</li> </ul>	<ul style="list-style-type: none"> <li>The company’s services help underserved individuals receive necessary medical services.</li> </ul>	<span style="font-weight: bold;">SDG 3:</span> Good Health and Well-Being <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">1</span>
	<ul style="list-style-type: none"> <li>As the company grows its product and service offering, it expands its client reach and as a result the positive impact it has on the livelihoods of ultimate beneficiaries.</li> </ul>		<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">2</span>
Who	<ul style="list-style-type: none"> <li>Low-income, children and disabled individuals. <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">3</span></li> </ul>		
How Much	<ul style="list-style-type: none"> <li>The company is a leading provider in the Managed Medicaid Services market with very few competitors. <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">4</span></li> </ul>		
Contribution	<ul style="list-style-type: none"> <li>The company helps clients navigate complex programs and policy issues, and therefore plays an important role in supporting improved quality of care, patient experiences and outcomes in the healthcare system. <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">5</span></li> </ul>		
Risks and Mitigants	<ul style="list-style-type: none"> <li><b>Risk:</b> Workforce turnover.</li> <li><b>Mitigant:</b> The company has a maintained historically high consultant retention rates and has established redundancies across relationships, reducing the risk of elevated workforce turnover. <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">6</span></li> </ul>		
Tracking & Engagement	<ul style="list-style-type: none"> <li>Further engagement is required to attain ESG KPIs such as savings generated, customer satisfaction/net promoter scores (NPS). <span style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">7</span></li> </ul>		

As of March 2023. The case studies provided herein have been provided for discussion purposes only and were selected using an objective non-performance based criteria to illustrate our impact and sustainable assessment approach and capabilities. The assessment process described herein may change over time. There is no guarantee that similar investment opportunities will become available in the future. Additional information is available upon request.

## SECTION 6

### Apollo's climate and transition assessment framework

To address the global energy transition, Apollo believes the world requires substantial, immediate, and ongoing investment in both businesses and technologies that support decarbonization and the transition to cleaner sources of energy. In 2022, Apollo announced the launch of a comprehensive sustainable investing platform focused on financing and investing in energy transition, decarbonization, and sustainability. We believe we can effectively deploy \$50 billion in clean energy and climate-related opportunities by 2027 and see an opportunity to deploy as much as \$100 billion by 2030<sup>1</sup>.



In 2023, Apollo's credit platform introduced innovative financing structures and led on a number of opportunities that contributed towards Apollo's climate and transition financing targets. Potential climate and transition investments undergo a rigorous assessment leveraging many of the same features as our Impact and Sustainable Investment Assessment.

### Case Study: Climate and Transition Assessment – Transition



The company is a vertically integrated manufacturer of wide bandgap semiconductors focused on silicon carbide (SiC) and gallium nitride (GaN) materials and devices for power and radio-frequency (RF) applications.

<b>Activity Category</b>	Industrial Decarbonization
<b>Activity Sub-Category</b>	Energy Efficiency/Electrification
<b>Sustainable Economy Activity</b>	Electrification–Commercial
<b>Activity Tag</b>	<b>Transition</b>
<b>Investment Classification</b>	<b>Currently contributing to Transition Activity</b>
<b>Transaction Type</b>	Private Credit Issuance
<b>Deal Team</b>	Opportunistic

Climate & Transition Investment Screen			
What	COMPANY OPERATIONS & OUTPUT	INTERMEDIATE OUTCOMES	TARGET OUTCOMES & SDG ALIGNMENT
	<ul style="list-style-type: none"> <li>The company provides silicon carbide (SiC) and gallium nitride (GaN) materials and devices for power and radio-frequency (RF) applications. The company's products are used in a variety of applications including solar and EVs.</li> </ul>	<ul style="list-style-type: none"> <li>Compared to traditional semiconductor silicon (Si), wide-bandgap semiconductor SiC exhibits lower resistance, better thermal conductivity and higher temperature capacity which results in lower conduction losses, lower levels of dissipated heat, reduced switching losses and reduced cooling needs, which combine to result in significant energy savings.</li> <li>In EVs, there is a 25% loss of energy from the battery to the wheels, and about 1/3 of that energy is expended from power electronics. This results in an ~ 10% increase in inverter efficiency from switching to SiC.</li> </ul>	 SDG 11: Sustainable Cities and Communities   SDG 13: Climate Action
<b>Who</b>	<ul style="list-style-type: none"> <li>Environmental benefits are global.</li> </ul>		
<b>How Much</b>	<ul style="list-style-type: none"> <li>According to MSCI, &gt;50% of the company's revenue comes from clean technology product lines. 37% of FY22 sales are related to power devices which are mainly used in EVs and 40% of FY22 sales relates to SiC and GaN Materials, which eventually also power devices further down the value chain. The deal team has conservatively estimated that of the power and material segments, 70% of revenues can be attributed to sustainable activities such as EVs and renewable applications. By 2027 the company estimates that 7/10 of their top 10 customers, making up 51% of total revenue, will be EV manufacturers. This number does not include the materials companies which can also be attributed to sustainable activities.</li> </ul>		
<b>Contribution</b>	<ul style="list-style-type: none"> <li>Transport is responsible for approximately 20% of global energy-related Co2 emissions. The overall life-cycle emissions from EVs with a decarbonised power system could be 70-90% lower than those of ICE cars. If countries are to meet their EV targets there needs to be a robust supply of semiconductors and SiC material from suppliers. In addition to this SiC semiconductors are more efficient than their pure Si counterpart therefore SiC semiconductors reduce the energy loss and therefore demand of EVs per mile driven vs their Si counterparts.</li> </ul>		
<b>Risks &amp; Mitigants</b>	<ul style="list-style-type: none"> <li>Risks: site health and safety, and energy consumption (the furnaces for silicon carbide processing must be able to reach up to 2000°C).</li> <li>Mitigants: In addition to the company's H&amp;S policies, in 2022, the company also initiated the process of registering their Occupational Health and Safety Management System to ISO45001:2018 standard. On energy consumption, SiC semiconductors produced by the company are much more efficient than their Si counterparties and the company is also investing in new ways to reduce the energy demand/emissions footprint of their manufacturing process. Mohawk Valley, NY receives hydropower from Niagara Falls. The company's owned manufacturing operations are certified to ISO 14001:2015 environmental management system standard.</li> </ul>		

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## SECTION 7

### Apollo's industry association<sup>2</sup>

Apollo voluntarily participates in collaborative initiatives that aim to advance the integration of relevant environmental, social, and governance considerations across the credit markets. In November 2022, the ESG Integrated Disclosure Project ("ESG IDP"), a recent initiative in the private credit industry that seeks to harmonize ESG data collection, announced that Apollo had been appointed inaugural Chair of the ESG IDP's Executive Committee. The ESG IDP is led by the Principles for Responsible Investment (PRI), Alternative Credit Council (ACC), the private credit affiliate of the Alternative Investment Management Association (AIMA), and the Loan Syndications and Trading Association (LSTA) as its secretariats, and is also supported by a diverse coalition of market stakeholders including CDP, the ESG Data Convergence Initiative and the Loan Market Association.

In 2023, credit rating agencies KBRA, Moody's, S&P Global, and Fitch and the Investment Consultant's Sustainability Working Group (US) joined the ESG IDP executive committee. The ESG IDP also welcomed the Asia Pacific Loan Market Association (APLMA), the European Leveraged Finance Association (ELFA), and other asset managers as supporting organizations. These organizations join credit fund managers and other industry associations as leading proponents of the initiative, helping to streamline cross-border disclosure efforts and increasing accessibility for investors.

The ESG IDP is designed to enhance transparency and consistency for both private companies and credit investors by providing a standard template for ESG-related disclosures. The template offers private companies a baseline from which to develop their ESG reporting capabilities. It also aims to enhance investor ability to identify industry-specific ESG risks in their credit portfolios and compare meaningful data across alternative asset managers more consistently. The ESG IDP template was updated in 2023 to include additional data points and help promote consistent global disclosure standards. The ESG IDP also has plans to expand its template to cover other asset classes like real estate and infrastructure.

Furthermore, Apollo has been working closely with third-party data providers MSCI and Persefoni to develop tools/platforms which aid issuers or their representatives in the disclosure process.

We believe that this harmonized approach will facilitate the development of ESG data disclosure, tackling what we view as one of the greatest challenges to ESG integration facing the private credit market today. Within Apollo, credit investment teams are encouraged to send the harmonized questionnaire annually for their holdings and as part of the due diligence phase for new transactions.

(2) The organizations listed herein are not affiliates or clients of Apollo and this information should not be construed as an endorsement of Apollo by any of the listed organizations.

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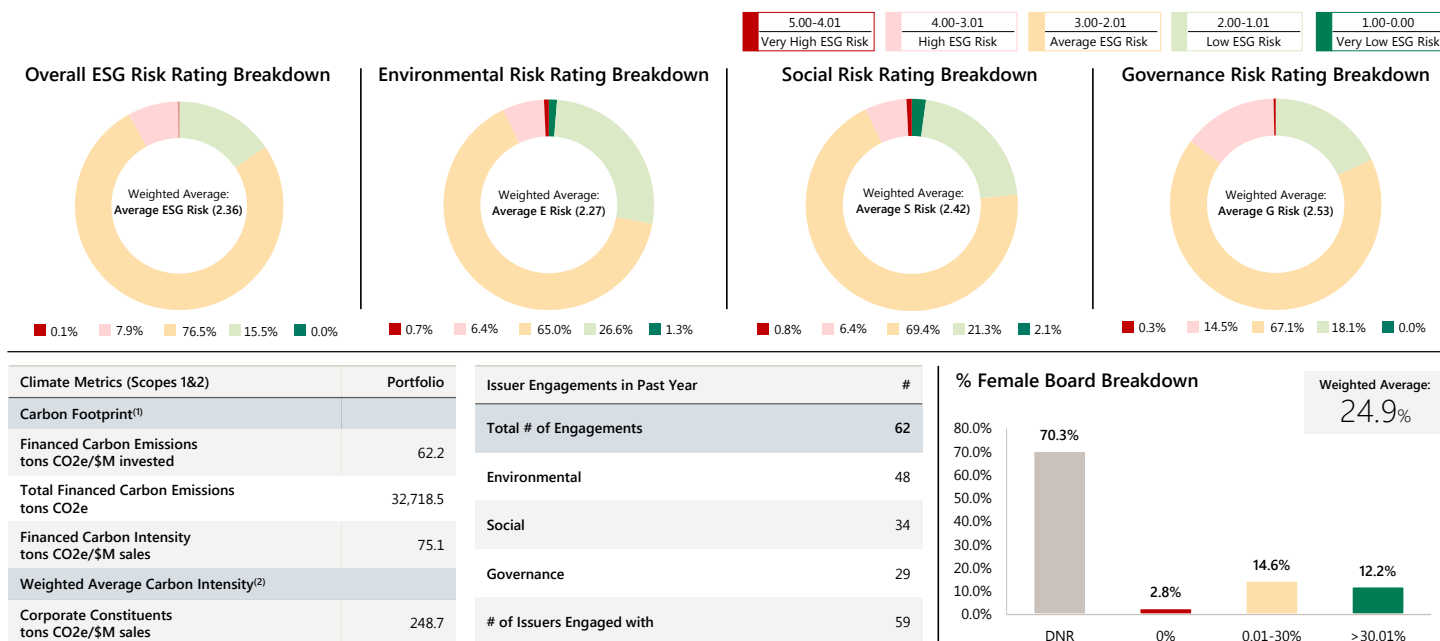
## SECTION 8

### ESG credit reporting: Continuing our commitment to transparency

Apollo's credit business produces ESG quarterly reporting for select funds and managed accounts, leveraging both internal data and external data from third-party vendors. The reports may include a summary of our evolved ESG Risk Ratings and engagements, as well as climate, governance, and controversy data (Exhibit 6).

In 2023, we increased the number of credit funds and managed accounts for which we provided ESG reporting. We expect our reporting capabilities to evolve as we continue to tackle the data availability challenges within private credit.

#### Exhibit 6: Illustrative ESG reporting



For illustrative purposes only. Rating weighted averages are independent of sector-specific ESG rating weights. Weighted average by portfolio MV. (1) Covers 32.2% eligible portfolio MV. (2) Covers 31.8% eligible portfolio MV. DNR = Does not report.

### Forging ahead: Evolving our ESG credit framework for tomorrow's market

We have made significant progress in the development and implementation of our ESG credit platform over the last 12 months, but our work is not yet finished. We pride ourselves on constant learning, contrarian thinking and rigorous debate, which means we will constantly seek to evolve our process in pursuit of ongoing improvement. We intend to continue investing in our capabilities in 2024 and beyond, to create value and respond to diverse stakeholder needs.

We will continue to work with teams across Apollo and our origination platforms to develop a harmonized approach to the integration of relevant environmental, social, and governance considerations. In some cases this will require us to develop ESG Risk Rating methodologies for additional security types, including for a broader set of structured securities.

In addition, we intend to remain active across our four engagement pillars, including as part of our recently launched thematic engagement initiative focused on circular economy and plastic. Furthermore, we expect to continue leveraging our ESG due diligence processes to develop and manage product solutions. Finally, we expect to further expand our reporting capabilities to encompass more credit funds and managed accounts.

We look forward to sharing our progress as we iterate and build upon our robust ESG credit platform.

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Co-Head of Global Corporate Credit

Joe Moroney is a Partner, Head of Sustainable Finance and Co-Head of Global Corporate Credit at Apollo. Prior to joining the Firm in 2008, Joe was with Aladdin Capital Management where he served as a Senior Managing Director of its Leveraged Loan Group. Joe's investment management career includes experience at various leading financial services firms including Merrill Lynch Investment Managers and MetLife Insurance. Joe graduated from Rutgers University with a BS in Ceramic Engineering and is a Director Emeritus of the Rutgers University Foundation. He is a CFA charterholder and a member of the NYSSA.



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Senior ESG Research Analyst

Amanda Gray is a Senior ESG Analyst on the ESG Credit Team. Amanda joined the ESG Credit Team from Apollo's Emerging Market Credit investment team where she was a Principal responsible for Emerging Markets Financial Sector investments. Prior to joining Apollo Global Management in October 2019, Amanda was a Senior Credit Analyst on the Emerging Markets team at BlueBay Asset Management. Amanda has over 15 years of credit investing experience. She has a Master's from the Fletcher School at Tufts University and a BA from Eckerd College.



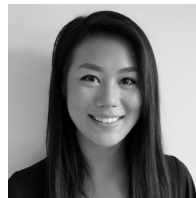
**Michael Kashani, Managing Director**  
Head of ESG Credit

Michael Kashani joined Apollo Global Management as the Head of ESG Credit in October 2021. He currently represents Apollo across several industry initiatives, including as the inaugural Steering Committee Chair of the ESG Integrated Disclosure Project. Michael formerly served as the Global Head of ESG Portfolio Management within the Fixed Income division at Goldman Sachs Asset Management. Prior to that role, he was on the Goldman Sachs Asset Management municipal team as a senior research analyst. Michael graduated from University at Albany (SUNY) with a BS in Business Administration and a concentration in Finance and Management Information Systems.



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Stewardship and Engagement  
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Ashley Yen joined Apollo's ESG Credit team in 2023 as a Stewardship and Engagement Specialist. She was previously a Rating Analyst on the Sustainable Finance Team at S&P Global Ratings. Prior to that role, she was an Energy and Sustainability Analyst in the Installations & Environment Group at the Army National Guard. Ashley holds a certificate in ESG Investing from the CFA Institute. Ashley graduated from University of Maryland, College Park with a BS degree in Environmental Science and Technology, with a concentration in Ecological Technology Design.



**Lori Shapiro, Director**  
Senior Stewardship and  
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Lori Shapiro joined Apollo's ESG Credit Team as a Senior Stewardship & Engagement Specialist in May 2022. She was previously a member of the Sustainable Finance team at S&P Global Ratings. Prior to that role, Lori worked as a credit ratings analyst on the corporate and sovereign ratings teams at S&P Global Ratings. She graduated from Brandeis University with a BA in Economics and Business and is a CFA charterholder.



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ESG Research Analyst

Sanchita Utekar joined Apollo's ESG Credit Team in February 2024 as an ESG Research Analyst. She was previously an ESG Analyst at ESG Risk Assessments and Insights Limited. Prior to that role, Sanchita worked with M&G Global Services Private Limited and Dun & Bradstreet India across their respective credit ratings and ESG segments. Sanchita holds a B.Com degree from S.I.E.S College of Commerce and Economics, a M.Com degree from the University of Mumbai, and a Postgraduate Diploma from Narsee Monjee Institute of Management Studies.

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## About the Technical Contributors:



**Frank Li, Principal**  
Head of ESG Tech & Data Strategy

Frank (Hewei) Li joined Apollo Investment Technology in 2023 as Principal, Head of ESG Tech & Data Strategy. Prior to joining Apollo, Frank was with Morgan Stanley Investment Management, where he led the build of ESG portfolio monitoring dashboards, reporting, SFDR PAI & climate datasets, and ESG analytics applications. Before Morgan Stanley, he spent 7+ years with MSCI ESG Research. Frank obtained an MSe in Civil & Environmental Engineering from the University of Washington in Seattle, and received a BSe in Hydrology & Environmental Engineering from China University of Geoscience in Beijing. Frank is a geographical information system (GIS) specialist and a certified statistical analyst by the Ministry of Education.



**Michael Kang, Associate Director**  
ESG Tech Engineer

Michael Kang joined Apollo Investment Technology in September 2022 as a Associate Director, ESG Tech Engineer. Prior to this, Michael worked as a risk quantitative developer, data scientist, as well as a technical product manager at Glencore. He graduated with BA's in Neuroscience and Physics from Bowdoin College.



**Shajan Kadiran, Director**  
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Shajan Kadiran joined Apollo Investment Technology in December 2022 as a Director, ESG Tech Engineer. Prior to this, Shajan worked at JP Morgan Asset Management on carbon transition indices and engaged in risk analytics at both Citi and Bank of America. Prior to major financial institutions, he worked at Deloitte and Touché to provide regulatory risk advisory services to banks. Shajan holds a bachelor's degree in Computer Science from India and MBA from Liberty University in Virginia.

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