Confidence must be earned

Amundi ASSET MANAGEMENT

February 2023

Investing Today in the Sustainable Leaders of Tomorrow: The Potential for US ESG Improvers

INVESTMENT TALKS

Craig Sterling

Head of Equity Research, US
Director of Core Equity
Portfolio Manager

- *As the US economy and society continue to evolve, corporates and asset managers are faced with navigating newer risks, opportunities, and shifting end-investor preferences.*
- *We believe the business model and corporate management practice considerations tied to environmental, social and governance (ESG) factors are directly relevant to understanding these emerging elements.*
- *The adoption of sustainable business practices is growing more rapidly than data can dynamically capture, making it critical for investors to identify companies that strengthen their business models and lower long-term systemic risks by incorporating sustainable practices.*
- *As market dynamics have shifted in the direction of ESG, highly ESG-rated companies, or "ESG Leaders," have traded at a premium. We believe that shifting ESG analysis from a current, high-level ESG snapshot to a forward-looking, bottom-up approach can help investors identify companies that are not yet ESG Leaders, but are positioned to profit in the future from their ESG momentum.*
- *These "ESG Improvers" are companies with positive ESG momentum in the most material sector and business drivers.*

The relevance of ESG data in the investment process

In recent years, unprecedented events such as the COVID-19 pandemic, mass workforce volatility and geopolitical conflicts have forced companies to adapt to a global health crisis, confront a battle to attract talent, and absorb the outsized impact on global supply chains. At the same time, emerging risks such as climate disruptions are increasingly altering companies' business practices and directly affecting the evolution of their business models. Meanwhile, significant innovation in new technologies and solutions in areas such as clean energy and electrification is beginning to drive accelerated growth.

The proliferation of ESG data over the last decade has provided the market with more comparable, scalable and economically relevant information. The rise of data providers who specialize in gathering ESG-related data, and the emergence of ESG ratings, allow analysts to better assess and understand a company's ESG profile. Among a growing body of research, an MSCI study reported that over the ten-year period ending December 2019, companies with higher ESG ratings were associated with higher profitability, lower tail risk and lower systematic risk[1].

We believe effective incorporation of ESG factors into an investment process is a bottom-up, fundamental exercise requiring expertise and skills that most US investors are still developing.

However, unlike typical financial data that uses common accounting and reporting standards and is released on a quarterly basis, company-disclosed ESG data is aggregated by ratings providers and may only influence an overall ESG rating annually, if at all. With varying ESG provider methodologies, there are few common standards. At times, this leads to management teams lacking guidance and definitive key performance indicators (KPIs). Many US companies are still in the early stages of integrating ESG considerations and reporting their own management processes.

Particularly in the US, incorporating ESG factors is an emerging analytical frontier that is growing in importance. We believe effective incorporation of ESG factors into an investment process is a bottom-up, fundamental exercise requiring expertise and skills that most US investors are still

[1] Morgan Stanley Capital International (MSCI), Comparing Risk and Performance for Absolute and Relative ESG Scores, Ankit Sayani, Bentley Kaplan, August 2020.

Amundi ASSET MANAGEMENT

developing. Strong investment teams can leverage in-house ESG expertise and other resources to support their bottom-up analyses of how ESG factors can potentially impact the forecast and valuation of a company's future long-term growth, margins, capital intensity, and returns on invested capital.

ESG Leaders and the "ESG premium" in the US

Investor demand for sustainable investing has outpaced the number of investable high-performing US companies. Most US companies are still in the early stages of incorporating ESG best practices into their management processes, resulting in a limited supply of information about material ESG considerations to investors and stakeholders.

Additionally, the massive inflows into ESG funds in recent years have led to market crowding and what we believe are unreasonable valuation premiums for companies with the highest relative ESG ratings, or "ESG Leaders." In the US, that population of companies is disproportionately comprised of asset-light, high-growth companies for which it was relatively easy to embrace reasonable ESG policies and related disclosures. For example, a software firm that has a relatively low carbon footprint and a highly compensated workforce generally may not face meaningful "E" or "S" issues and risks.

Over the past two years, the unwinding of the dominance of growth-style outperformance has demonstrated the resulting growth bias of many ESG-categorized indices and funds. For example, in the two-year period ending December 31, 2022, the MSCI US Value Index gained 19.0%, the MSCI US Growth Index lost 14.2%, and the MSCI USA ESG Leaders Index gained 6.3%. The recent underperformance of the ESG Leaders Index relative to the Value Index was due in part to its 27.3% weighting in the technology sector.

We believe there is a need to use an investment process that incorporates ESG analysis in order to identify the future ESG Leaders – or "ESG Improvers" – in the value side of the US stock market.

This highlights the potential risks to investors of heavily relying on top-line ESG ratings, whose methodologies may vary depending on the ESG provider. Our approach is to disaggregate and assess the underlying raw ESG data as part of our process to develop financial and economic stock forecasts, assess valuations, and manage risk. This has led us to favor value stocks over growth stocks, including some growth stocks with high ESG ratings. Often in investing, risks are overlooked and do not seem to matter until they do. This has recently proven itself with the meaningful growth of ESG strategies in the past two years.

We believe the shift from growth to value will sustain itself for years, and there is a need to be forward-looking using an investment process that incorporates ESG analysis in order to identify the future ESG Leaders—or "ESG Improvers"—in the value side of the US stock market. ESG Improvers are those companies with average ESG ratings, but demonstrating significant positive ESG momentum. The valuation gap between ESG Leaders and Improvers provides valuation support to the current focus on Improvers.(see Exhibit 1).

Exhibit 1: Higher valuations of ESG Leaders support focus on value components

Earnings per share and enterprise value of ESG Leaders and ESG Improvers

	Price / NTM Earnings per Share	Enterprise Value / EBITDA Fy1
ESG Leaders (Average)	22.2	17.0
ESG Improvers (Average)	19.5	14.4
ESG Leaders (Capitalization-Weighted)	23.1	18.5
ESG Improvers (Capitalization-Weighted)	20.0	14.4

Source: Factset, Jan 31, 2023. NTM refers to "Next Twelve Months" and is a forward-looking measure. EBITDA refers to Earnings before Interest, Taxes, Depreciation and Amortization. See Terms and Indices section for further information, including definitions and calculation details.

Amundi
ASSET MANAGEMENT

Third-party ratings providers struggle to capture fully the depth and dynamic nature of companies evolving their ESG practices.

The Case for ESG Improvers

Given the emerging ESG risks described above, and pressure from shareholders and stakeholders, the momentum for integrating industry-relevant ESG factors in the US is just beginning. For the US to make progress across areas such as climate change, supply chain disruptions, and competition for scarce labor, businesses with fixed assets, complex supply chains and a workforce across the wage scale must adopt and evolve. Big corporations are large, complex institutions whose environmental and social landscapes require time and significant effort by management teams to understand. This includes how to measure and monitor factors across a company's business model and corporate culture. Recent significant geopolitical conflicts, a related energy and food crisis, and a possible looming recession do not make the task of incorporating ESG for management teams any easier. Third-party ratings providers struggle to capture fully the depth and dynamic nature of companies evolving their ESG practices.

We believe this information disconnect presents an opportunity for active investment managers with deep ESG expertise to capture alpha (excess return relative to a benchmark) for investors. All else equal, there is an opportunity to identify ESG Improvers in the early stages of an improving ESG trend. These companies could become future ESG Leaders. In the current market, we believe this assessment process disproportionately leans towards the value side of the equity market, where tangible improvement can be seen. For example, US value sectors such as financials, energy, industrials and utilities had the lowest absolute ESG scores at the end of 2022 and presented the biggest gaps with global best-in-class companies. As evidence of the opportunity to make ESG improvements that will have a meaningful impact on their footprint, ESG Improvers have lower capital efficiency than ESG Leaders, meaning fewer sales per unit of fixed assets, or property, plant & equipment (Exhibit 2). This is often due to their higher level of overall invested fixed capital, which takes time and complexity for asset-intensive businesses. This is where the real ESG change needs to occur to have a measurable impact on the "E" and the "S" for the economy.

Exhibit 2: Capital efficiency is lower for ESG Improvers than for ESG Leaders, meaning ESG Improvers have more invested fixed assets per unit of sales

With more capital (including fixed assets such as property, plant & equipment) per unit of sales due to the types of industries the group skews toward, we believe ESG Improvers have significant opportunity for advancement.

	Sales per Unit of Fixed Assets
ESG Leaders (Average)	4.8
ESG Improvers (Average)	3.6
ESG Leaders (Capitalization-Weighted)	3.9
ESG Improvers (Capitalization-Weighted)	3.1

Source: HOLT Lens, Amundi, Jan. 31, 2023. Fixed assets represents property, plant & equipment (PP&E). Note that companies with more sales per unit of PP&E are less asset intensive than those with less. See Terms and Indices section for further information, including definitions and calculation details.

Right now, we believe there is a window of opportunity to identify and invest in ESG Improvers before ESG practices move further up the best-in-class curve and disclosure requirements tighten. US ESG regulations that follow Europe's lead on data and disclosure will likely further accelerate the shrinking of the ESG profile gap that exists for the US market.

However, until that happens, we believe a fundamental, bottom-up focused investment approach that incorporates dedicated responsible investing resources has the ability to identify ESG

Amundi
ASSET MANAGEMENT

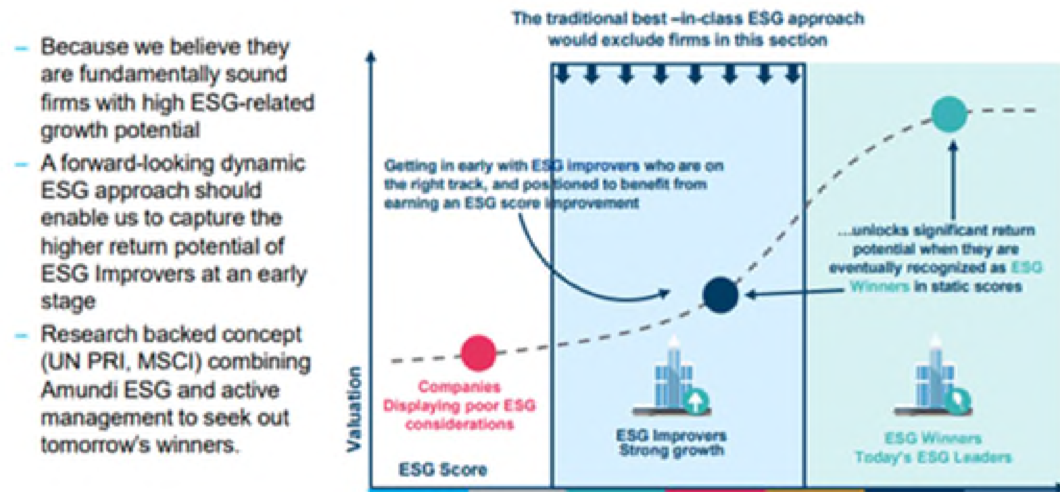
Improvers before they become ESG Leaders. Companies that can manage evolving risks and/or take advantage of current tailwinds have strong potential to strengthen overall fundamentals. We believe these will be the ESG leaders of tomorrow.

As companies successfully implement ESG principles, their likelihood of improved business model sustainability and long-term prospects could be reflected in a positive market adjustment of their valuations. Therefore, we believe identifying ESG Improvers at an early stage can potentially be a source of alpha for investors.

A dynamic, forward-looking approach through fundamental analysis can help investors identify and invest in companies at the early and middle stages of ESG development.

A dynamic, forward-looking approach through fundamental analysis can help investors identify and invest in companies at the early and middle stages of ESG development. ESG analysis goes hand-in-hand with fundamental analysis to assess the sustainability and profitability of each corporate's business.

Exhibit 3: Why Can ESG Improvers Be an Appealing Investment Opportunity?



Source: Amundi US. For illustrative purposes only.

The evolving US market landscape

A company's resiliency is generally based on its ability to understand and manage risks while identifying opportunities to create long-term value. How companies behave today can have long-lasting financial implications on their businesses. Several key trends provide further opportunity to capitalize on identifying a company's positive ESG trajectory: Increased regulation, incentives in the 2022 US Inflation Reduction Act, and enhanced disclosure.

With the growth in investor demand for ESG-related funds globally, regulators are catching up and seeking to address how they can best protect end investors. The approach by regulators have taken different forms across regions. The European Union (EU) proactively led ESG regulatory efforts several years ago. Today, EU regulators continue to expand their guidelines to deepen expectations on disclosures for corporates and asset managers.

The US is in the early stages of proposing regulatory guidance for climate-related disclosures on corporates, as well as ESG category guidance for asset managers. As previously discussed, the US government's recent passage of the 2022 Inflation Reduction Act should stimulate additional growth through tax and investment incentives, further develop new clean energy technologies and increase the affordability and accessibility of these technologies in low-income communities.

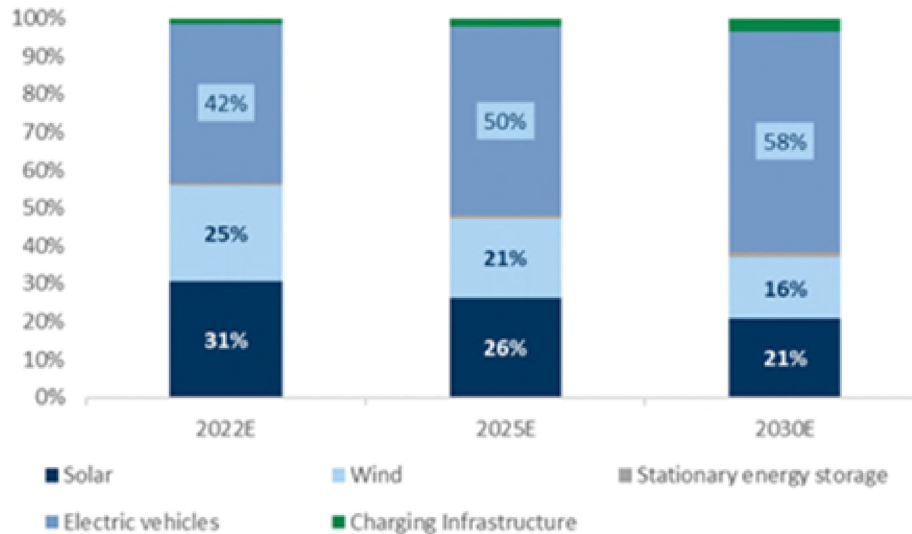
We also expect enhanced disclosures surrounding data security and privacy laws—already important ESG differentiators—to be an increasingly important theme for financial, consumer, and technology companies in the US.

Amundi
ASSET MANAGEMENT

The electric vehicle market: Alpha generators are not always obvious

We believe the best way to maximize investment returns from many emerging ESG risks and trends is not always by investing in companies and industries that seem to be obvious. Take, for example, the emerging electric vehicle (EV) sector. In recent years, we have seen a shift in the auto industry leadership as EVs have gained greater acceptance, supported in part by tax incentives and growing consumer demand.

Exhibit 4: Proportion of electric vehicles as alternative energy usage



Source: Wolfe Research, November 2022.

At face value, the EV sector has a strong investment narrative that benefits from broad market demand for ESG-related investing. However, the auto industry is extremely competitive, with perennial overcapacity and with many companies supported by a national economic interest in having a large automobile manufacturer. Over the long term, we do not believe this is supportive of the potential for positive returns on capital and thus, stock performance. Nearly every automaker is spending meaningful capital the next few years, in aggregate more than $50 billion[2] of invested capital per year to transform their vehicle line-ups towards EVs, which could negatively impact share price performance. Typically, when more investor capital chases the same unit of output (i.e., consumers are not going to buy more cars overall), investors suffer. Consumers will benefit, but typically not investors.

In our view, an investment process that leverages effective use of ESG factors should be focused on the corporate fundamentals that support alpha generation.

This does not mean EVs are not an important solution for carbon emissions as we move towards a lower-carbon economy. In our view, an investment process that leverages effective use of ESG factors should be focused on the corporate fundamentals that support alpha generation, such as sustainable returns on capital. With the example of EVs, it is hard to forecast the winners and losers among automakers. This is because as the EV industry gets more competitive, new models are released frequently and fickle consumer tastes and preferences become more critical.

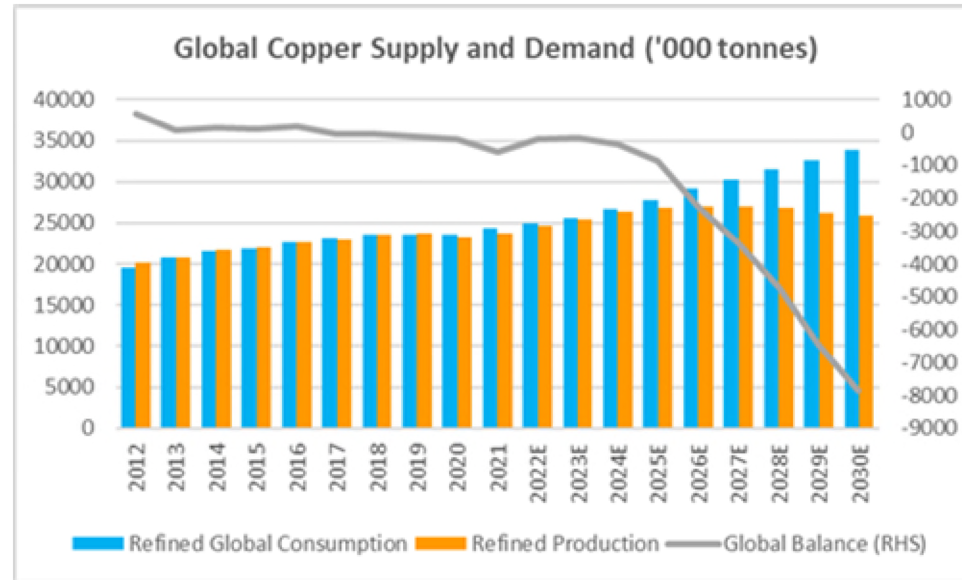
However, we do know that EVs require significantly more copper for electrification than traditional internal combustion autos, and there is a global capacity shortage of copper. This provides an opportunity to further analyze upstream industries in the autos industry supply chain.

[2] Source: Wolfe Research, November 2022

Amundi ASSET MANAGEMENT

Exhibit 5: The growing imbalance of copper supply and demand

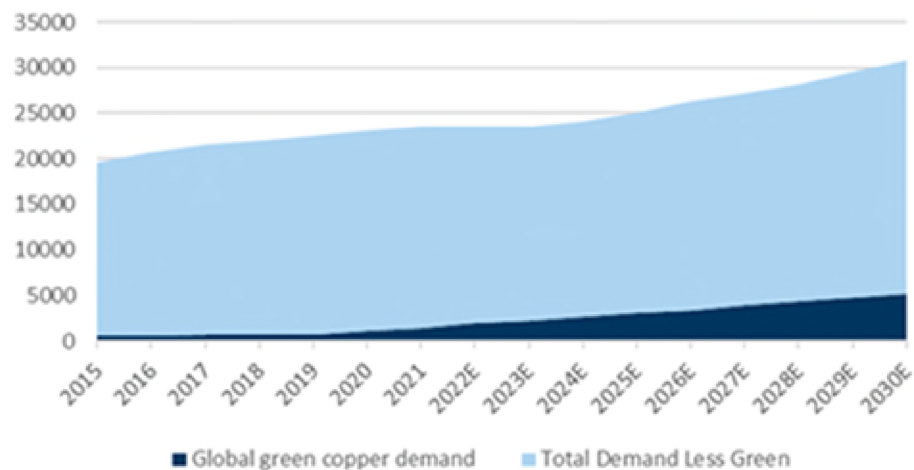
As global consumption has increased, production has declined



Source: Amundi and Goldman Sachs, November 2022.

Exhibit 6: Copper demand: old vs. green

Growing demand for green copper predicted to continue



Source: Goldman Sachs, November 2022.

Similarly, certain automobile components manufacturers provide critical technology to advance vehicle safety, autonomous driving capabilities and high voltage electrification for the new generation of EVs. Because a company like this sells to many original equipment manufacturers (OEMs), it can be successful regardless of which OEMs produce the most cars or whether there is too much capital chasing the same number of vehicles. While selected automobile component manufacturers have legacy auto exposures, the innovative, EV-levered portion of their businesses will continue to grow.

Amundi
ASSET MANAGEMENT

There are many recent examples of companies that innovate, adapt, and grow themselves to evolve from value to growth valuations as they transition with the broader economy. This can be an effective way at current valuations to generate alpha from the shift to EVs as production increases in future years. This is how ESG improvement can be realized in the context of a bottom-up, fundamental investment process where valuation is a core component.

Selecting ESG Improvers

A key component of forward-looking ESG evaluation includes direct dialogue with companies.

In addition to exclusion strategies, a common approach to responsible investing has been based on – and driven by – pure assessment of top-line ESG ratings. The challenge with relying solely on standard ESG ratings is that ratings are typically a point-in-time annual snapshot of a company's ESG profile, and inherently unable to capture potential ESG improvement. Unpacking ESG ratings and understanding the underlying ESG drivers of a company over time can provide a baseline assessment for further bottom-up analysis.

We believe active management is key to focusing on a dynamic and forward-looking analysis. This translates into:

- Identifying the most material ESG drivers for each business.
- Identifying the ESG drivers that are material to a corporate's ESG profile.
- Understanding the financial impact of those drivers. For instance, the CO2 footprint is more relevant to an energy company than to a telecommunication company.
- Detecting how those drivers will evolve in the future.
- Identifying the financial impact of those drivers. For this, a combination of both ESG and financial analysis is critical.
- Understanding how these drivers changed in the past and assessing how they will change in the future.

Additionally, a key component of forward-looking ESG evaluation includes direct dialogue with companies. Through speaking with company management, investment managers can thoughtfully identify relevant environmental, social and governance factors that could either mitigate potential risks or provide opportunities to enhance long-term performance.

Exhibit 7: The Potential Benefits of a Forward-Looking Dynamic ESG Approach

Source: Amundi US. For illustrative purposes only.

By identifying future environmental, social, and governance leaders, we can seek to capture responsible alpha.

Conclusion

We believe the opportunity presented by implementing ESG factors into the investment selection process is clear. But as market dynamics shift in that direction, high ESG-rated companies, or "ESG Leaders," have traded at a premium. Shifting the ESG analysis from a current, high-level ESG snapshot to a forward-looking bottom-up approach can help investors leverage the potential investors to identify and invest in the companies positioned to profit the most from their ESG momentum, termed "ESG Improvers." Honing in on the relevant ESG data over time, combined with dialogue with companies, can lead to a greater understanding of the potential ESG trajectory of a company. Company analysis is multi-faceted, and fundamental analysis of the competitive advantages and financial strength of a firm, as well as historical and current ESG key criteria assessments, provides an opportunity for additional alpha generation. Essentially, by identifying future environmental, social, and governance leaders, we can seek to capture responsible alpha.

Terms and Indices

2022 US Inflation Reduction Act – Includes tax laws that will affect individuals and businesses. One provision changes the eligibility rules to claim a tax credit for clean vehicles.

Alpha – A measure of performance, gauged from the excess return of an investment relative to the return of a benchmark index.

Average-Weighted - A type of market index in which each component is weighted equally.

Capitalization-Weighted – A type of market index in which each component is weighted according to the size of its total market capitalization.

Capital Efficiency – A measure of the amount of money that is put into the business and how much revenue the business generates from that investment.

Capital Intensity – A measure of the assets needed to generate income. It is calculated by dividing gross tangible fixed assets to full-time equivalent employees. A high capital intensity ratio indicates that the company has to spend more on assets to generate revenues or the company has bought new assets. A low capital intensity ratio suggests that the company is spending less on assets and is earning more revenue.

EBITDA- A measure of a company's earnings excluding interest, taxes, depreciation and amortization. Used to describe a company's overall financial performance.

ESG – Environmental, social and governance.

ESG Improvers - Companies in the early stages of an improving ESG trend that we consider potential future ESG Leaders. For the purposes of our analysis, ESG Improvers are defined as the companies in the US investable universe (which includes the securities in the S&P 500, the Russell 3000, and those with a market cap greater than $5 billion) that have the most improved Amundi ESG scores among average-rated companies from one year ago.

ESG Leaders – Companies with the highest ESG ratings. For the purposes of our analysis, ESG Leaders are defined as the top one-third Amundi ESG-rated companies in the US investable universe (which includes the securities in the S&P 500, the Russell 3000, and those with a market cap greater than $5 billion).

Electric Vehicles (EVs) - Vehicles that can be powered by electric motors that draw electricity from a battery and is capable of being charged from an external source.

Key performance indicators (KPIs) – Quantifiable indicators of progress toward an intended result.

Property, Plant and Equipment (PP&E) - A company's physical assets that are expected to generate economic benefits and contribute to revenue for many years.

Important information

The MSCI information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each other person involved in or related to compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties (including, without limitation, any warranty of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages. (www.mscibarra.com).

This document is solely for informational purposes. This document does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation of any security or any other product or service. Any securities, products, or services referenced may not be registered for sale with the relevant authority in your jurisdiction and may not be regulated or supervised by any governmental or similar authority in your jurisdiction. Furthermore, nothing in this document is intended to provide tax, legal, or investment advice and nothing in this document should be construed as a recommendation to buy, sell, or hold any investment or security or to engage in any investment strategy or transaction. There is no guarantee that any targeted performance or forecast will be achieved. Unless otherwise stated, all information contained in this document is from Amundi Asset Management US, Inc. (Amundi US) and is as of November 30, 2022. Diversification does not guarantee a profit or protect against a loss. The views expressed regarding market and economic trends are those of the authors and not necessarily Amundi US, and are subject to change at any time based on market and other conditions, and there can be no assurance that countries, markets or sectors will perform as expected. These views should not be relied upon as investment advice, a security recommendation, or as an indication of trading for any Amundi product. This material does not constitute an offer or solicitation to buy or sell any security, fund units or services. Investment involves risks, including market, political, liquidity and currency risks. Past performance is not a guarantee or indicative of future results.

Date of first use: February 6, 2023

Amundi US is the US business of the Amundi Asset Management group of companies.

©2023 Amundi Asset Management US

RO ID# 2691189

Amundi
ASSET MANAGEMENT