

Climate Change Is Here ... And So Is the Need to Embrace Sustainability in Real Estate



INSIGHTS | GLOBAL LISTED REAL ASSETS TEAM | September 2024

“It is unequivocal that human influence has warmed the atmosphere, ocean and land.” So said the scientists on the United Nations International Panel on Climate Change in their sixth assessment report released in August 2021.¹ Using their strongest phrasing ever to stress that human actions are responsible, this report heightened the sense of urgency to act on climate change.

Not surprisingly, the real estate industry has been under pressure to focus attention on sustainability. After all, building operations and construction account for approximately 40% of global energy-related CO₂ emissions.²

Morgan Stanley Investment Management’s (MSIM)³ Global Listed Real Assets (GLRA) team⁴ believes environmental, social and governance (ESG) factors and a real estate company’s approach to sustainability will significantly influence its future risk and total return prospects. Given this view, we believe it is imperative to focus on analyzing sustainability factors and integrating these risks and opportunities into an assessment of value.

¹ IPCC. “Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the IPCC”, August 2021.

² United Nations Environment Programme. “2021 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector”, October 2021.

³ The term MSIM generally includes each registered investment advisor owned by Morgan Stanley. However, unless otherwise noted, references to MSIM do not include Eaton Vance Management, Calvert Research and Management, Atlanta Capital Management Company, or Parametric Portfolio Associates which were acquired by Morgan Stanley on March 1, 2021.

⁴ The Global Listed Real Assets team, part of MSIM’s Real Assets capability group, invests in publicly traded real estate and infrastructure securities. MSIM Real Assets delivers comprehensive real estate and infrastructure solutions to our partners and clients.

AUTHORS



LAUREL DURKAY, CFA
Head of Global Listed
Real Assets



MONA BENISI
Head of Sustainability
Global Real Assets

Why Investing Sustainably Matters in Real Estate

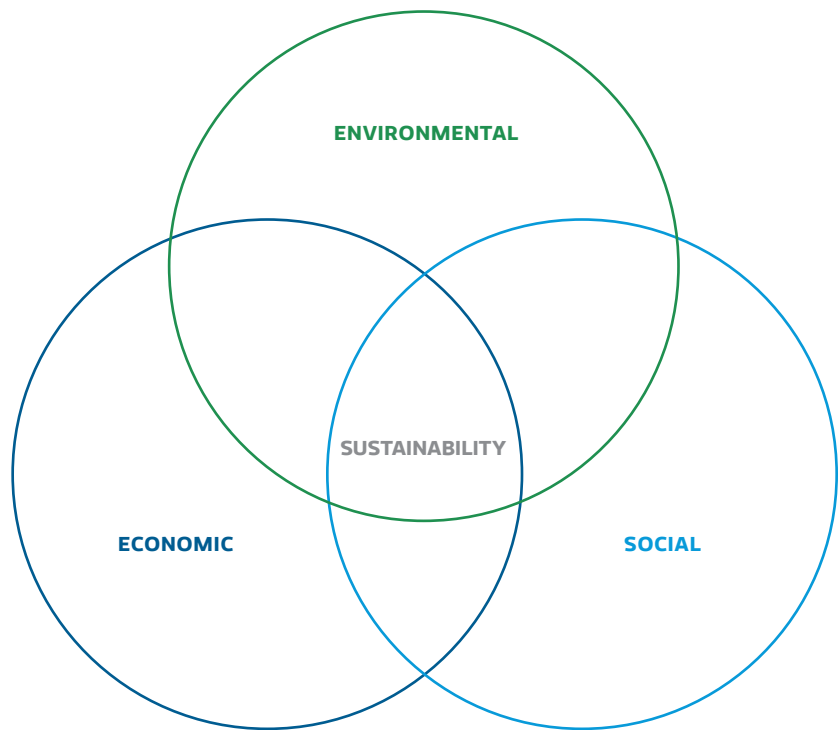
Climate change is an important factor to consider for the real estate sector.⁵ Existing buildings face chronic and acute physical risks, including intensifying hurricanes, floods and wildfires, as well as economic, social and regulatory changes necessary for decarbonization. To limit the global temperature increase to 1.5°C in this century as required by the Paris Agreement, it has been estimated that real estate's direct carbon emissions will need to be cut in half by 2030, compared to 2020 levels, and reach net-zero by 2050.⁶

Publicly traded real estate companies hold a significant share of the building stock globally. As such, they are in a unique position to play an important role in achieving global sustainability targets. As public market investors, understanding how companies can influence and achieve net-zero targets is important, as is assessing the financial implications and, importantly, the capital expenditures required to reach such targets.

DISPLAY 1 What Is Sustainability?

In the 1987 Brundtland Commission Report, the United Nations defined sustainable development as “meeting the needs of the present without compromising the ability of future generations to meet their own needs”.⁸ Ultimately, we believe sustainability requires the equilibrium of three core pillars:

- ENVIRONMENTAL**
 - Managing the consumption of natural resources and reducing environmental impact to preserve the planet
- ECONOMIC**
 - Using resources efficiently and adopting practices that support long-term economic growth, while also generating operational profit
- SOCIAL**
 - Balancing the needs of individuals in society to maintain community welfare in the long term, including equal opportunities for employment, health and wellbeing



With 80% of the existing building stock expected to still be in place through 2050, retrofitting the current stock is critical to meeting global net-zero targets.⁷

⁵ McKinsey. “Climate Risk and the Opportunity for Real Estate”, February 2022.

⁶ United Nations Environment Programme. “2021 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector”, October 2021.

⁷ JLL Research. “Return on Sustainability: How the ‘Value of Green’ Conversation is Growing Up”, January 2022.

⁸ United Nations Brundtland Commission. “Report of the World Commission on Environment and Development: Our Common Future”, April 1987.

Who Is Setting the Priorities for Sustainability?

A confluence of events has led to a rapid increase in the momentum behind sustainability for real estate. This momentum is attributable to three primary constituents: real estate investors, regulators and tenants (see *Display 2*).

REAL ESTATE INVESTORS

The amount of capital directed towards sustainable investing has experienced exponential growth. For example, the UN-convened Net-Zero Asset Owner Alliance (NZAOA), an international group of 74 institutional investors with \$10.6 trillion in assets under management, has committed to transition investment portfolios to net-zero greenhouse gas (GHG) emissions by 2050.⁹

Energy-efficient buildings represent the second biggest use of green bond proceeds.¹⁰ Of the \$290 billion total green bond global issuance in 2020, \$76 billion—more than one quarter—was tagged for green buildings. Banks are also increasing green building construction and mortgage financing.

REGULATORS

As the effects of climate change intensify around the globe, the regulatory landscape is evolving to address and mitigate the worst impacts, with a number of real estate-specific local laws and regulations being adopted in the U.S. and Europe (see *Display 3*).

We are also seeing an even greater global push toward broader ESG regulation, with a particular focus on combating greenwashing.¹¹

DISPLAY 2 Three-Pronged Focus on Sustainability



DISPLAY 3 Select Environmental Regulations

U.S. Building Performance Standards (BPS)	The U.S. BPS Coalition is comprised of 37 state and local governments committed to create and implement BPS in their jurisdictions by 2024. BPS are laws that require buildings to achieve minimum levels of energy or climate performance. ¹²
New York City (NYC) Local Law 97 (LL97)	Requires most buildings over 25,000 square feet to meet new energy efficiency and greenhouse gas emissions limits by 2024, with stricter limits coming into effect in 2030, or face financial penalties. ¹³
California Building Energy Benchmarking	Requires owners of large commercial and multifamily buildings (greater than 50,000 square feet of gross floor area) to annually report whole building energy usage to the California Energy Commission. ¹⁴
French Décret Tertiaire	Requires landlords and tenants of tertiary (i.e., service) sector buildings to reduce energy consumption by 40% by 2030, 50% by 2040 and 60% by 2050 (regulation sets out guidance for defining base year) and to report the energy performance of their buildings annually. ¹⁵
Energy Performance Certificates (EPCs)	Buildings in many European countries are required to hold EPCs, which measure energy efficiency on a scale from A to G. For example, all office buildings greater than 100 square meters in the Netherlands must achieve a minimum EPC rating of C by 2023 and A by 2030. ¹⁶

⁹ UN Environment Programme Finance Initiative. "UN-convened Net-Zero Asset Owner Alliance." Updated 28 July 2022.

¹⁰ United Nations Environment Programme. "2021 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector", October 2021.

¹¹ Greenwashing refers to misleading representations about the sustainability characteristics of a product.

¹² National BPS Coalition. "About the National BPS Coalition", January 2022.

¹³ NYC Sustainable Buildings. "Local Law 97", November 2019.

¹⁴ Kimball, Tirey & St. John LLP. "California Energy Commission's Building Use Benchmarking and Public Disclosure Program – AB 802". Updated June 2018.

¹⁵ Easee. "Décret Tertiaire' – Tertiary Decree", October 2021.

¹⁶ Greenberg Traurig, LLP. "Energy Label C Obligation for All Office Buildings in the Netherlands in 2023 (With Few Exceptions)", November 2018.

- **European Union (EU) Sustainable Finance Disclosure Regulation (SFDR)** has two underlying policy objectives: preventing greenwashing and directing capital into sustainable economic activities. These are achieved by introducing specific obligations for asset managers at the entity level and investment product, i.e. fund level.¹⁷
- **EU Taxonomy** is a classification system, establishing a list of environmentally sustainable economic activities. It could play an important role helping the EU scale up sustainable investment and meet the EU's climate and energy targets for 2030.¹⁸
- **In the U.S., the Securities and Exchange Commission** recently adopted revisions to its fund names rule and has also introduced proposals to enhance disclosures related to ESG investments and alignment with proposed ESG fund categorizations. The new rule and proposal aim to enhance transparency, mitigate greenwashing and provide ESG-related disclosures in the financial industry.

TENANTS

Increasing demand from tenants for sustainable buildings is a natural consequence of the growth in climate target setting by corporations.

Employees returning to the workplace after the COVID pandemic have also brought health and wellbeing into sharper focus. This increasing tenant demand and expectation for green and healthy buildings is leading to rental premiums versus the rest of the market. For example, healthy buildings, as deemed by WELL²² and Fitwel²³ certifications, command effective rents that are 5%

to 8% higher per square foot than comparable non-certified buildings.²⁴

How We Integrate ESG into Real Estate Investing

For MSIM's GLRA team, the identification and assessment of risks and opportunities related to sustainability—specifically the Environmental, Social and Governance (ESG) pillars—are a core element of our research process. Our ESG focus is comparable to our focus on other factors such as building quality, tenancy, occupancy, strategic business plans, etc.

Of companies in the Fortune Global 500, 63% have set 2050 emission reduction targets while 42% have set a significant climate milestone—either carbon neutrality, RE100,¹⁹ or a net-zero target—or they have publicly committed to do so by 2030,²⁰ thus continuing to drive the demand for net-zero carbon buildings.

More than half of FTSE 100 companies have a board-level committee focusing on ESG issues.²¹

¹⁷ An Article 8 financial product promotes binding environmental and/or social characteristics and investee companies follow good governance practices. An Article 9 financial product has sustainable investment as an objective, does no significant harm to its objective, and investee companies follow good governance practices.

¹⁸ Source: https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en.

¹⁹ RE100 is a global initiative that brings together international businesses committed to 100% renewable electricity. For more info refer to <https://www.there100.org/>.

²⁰ Climate Impact Partners. "If Not Now, When?", September 2022.

²¹ Bloomberg. "More Than Half of FTSE 100 Companies Now Have ESG Committees", September 2022.

²² The WELL Building Standard® is a performance-based system for measuring, certifying and monitoring features in buildings and the built environment that impact human health and wellbeing, such as air, water, light and comfort. For more info refer to: <https://www.usgbc.org/articles/what-well>.

²³ Fitwel is a green building certification system that focuses on improving, enhancing and safeguarding the health and wellbeing of tenants and residents in office buildings, multifamily residential buildings and retail space. For more info refer to <https://www.fitwel.org/>.

²⁴ JLL Research. "Return on Sustainability: How the 'Value of Green' Conversation is Growing Up", January 2022.

We undertake a mosaic approach to sustainability research, using both quantitative and qualitative data from multiple sources. The GLRA team’s internal research complements and enhances data from company sustainability reports and third-party providers—including MSCI, S&P Global Trucost, ISS, Equileap and the Global Sustainability Real Estate Benchmark (GRESB)—and we focus our sustainability research on the areas shown in *Display 4*.

The proprietary research process ranks the relative strengths and weaknesses of each company in the investment universe on ESG factors. We then adjust our valuations to account for these ESG risks and opportunities, and the impact they may have on a company’s net asset value and cash flow forecasts in both the near and intermediate term; ultimately, we seek to identify the real estate securities with the best total expected returns for our clients, inclusive of adjustments for ESG risks and opportunities.

ONGOING ENGAGEMENT AND ADVOCACY

We conduct engagements with select portfolio companies each year and prioritize active dialogues where positions are significant and issues are viewed as material. Our constructive dialogue seeks to drive positive change, improve sustainability and enhance long-term value creation.

Complementing these formal ESG engagements are research touchpoints with companies during which ESG factors are discussed.

DISPLAY 4 ESG Focus Areas for the Global Listed Real Assets Team

ENVIRONMENTAL



- Energy usage and renewables
- Water usage
- GHG emissions
- Waste reduction and diversion
- Supply chain and materials management
- Tenant engagement
- Climate resilience

SOCIAL



- Health and wellness
- Safety
- Diversity, equity and inclusion
- Workforce and labor management
- Community impact

GOVERNANCE



- Governance structure
- Board diversity and refreshment
- Compensation programs
- Government and regulatory risk
- Business ethics
- Sustainability-linked financing
- Management skill

In addition to ongoing research and company engagements, proxy voting is an important piece of ESG integration, with investment team members playing an active role in voting, in line with guidance provided by MSIM’s Proxy Voting Policy.

We also leverage our connections in the industry for further collaboration and advocacy. Our involvement includes participation in industry groups and relevant ESG discussions as appropriate including the National Association of Real Estate Investment Managers (NAREIM), National Association of Real Estate Investment Trusts (Nareit), the Real Estate Roundtable and the European Public Real Estate Association (EPRA).

Where We See Sustainability Trends Evolving

- In response to demand from capital allocators and regulators for a rigorous quantitative approach, more ESG data providers will enter the marketplace—creating their own frameworks to rank the ESG profiles of companies using publicly available information.
- Demand will increase for real estate sustainability benchmarks such as GRESB to compare ESG profiles of similar real estate investments.
- Obsolescence risk will increase substantially for “carbon stranded” buildings unable to achieve greenhouse gas emissions (GHGe) reductions necessary to be aligned with a 1.5°C pathway. This will incur a brown discount, ultimately impairing values and potential total returns.

Predictions for Sustainability in Real Estate

Here are our predictions for sustainability in real estate, based on the recognition that assessing ESG risks and opportunities will have a growing impact on valuations, cash flow projections and total returns:

- Increased demand for green buildings, energy metering and prioritizing health, safety and wellness by tenants will lead to a new capital expenditure cycle for commercial real estate. Property owners that have already made significant investments in these areas will be best positioned to navigate the increasing costs.
- While the growing focus on sustainability is a global trend, there will be regional differences due to existing practices and new or expected regulations that mandate energy efficiency; understanding such nuances will be increasingly important for active real estate investors.
- With the evolving regulatory landscape and reporting requirements, ESG data management and disclosure will continue to increase in importance. This should lead to increased transparency and a better understanding of the risks and opportunities related to ESG.
- Responding to ever-expanding tenant demand for green certified buildings, property owners are likely to adopt new technology to achieve sustainability standards. This will pave the way for increased innovation and a growing differentiation between operating platforms, further separating the winners from the losers.

The MSIM GLRA Team seeks to integrate sustainability into certain research and investment processes to stay ahead of these trends, as we seek to provide our clients with exposure to real estate securities with the best expected total returns.

Risk Considerations

The value of investments may increase or decrease in response to economic and financial events (whether real, expected or perceived) in global markets. The value of **equity** securities is sensitive to stock market volatility. **Real Estate Risk:** The risks associated with ownership of real estate and the real estate industry in general include fluctuations in the value of underlying property, defaults by borrowers or tenants, market saturation, decreases in market rents, interest rates, property taxes, increases in operating expenses and political or regulatory occurrences adversely affecting real estate. **Real estate investment trusts (REITs)** are subject to risks similar to those associated with the direct ownership of real estate, and they are sensitive to such factors as management skills and changes in tax laws. **Concentration Risk:** Concentration in a single region may make the portfolio more volatile than one that invests globally. ESG Strategies that incorporate impact investing and/or **Environmental, Social and Governance (ESG) factors** could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. As a result, there is no assurance ESG strategies could result in more favorable investment performance.

IMPORTANT INFORMATION

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market.

A separately managed account may not be appropriate for all investors. Separate accounts managed according to the particular Strategy may include securities that may not necessarily track the performance of a particular index. A minimum asset level is required.

For important information about the investment managers, please refer to Form ADV Part 2.

The views and opinions and/or analysis expressed are those of the author or the investment team as of the date of preparation of this material and are subject to change at any time without notice due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication. The views expressed do not reflect the opinions of all

investment personnel at Morgan Stanley Investment Management (MSIM) and its subsidiaries and affiliates (collectively "the Firm"), and may not be reflected in all the strategies and products that the Firm offers.

Forecasts and/or estimates provided herein are subject to change and may not actually come to pass. Information regarding expected market returns and market outlooks is based on the research, analysis and opinions of the authors or the investment team. These conclusions are speculative in nature, may not come to pass and are not intended to predict the future performance of any specific strategy or product the Firm offers. Future results may differ significantly depending on factors such as changes in securities or financial markets or general economic conditions.

This material has been prepared on the basis of publicly available information, internally developed data and other third-party sources believed to be reliable. However, no assurances are provided regarding the reliability of such information and the Firm has not sought to independently verify information taken from public and third-party sources.

This material is a general communication, which is not impartial and all information provided has been prepared solely for informational and educational

purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The information herein has not been based on a consideration of any individual investor circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

The Firm does not provide tax advice. The tax information contained herein is general and is not exhaustive by nature. It was not intended or written to be used, and it cannot be used by any taxpayer, for the purpose of avoiding penalties that may be imposed on the taxpayer. Each Jurisdiction tax laws are complex and constantly changing. You should always consult your own legal or tax professional for information concerning your individual situation.

Charts and graphs provided herein are for illustrative purposes only. **Past performance is no guarantee of future results.**

The indexes are unmanaged and do not include any expenses, fees or sales charges. It is not possible to invest directly in an index. Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

This material is not a product of Morgan Stanley's Research Department and should not be regarded as a research material or a recommendation.

The Firm has not authorized financial intermediaries to use and to distribute this material, unless such use and distribution is made in accordance with applicable law and regulation. Additionally, financial intermediaries are required to satisfy themselves that the information in this material is appropriate for any person to whom they provide this material in view of that person's circumstances and purpose. The Firm shall not be liable for, and accepts no liability for, the use or misuse of this material by any such financial intermediary.

This material may be translated into other languages. Where such a translation is made this English version remains definitive. If there are any discrepancies between the English version and any version of this material in another language, the English version shall prevail.

The whole or any part of this material may not be directly or indirectly reproduced, copied, modified, used to create a derivative work, performed, displayed, published, posted, licensed, framed, distributed or transmitted or any of its contents disclosed to third parties without the Firm's express written consent. This material may not be linked to unless such hyperlink is for personal and non-commercial use. All information contained herein is proprietary and is protected under copyright and other applicable law.

Eaton Vance is part of Morgan Stanley Investment Management. Morgan Stanley Investment Management is the asset management division of Morgan Stanley.

DISTRIBUTION

This material is only intended for and will only be distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

MSIM, the asset management division of Morgan Stanley (NYSE: MS), and its affiliates have arrangements in place to market each other's products and services. Each MSIM affiliate is regulated as appropriate in the jurisdiction it operates. MSIM's affiliates are: Eaton Vance Management (International) Limited, Eaton Vance Advisers International Ltd, Calvert Research and Management, Eaton Vance Management, Parametric Portfolio Associates LLC, and Atlanta Capital Management LLC.

This material has been issued by any one or more of the following entities:

EMEA

This material is for Professional Clients/Accredited Investors only.

In the EU, MSIM and Eaton Vance materials are issued by MSIM Fund Management (Ireland) Limited ("FMIL"). FMIL is regulated by the Central Bank of Ireland and is incorporated in Ireland as a private company limited by shares with company registration number 616661 and has its registered address at 24-26 City Quay, Dublin 2, DO2 NY19, Ireland.

Outside the EU, MSIM materials are issued by Morgan Stanley Investment Management Limited (MSIM Ltd) is authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

In Switzerland, MSIM materials are issued by Morgan Stanley & Co. International plc, London (Zurich Branch) Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered Office: Beethovenstrasse 33, 8002 Zurich, Switzerland.

Outside the US and EU, Eaton Vance materials are issued by Eaton Vance Management (International) Limited ("EVM") 125 Old Broad Street, London, EC2N 1AR, UK, which is authorised and regulated in the United Kingdom by

the Financial Conduct Authority.

Italy: MSIM FMIL (Milan Branch), (Sede Secondaria di Milano) Palazzo Serbelloni Corso Venezia, 16 20121 Milano, Italy. **The Netherlands:** MSIM FMIL (Amsterdam Branch), Rembrandt Tower, 11th Floor Amstelplein 1 1096HA, Netherlands.

France: MSIM FMIL (Paris Branch), 61 rue de Monceau 75008 Paris, France.

Spain: MSIM FMIL (Madrid Branch), Calle Serrano 55, 28006, Madrid, Spain.

Germany: MSIM FMIL (Ireland) Limited Frankfurt Branch, Große Gallusstraße 18, 60312 Frankfurt am Main, Germany (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG). **Denmark:** MSIM FMIL (Copenhagen Branch), Gorrissen Federspiel, Axel Towers, Axeltorv2, 1609 Copenhagen V, Denmark.

MIDDLE EAST:

Dubai: MSIM Ltd (Representative Office, Unit Precinct 3-7th Floor-Unit 701 and 702, Level 7, Gate Precinct Building 3, Dubai International Financial Centre, Dubai, 506501, United Arab Emirates. Telephone: +97 (0)14 709 7158).

This document is distributed in the Dubai International Financial Centre by Morgan Stanley Investment Management Limited (Representative Office), an entity regulated by the Dubai Financial Services Authority (DFSA). It is intended for use by professional clients and market counterparties only. This document is not intended for distribution to retail clients, and retail clients should not act upon the information contained in this document.

This document relates to a financial product which is not subject to any form of regulation or approval by the DFSA. The DFSA has no responsibility for reviewing or verifying any documents in connection with this financial product. Accordingly, the DFSA has not approved this document or any other associated documents nor taken any steps to verify the information set out in this document, and has no responsibility for it. The financial product to which this document relates may be illiquid and/or subject to restrictions on its resale or transfer. Prospective purchasers should conduct their own due diligence on the financial product. If you do not understand the contents of this document, you should consult an authorised financial adviser.

U.S.:

NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A DEPOSIT

Latin America (Brazil, Chile Colombia, Mexico, Peru, and Uruguay)

This material is for use with an institutional investor or a qualified investor only. All information contained herein is confidential and is for the exclusive use and review of the intended addressee, and may not be passed on to any third party. This material is provided for informational purposes only and does not constitute a public offering, solicitation or recommendation to buy or sell for any product, service, security and/or strategy. A decision to invest should only be made after reading the strategy documentation and conducting in-depth and independent due diligence.

ASIA PACIFIC

Hong Kong: This material is disseminated by Morgan Stanley Asia Limited for use in Hong Kong and shall only be made available to "professional investors" as defined under the Securities and Futures Ordinance of Hong Kong (Cap 571). The contents of this material have not been reviewed nor approved by any regulatory authority including the Securities and Futures Commission in Hong Kong. Accordingly, save where an exemption is available under the relevant law, this material shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong. **Singapore:** This material is disseminated by Morgan Stanley Investment Management Company and should not be considered to be the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under section 304 of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"); (ii) to a "relevant person" (which includes an accredited investor) pursuant to section 305 of the SFA, and such distribution is in accordance with the conditions specified in section 305 of the SFA; or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. This publication has not been reviewed by the Monetary Authority of Singapore. **Australia:** This material is provided by Morgan Stanley Investment Management (Australia) Pty Ltd ABN 22122040037, AFSL No. 314182 and its affiliates and does not constitute an offer of interests. Morgan Stanley Investment Management (Australia) Pty Limited arranges for MSIM affiliates to provide financial services to Australian wholesale clients. Interests will only be offered in circumstances under which no disclosure is required under the Corporations Act 2001 (Cth) (the "Corporations Act"). Any offer of interests will not purport to be an offer of interests in circumstances under which disclosure is required under the Corporations Act and will only be made to persons who qualify as a "wholesale client" (as defined in the Corporations Act). This material will not be lodged with the Australian Securities and Investments Commission.

Japan: For professional investors, this material is circulated or distributed for informational purposes only. For those who are not professional investors, this material is provided in relation to Morgan Stanley Investment Management

(Japan) Co., Ltd. ("MSIMJ")'s business with respect to discretionary investment management agreements ("IMA") and investment advisory agreements ("IAA"). This is not for the purpose of a recommendation or solicitation of transactions or offers any particular financial instruments. Under an IMA, with respect to management of assets of a client, the client prescribes basic management policies in advance and commissions MSIMJ to make all investment decisions based on an analysis of the value, etc. of the securities, and MSIMJ accepts such commission. The client shall delegate to MSIMJ the authorities necessary for making investment. MSIMJ exercises the delegated authorities based on investment decisions of MSIMJ, and the client shall not make individual instructions. All investment profits and losses belong to the clients; principal is not guaranteed. Please consider the investment objectives and nature of risks before investing. As an investment advisory fee for an IAA or an IMA,

the amount of assets subject to the contract multiplied by a certain rate (the upper limit is 2.20% per annum (including tax)) shall be incurred in proportion to the contract period. For some strategies, a contingency fee may be incurred in addition to the fee mentioned above. Indirect charges also may be incurred, such as brokerage commissions for incorporated securities. Since these charges and expenses are different depending on a contract and other factors, MSIMJ cannot present the rates, upper limits, etc. in advance. All clients should read the Documents Provided Prior to the Conclusion of a Contract carefully before executing an agreement. This material is disseminated in Japan by MSIMJ, Registered No. 410 (Director of Kanto Local Finance Bureau (Financial Instruments Firms)), Membership: the Japan Securities Dealers Association, The Investment Trusts Association, Japan, the Japan Investment Advisers Association and the Type II Financial Instruments Firms Association.