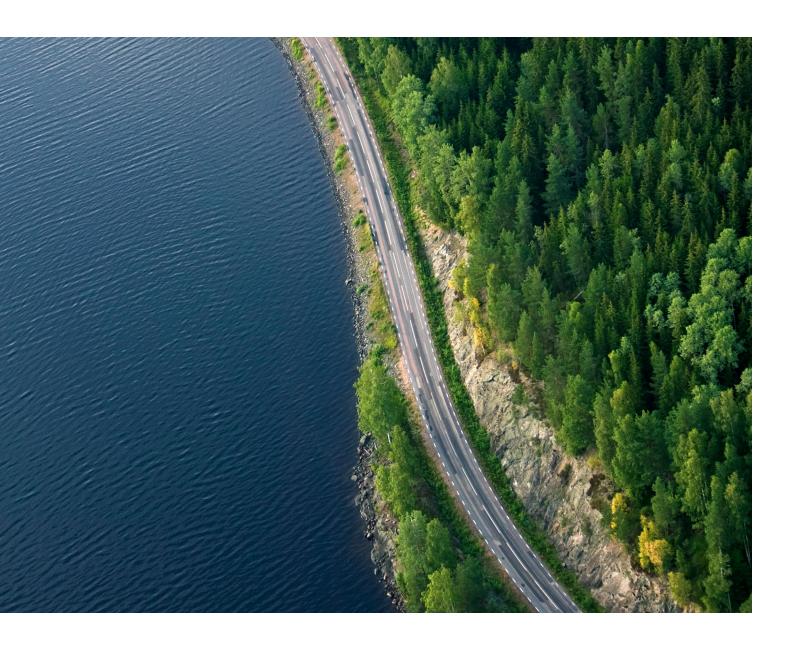
Morgan Stanley

INSTITUTE FOR SUSTAINABLE INVESTING

Sustainable Signals

Institutional Investors

DECEMBER 2024



Key Insights



Sustainable Assets Are Expected to Increase

Over three-quarters of asset managers (78%) and asset owners (80%) expect sustainable assets under management (AUM) and asset allocations to rise in the next two years, driven by new mandates and a more established track record for sustainable investing. More than 75% of institutional investors agree that sustainable investment offerings influence mandate decisions, and 90% say client demand is driving their sustainable investing efforts.



Data and Greenwashing Are Major Challenges for Institutional Investors

Institutional investors face challenges like data availability and consistency (71%) and the risk of greenwashing (68%) in sustainable investing. Concerns about the real-world impact of investments and negative perceptions in the media and broader society rank lower. APAC investors cite challenges at higher rates than their European or North American counterparts and are particularly concerned about the burden of disclosure requirements for investors.



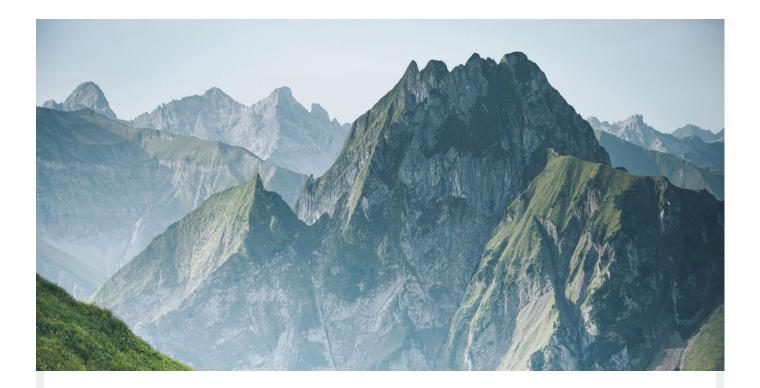
Institutional Investors Say They Have a Plan to Meet Net-Zero Targets, But Have Mixed Views on Carbon Offsets

Nearly two-thirds of asset owners have net-zero targets, with asset managers lagging by eight percentage points. Almost all of those with a target say they have a plan to deliver on it, with about 2% claiming to have already reached net zero. Nearly 40% of asset owners currently use carbon offsets to mitigate portfolio emissions, and 31% of asset managers say they currently offer clients offsets linked to specific products or aggregated emissions. There is no consensus on the use of carbon offsets among institutional investors, with mixed views on their appropriateness for broad decarbonization efforts or targeted use for specific hard-to-abate emissions.



There Are Regional Differences in Sustainable Investment Themes and Solutions

Globally, healthcare (41%) and financial inclusion (40%) are top themes, but regional priorities do vary. In Europe, investors rank nature and biodiversity investment opportunities higher than their North American and APAC counterparts, while APAC investors focus more on climate action and healthcare solutions. Notably, climate adaptation solutions are seen as one of the most underappreciated investment opportunities across all three regions.



Methodology

This report is led by the Morgan Stanley Institute for Sustainable Investing ("Institute") and presents results from an online survey of asset owners and asset managers conducted by Dynata LLC on behalf of the Institute. This report is the latest in the "Sustainable Signals" series, which is designed to identify global market trends in sustainable investing. This report is the second edition of combined survey data from asset owners and asset managers under the umbrella of "institutional investors." Direct comparisons to previous surveys may not be meaningful as different survey vendors were used.

From July 17 to August 7, 2024, a sample of 295 asset owners and 606 asset managers were surveyed across North America, Europe and Asia Pacific for a global total of 901 institutional investors. Unless otherwise specified, "institutional investors" refers to combined responses from both asset owners and asset managers. To qualify, respondents had to respond that their firm currently practices or plans to practice sustainable investing. For more information on the sample profile and quotas, please see page 15 in the Appendix.

CONTACT US

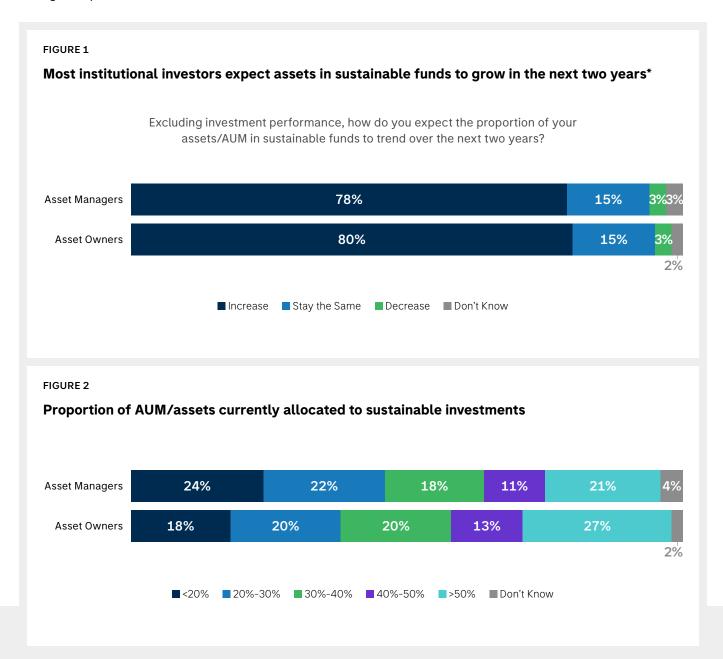
For any questions related to the report, please reach out to the Institute for Sustainable Investing team at globalsustainability@morganstanley.com.

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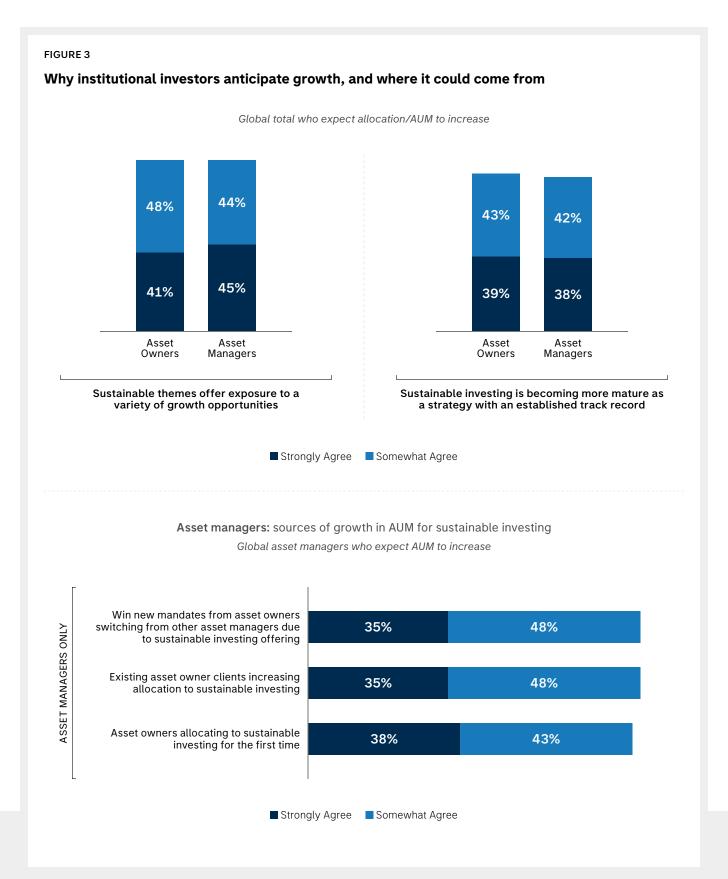
Sustainable Assets Are Expected to Increase

More than three-quarters (78%) of asset managers expect AUM in sustainable funds to increase over the next two years, driven by a combination of new mandates and higher allocations from existing asset owner clients. This is consistent with responses from asset owners, where 80% expect the proportion of their assets allocated to sustainable investment options to increase over the same period. Notably, only 3% of asset owners and asset managers expect a decline in asset allocation or AUM.

For both groups, the exposure to growth opportunities that sustainable investments offer is the top reason for this expected increase, followed by a more established track record for sustainable investing as a strategy. For more than 70% of both asset owners and asset managers, sustainable investments make up less than half of assets or AUM today, suggesting there is indeed room for growth.



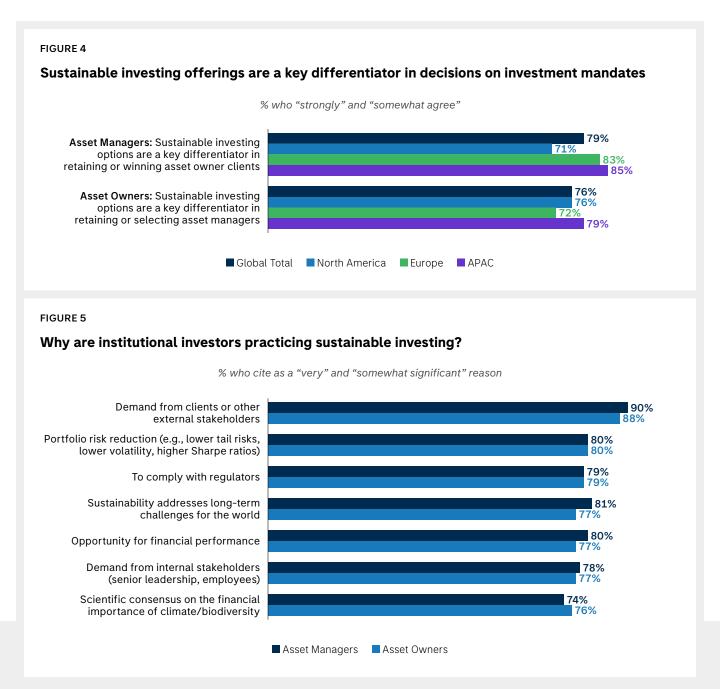
^{*}Sums may not equal 100% in some figures due to rounding.



Sustainable Investing Offerings Are a Key Differentiator in Investment Mandate Decisions

Sustainable investing offerings are seen as a key differentiator in the asset owner and asset manager relationship, with more than three-quarters "strongly" or "somewhat agreeing" that they influence mandate decisions. More than 80% of asset owners globally say that they require asset managers to have a sustainable investing policy or strategy in place.

Nearly 90% of institutional investors (90% of asset managers, 88% of asset owners) say that their sustainable investing activities are driven by client and external stakeholder demand. This trend is consistent across regions and among both asset managers and asset owners.



Data and Greenwashing Are Top Challenges for Both Asset Owners and Asset Managers

For 71% of institutional investors, data availability and consistency are the most pressing challenges in sustainable investing, with fluctuating regulations and the threat of greenwashing not far behind (69% and 68% respectively). Concerns about the real-world impact of investments and negative perceptions in the media or broader society rank lower at 60% and 59%, respectively.

While the top concerns are consistent across regions, APAC investors do cite challenges at higher rates than their European and North American counterparts. APAC investors appear particularly concerned about the burden of disclosure requirements for investors (71%), a sentiment less pronounced in Europe (58%) and North America (57%).

Broadly, asset owners and asset managers report very similar views on these key concerns about sustainable investing.

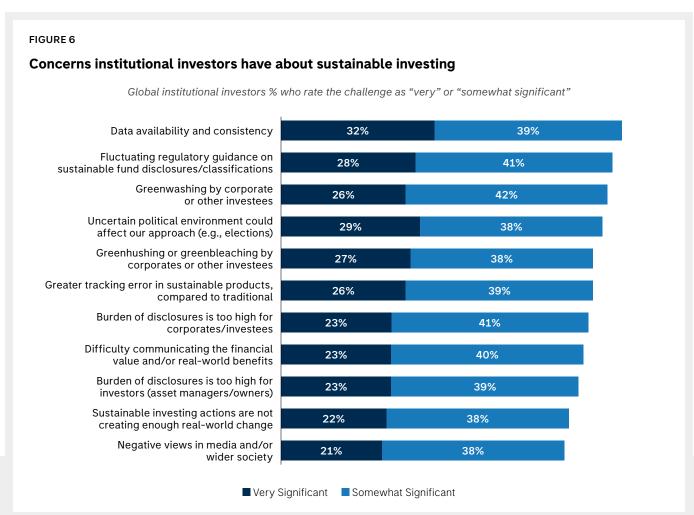
But just as sustainability is a key differentiator in mandate decisions, it also raises concerns in the asset manager and asset owner relationship. Seventy-one percent of asset owners say they are worried about possible greenwashing from asset managers; at the same time, 67% of asset managers say that asset owners have unrealistic expectations about the sustainability outcomes of their investments.

Asset owners concerned about greenwashing from asset managers



Asset managers who say asset owners have unrealistic expectations about sustainability outcomes



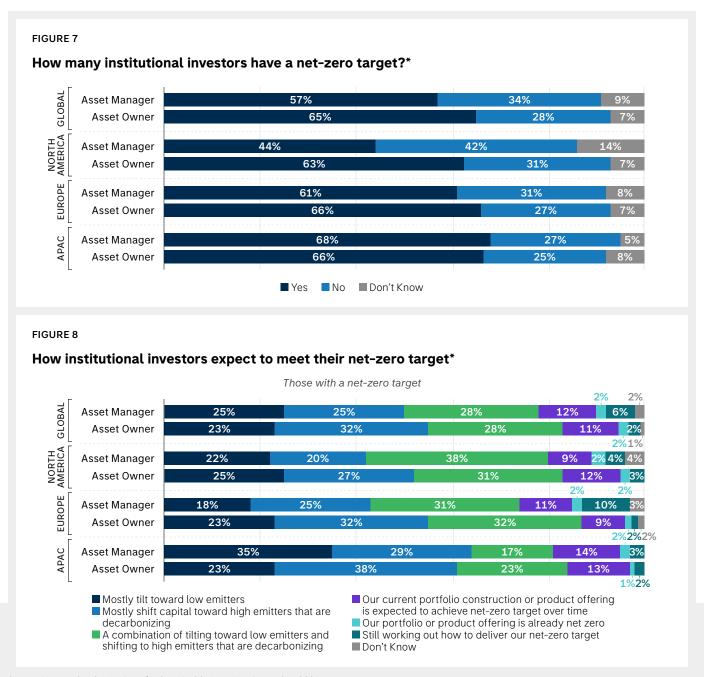


Institutional Investors Say They Have Plans to Meet Net-Zero Targets

Close to two-thirds of asset owners have set a net-zero target, with asset managers trailing by eight percentage points.

Almost all of those with a target say they have plans to deliver, with ~2% saying they have already reached net zero.

A majority of institutional investors say that meeting their net-zero targets will require new portfolio construction strategies, suggesting future capital shifts are anticipated as investors prioritize low-emitting assets and companies actively decarbonizing. This capital shift has largely not happened yet, which means that potentially material impacts on valuations are still to play out.



Source: Morgan Stanley Institute for Sustainable Investing, December 2024. *Sums may not equal 100% in some figures due to rounding.

Institutional Investors Have Diverse Approaches to Carbon Offsets

Nearly 40% of asset owners currently purchase carbon offsets to mitigate their portfolio emissions, with one-quarter planning to start in the next two years. For asset managers, 31% say they currently offer clients carbon offsets linked to specific products or aggregated emissions and 32% plan to make such an offering in the next two years.

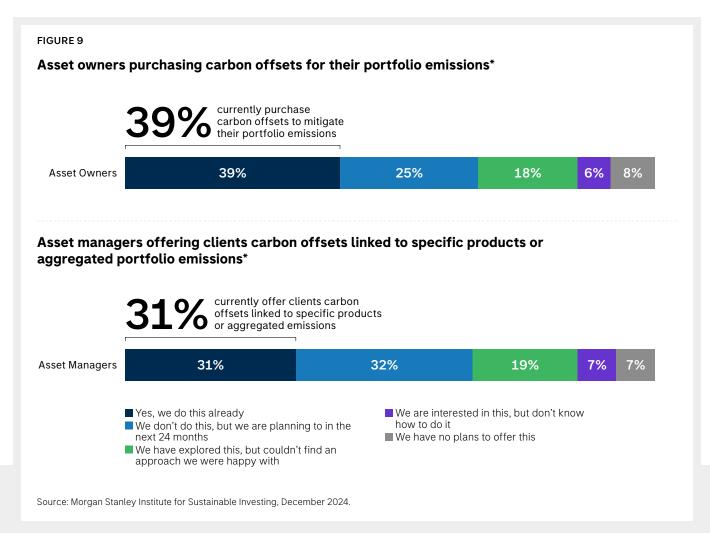
When it comes to assessing the use of carbon offsets for current or potential investees, there is no clear consensus. Investors are split on whether offsets are a valid approach to broader decarbonization strategies (32% of asset owners; 31% of asset managers) or whether they should only be used for hard-to-abate emissions (21% of asset owners, 22% of asset managers). That said, only 6% of asset managers and 3% of asset owners think that offsets should not be used as part of an investee's decarbonization strategy at all.

HOW RESPONDENTS WERE ASKED ABOUT CARBON OFFSETS:

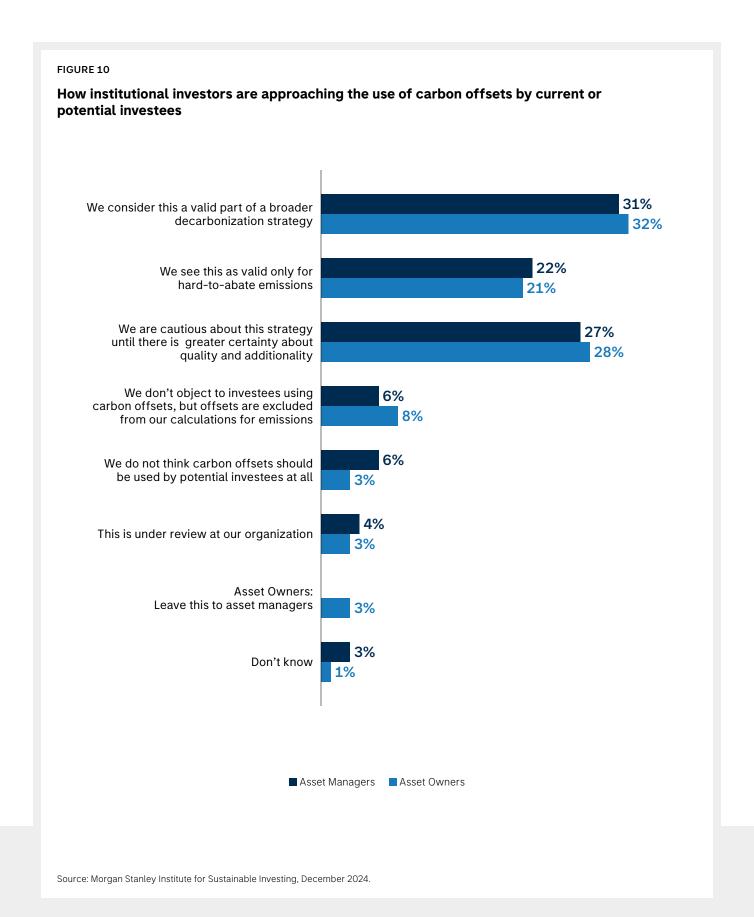
Respondents were asked about their own use of carbon offsets and about their view of carbon offsets used by corporates.

In investment portfolios: Asset managers were asked if they currently offer their clients carbon offsets linked to specific investment products or aggregated portfolio emissions (offsets for combined emissions exposure across multiple products). Asset owners were asked if they currently purchase carbon offsets to mitigate their portfolio's emissions. Responses are shown in Figure 9.

Use by corporates: Both asset owners and asset managers were asked how they approach carbon offsets used by current or potential investees when making investments. Responses are shown in Figure 10. Here "investees" refers mostly to corporates, but could also include sovereigns in a fixed income context.



^{*}Sums may not equal 100% in some figures due to rounding.



There Are Regional Differences for Sustainable Investment Themes and Solutions

Globally, institutional investors are invested in a range of sustainability themes, with healthcare (41%) and financial inclusion (40%) having a slight lead.

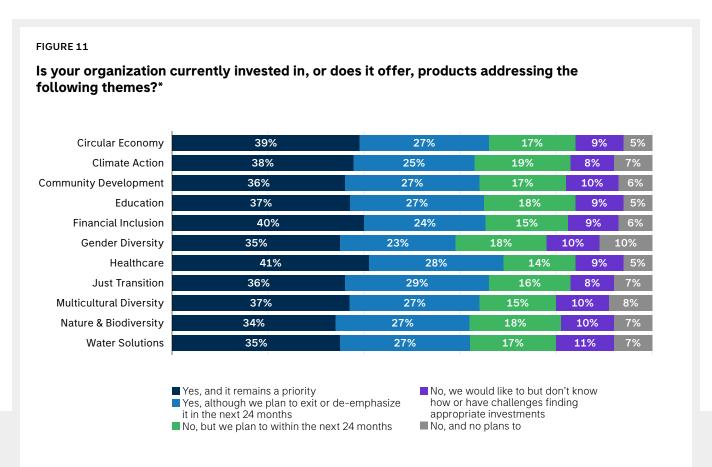
When asked to prioritize specific environmental and social solutions, global investors across North America, Europe and APAC rank renewable energy, energy efficiency and climate adaptation highly. Notably, climate adaptation solutions are also seen as one of the most underappreciated investment opportunities across all three regions.

Some notable differences emerged at the regional level, though. In Europe, "protecting wildlife on land and in water", "preventing deforestation" and "ocean conservation" are all top 10 sustainable solutions, while there was no mention of nature or biodiversity in the top 10 for North America or APAC. "Biofuels" and "support for aging populations" were top ranked themes unique to APAC, while "racial diversity, equity and inclusion" was in the top 10 for North America but not the other regions.

HOW RESPONDENTS WERE ASKED ABOUT INVESTMENT THEMES AND SOLUTIONS:

Themes: Respondents were provided with a list of 11 broad sustainable investing themes and asked to rank them, as shown in Figures 11, 12, 14 and 16.

Specific solutions: Separately, the survey included a list of more than 30 specific sustainability solutions (see Appendix for a full list). Respondents were asked to select their top five priorities for investment and rank them #1-#5. For their top five priorities, they were then asked to rate the availability of suitable investments in that area. Potential responses were: Plenty of opportunities, still underappreciated; Plenty of opportunities, although partly in the price; Plenty of opportunities, but fully reflected in asset prices; Limited opportunities; Very few or no opportunities. Responses to these questions are shown in Figures 13, 15 and 17.



Source: Morgan Stanley Institute for Sustainable Investing, December 2024. *Sums may not equal 100% in some figures due to rounding.

NORTH AMERICA



INVESTMENT THEMES

Most Invested

- Healthcare
- · Financial Inclusion

Next Priorities

- · Climate Action
- Water Solutions
- · Circular Economy

SPECIFIC INVESTMENT SOLUTIONS

Top Priority Solutions

- · Renewable Energy
- · Affordable Healthcare Plans
- Energy Efficiency
- Clean Water and Sanitation

Underappreciated by the Market

- · Racial Equity, Diversity and Inclusion
- · Climate Adaption
- Energy Storage and Battery Technology

Specific themes, ranked and prioritized in North America

Is your organization currently invested in, or does it offer, products addressing the following themes?

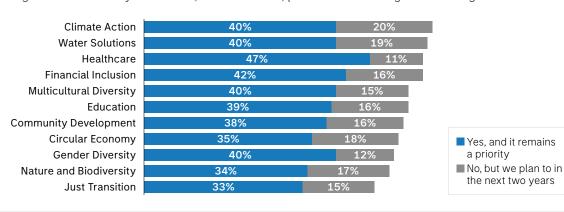
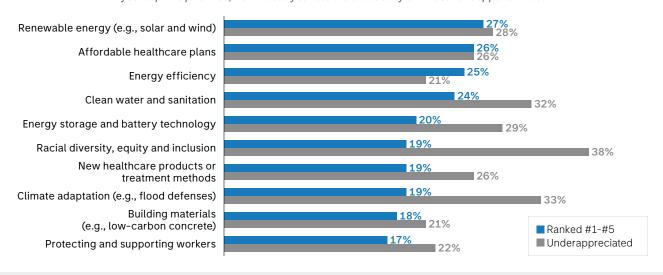


FIGURE 13

Specific solutions, top 10 of those ranked #1-#5 in North America

Assuming investment opportunities were available, please select your top five priorities In your top five priorities, how would you rate the availability of investment opportunities?



EUROPE



INVESTMENT THEMES

Most Invested

- Climate Action
- Circular Economy

Next Priorities

- · Gender Diversity
- Just Transition
- · Education

SPECIFIC INVESTMENT SOLUTIONS

Top Priority Solutions

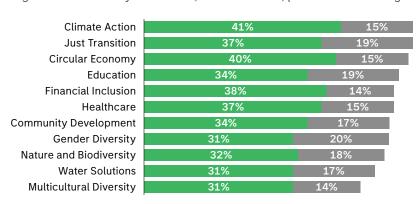
- · Energy Efficiency
- Clean Water and Sanitation
- Renewable Energy

Underappreciated by the Market

- · Clean Water and Sanitation
- Climate Adaptation
- · Waste Management
- Sustainable Building Materials

FIGURE 14 Specific themes, ranked and prioritized in Europe

Is your organization currently invested in, or does it offer, products addressing the following themes?



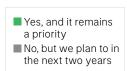
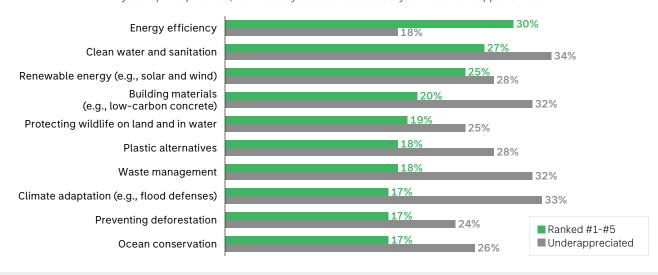


FIGURE 15

Specific solutions, top 10 of those ranked #1-#5 in Europe

Assuming investment opportunities were available, please select your top five priorities In your top five priorities, how would you rate the availability of investment opportunities?



APAC



INVESTMENT THEMES

Most Invested

- · Circular Economy
- · Financial Inclusion

Next Priorities

- · Gender Diversity
- · Climate Action

SPECIFIC INVESTMENT SOLUTIONS

Top Priority Solutions

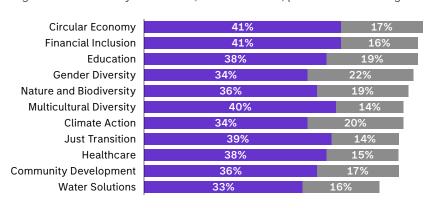
- · Renewable Energy
- Energy Efficiency

Underappreciated by the Market

- · Protecting and Supporting Workers
- Climate Adaptation
- Biofuels

FIGURE 16 Specific themes, ranked and prioritized in APAC

Is your organization currently invested in, or does it offer, products addressing the following themes?



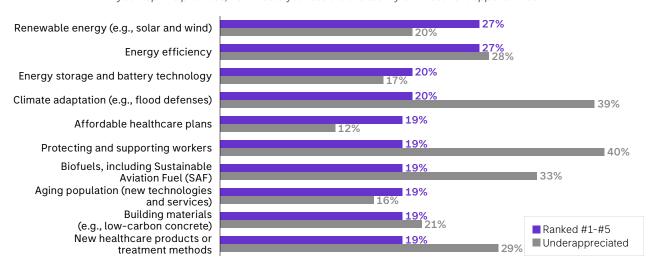
Yes, and it remains a priority

No, but we plan to in the next two years

FIGURE 17

Specific solutions, top 10 of those ranked #1-#5 in APAC

Assuming investment opportunities were available, please select your top five priorities In your top five priorities, how would you rate the availability of investment opportunities?



Appendix

Methodology and Sample Design

QUALIFIERS

To qualify, respondents had to:

- Self-identify their organization as asset managers or asset owners. Respondents answered "How would you describe your organization?" with "Asset Owner Endowment / Foundation," "Asset Owner Family Office," "Asset Owner Insurance," "Asset Owner Pension Fund Corporate," "Asset Owner Pension Fund Government," "Asset Owner Pension Fund Other," "Asset Owner Sovereign Wealth Fund," "Asset Owner Asset Allocator / OCIO" or "Asset Manager."
- Respond that their organization currently offers or invests in sustainable investments, or plans to.
- Confirm that they are familiar with their organization's investment strategy and decision making.

QUOTAS

Seeking a broad range of responses, the survey design set a number of quotas for asset owner type, investable assets (asset owner) and AUM (asset manager), which applied both globally and for each region. These are set out in the table below.

COUNTRIES

- North America: United States (n=237), Canada (n=48), Mexico (n=16).
- Europe: Austria (n=16), Belgium (n=11), France (n=43), Finland (n=13), Denmark (n=15), Germany (n=30), Ireland (n=16), Netherlands (n=22), Spain (n=62), Sweden (n=19), Switzerland (n=10), United Kingdom (n=45).
- APAC: Australia (n=26), Mainland China (n=66), Hong Kong SAR (n=25), India (n=8), Japan (n=90), Malaysia (n=15), New Zealand (n=3), Philippines (n=20), Singapore (n=23), Taiwan (n=22).

SAMPLE PROFILE

	GLOBAL	NORTH AMERICA	EUROPE	APAC
Total	901	301	302	298
RESPONDENT TYPE	Quota 67%/33% Asset Owner/Asset Manager*			
Asset Owner	606	199	202	205
Asset Manager	295	102	100	93
ASSET OWNER TYPE	Quota <50% Pension Fund			
Endowment / Foundation	67	28	27	12
Family Office	79	24	26	29
Insurance	238	75	73	90
Pension Fund - Corporate	117	38	43	36
Pension Fund - Government	34	16	11	7
Pension Fund - Other	11	5	3	3
Sovereign Wealth Fund	40	7	8	25
Asset Allocator / OCIO	20	6	11	3
ASSET OWNER INVESTABLE ASSETS*	Quota <50% Under \$1bn / >10% More than \$50bn			
Large >\$50bn	93	38	27	28
Mid-Size	209	57	70	82
Small <\$1bn	304	104	105	95
ASSET MANAGER AUM*	Quota <50% Under \$1bn / >10% More than \$100bn			
Large >\$100bn	58	18	23	17
Mid-Size	65	20	15	30
Small <\$10bn	172	64	62	46

^{*}Different bands for asset owner and asset manager size, as well as a larger proportion of asset owners in the sample, reflect greater consolidation among asset managers. "Large" in each case broadly corresponds to the largest 100 global firms in each category.

Full list of specific sustainability solutions referenced on page 11:

- Companies or other investees with strong female representation and/or policies
- Projects specifically benefiting women in developing countries, such as microfinance or clean cooking stoves
- · Nuclear power
- Energy storage and battery technology
- Carbon capture and storage
- Renewable energy (e.g., solar and wind)
- · Energy efficiency
- Hydrogen, including fuel cells

- · Green ammonia
- Biofuels, including Sustainable Aviation Fuel (SAF)
- Sustainable building materials (e.g., low-carbon concrete, green steel)
- Low-carbon/alternative protein
- Climate adaptation (e.g., flood defenses, cooling equipment)
- · Preventing deforestation
- Protecting wildlife on land and in water
- Regenerative agriculture and other sustainable farming practices

- · Ocean conservation
- Racial diversity, equity and inclusion
- LGBTQ+ equity and inclusion
- Lower socioeconomic class equity and inclusion
- Affordable or low-income housing
- Accessible lending, for example via CDFIs
- · Plastic alternatives
- · Waste management
- Clean water and sanitation
- Broadening access to vaccines

- Developing healthcare workers skills
- Affordable healthcare plans
- New healthcare products or treatment methods
- Nursing services (Childcare, Nursing Care)
- Aging population (new technologies and services)
- Declining birthrate & depopulation (new products and services)
- Protecting and supporting workers
- Supporting military veterans

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ESG investments may also be referred to as sustainable investments, impact aware investments, socially responsible investments or diversity, equity, and inclusion ("DEI") investments. It is important to understand there are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. This is due to a current lack of consistent global reporting and auditing standards as well as differences in definitions, methodologies, processes, data sources and subjectivity among ESG rating providers when determining a rating. Certain issuers of investments including, but not limited to, separately managed accounts (SMAs), mutual funds and exchange traded-funds (ETFs) may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. Further, socially responsible norms vary by region, and an issuer's ESG practices or Morgan Stanley's assessment of an issuer's ESG practices can change over time.

Portfolios that include investment holdings deemed ESG investments or that employ ESG screening criteria as part of an overall strategy may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results. For risks related to a specific fund, please refer to the fund's prospectus or summary prospectus.

Investment managers can have different approaches to ESG and can offer strategies that differ from the strategies offered by other investment managers with respect to the same theme or topic. Additionally, when evaluating investments, an investment manager is dependent upon information and data that may be incomplete, inaccurate or unavailable, which could cause the manager to incorrectly assess an investment's ESG characteristics or performance. Such data or information may be obtained through voluntary or third-party reporting. Morgan Stanley does not verify that such information and data is accurate and makes no representation or warranty as to its accuracy, timeliness, or completeness when evaluating an issuer. This can cause Morgan Stanley to incorrectly assess an issuer's business practices with respect to its ESG practices. As a result, it is difficult to compare ESG investment products.

The appropriateness of a particular ESG investment or strategy will depend on an investor's individual circumstances and objectives. Principal value and return of an investment will fluctuate with changes in market conditions.

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