Corporate &
Investment Banking

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Sustainable Finance & Advisory

Top 10 Sustainability Trends for 2023

As companies around the world have embedded sustainability into their business models, set emissions targets, and deepened their efforts on the governance front, expectations across the stakeholder landscape have grown. Against a backdrop of weakening macros and volatile markets, the U.S. political climate brought diverging views to the fore, and sharpened debates about fiduciary responsibility within the corporate and asset management arenas. Amid geo-political uncertainty, one thing seems more certain – regulation. Europe has been leading the charge, requiring mandatory disclosures by corporations and investment managers, while the SEC has proposed its own regulation for U.S. entities. Regardless of how the conversations about climate, sustainability, and Environmental, Social and Governance (ESG) evolve, boards will need to apply a sustainability lens to a wide range of matters, including governance, human capital, environmental implications of business decisions, and supply chains.

There were several achievements in the year that should provide a tailwind for sustainability. The passing of historic climate legislation via the Inflation Reduction Act is expected to invigorate the energy transition and expand sources of capital for the next era of sustainable finance. While COP 27 didn't come with the same fanfare as in years past, progress was indeed made – the most notable being a mechanism for loss and damage finance. Its sister Biodiversity Conference, COP15, brought the criticality of biodiversity to the fore, highlighting that business and nature are inextricably linked.

At Wells Fargo, we remain excited about the future of sustainable finance, the transformative impact it will continue to have, and the role we can play supporting our clients. With that preamble, we are pleased to present our Top 10 Sustainability Trends for 2023.

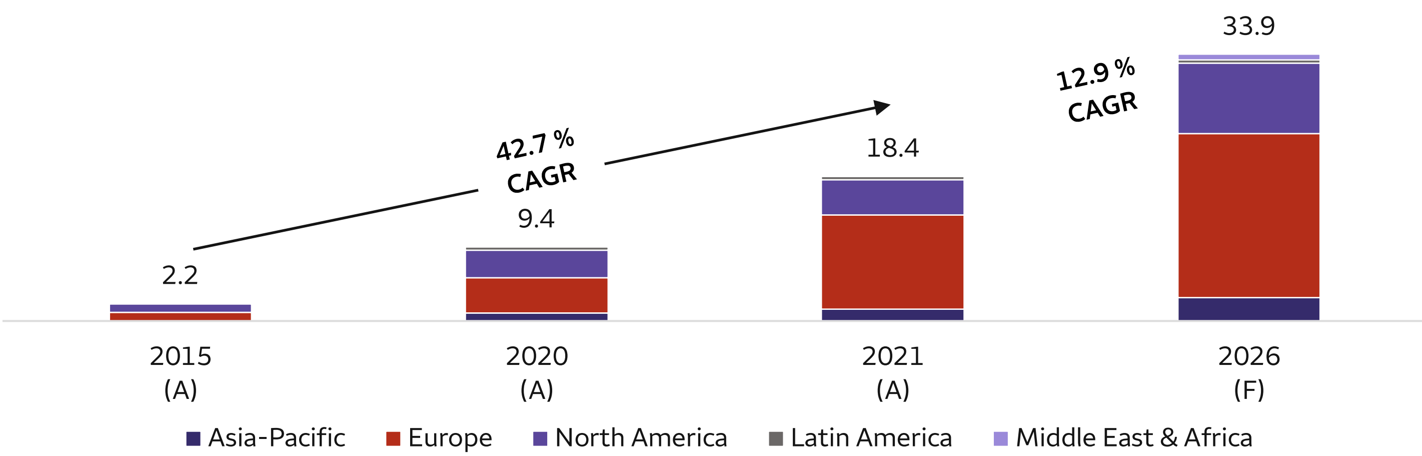
Summary of Top 10 Sustainability Trends for 2023

1	**ESG investments to grow market share and improve transparency** Irrespective of the political climate, sustainable AUM is expected to grow as a percent of the overall market as the investible landscape expands and becomes more detailed and defined.
2	**Ever-evolving regulations to expand the scope of disclosures** Updated regulations globally will challenge entities, from companies to investment firms, to provide even more detailed disclosures to give capital providers and other stakeholders further transparency.
3	**Boards will continue to be challenged on ESG matters** Sustainability will be an important consideration for corporations, and boards should pay close attention to ESG matters to meet regulatory demands, avoid reputational harm, or identify growth opportunities.
4	**Expansion of the energy transition and the financing options available** After a brief slowdown in 2022, the energy transition should get a boost from additional pools of capital, as well as an unprecedented policy environment that provides a particularly strong push for wind and solar.
5	**Advancement of climate goals and an emphasis on biodiversity** COP27 and COP15 closed in winter 2022, raising accountability for climate goals and putting a fresh focus on biodiversity.
6	**Climate-related financial risk to garner increased attention and guidance** Asset values and return models are beginning to adjust for climate and environmental risks of business strategies and investments.
7	**After market-driven slowdown, modest growth in ESG-labeled bond supply** ESG-labeled bond issuance is expected to grow modestly as a percentage of the overall bond market.
8	**Sustainability-linked loan market to hold ground** After slight gains in market share in 2022, sustainability-linked lending is expected to maintain current levels through 2023.
9	**Environmental and human elements converge in supply chains** Ambitious targets from corporates to reduce Scope 3 emissions are expected to increasingly put pressure on all ESG factors of supply chain management, from environmental factors to human rights.
10	**Sustainability becomes a focus in Commercial Real Estate** Emissions reporting requirements are only the latest driver of progress towards sustainability in the commercial real estate sector, with more innovative solutions expected in 2023.

1. ESG investments to grow market share and improve transparency

- The last year saw increased debate about the role of ESG in a corporation's financial performance and the responsibility of fiduciaries. Between political campaigns and state actions penalizing financial institutions with positions that may be informed by ESG considerations, and critics from within the asset management world, the movement is raising important ideas and forcing market players to improve methodological transparency and better articulate value propositions.
- But the noise isn't preventing strides from being made in sustainable investing, with projections calling for growth in global ESG assets under management (AUM) that will outpace that of the asset and wealth management market as a whole.[1] The share of ESG assets as a percent of total AUM is forecast to increase from 14.4% ($18.4 trillion) to 21.5% ($33.9 trillion) representing ~13% annual growth from 2021 to 2026. A large driver of growth will be the repurposing of funds, particularly in Europe, to incorporate ESG factors.

Sustainable Finance Volumes are Projected to Grow Through 2026
Global Sustainable Finance AUM ($ in trillions)



Source: PwC Asset and wealth management revolution 2022. Includes Mutual Funds, Private Capital, and Mandates

- In the ETF space more specifically, ESG-labeled equity funds realized positive net fund flows in each month of 2022, despite declines in global AUM in equity portfolios and periods of outflows in the broader ETF space.[2] Looking ahead, growth in global ESG ETFs is expected to be up overall, but mixed by region reflecting varying sentiment and reallocations to be more sector neutral. Europe, where ESG sentiment remains positive, should continue to see positive fund flows, and helped by the Markets in Financial Instruments Directive (MiFID) suitability requirements (effective August 2022). The rule requires investment firms to assess clients' sustainable preferences along with investment objectives, which could provide a tailwind to the greener Article 8 and 9 funds. Article 8 funds account for the majority of global ESG ETF assets, compared to 14% for the darker green Article 9 funds, and 37% for the remainder.[3]
- Disclosures around funds are set to get more stringent on the heels of legislation, which should improve the alignment of holdings with their fund's investment thesis. The EU's Sustainable Finance Disclosure Regulation (SFDR), which aims to improve transparency on the sustainability features of investment portfolios, put into effect Level 2 requirements at the start of this year, requiring firms to provide more detail regarding portfolio alignment with Article 8 or Article 9 products. Another development has occurred stateside with the SEC's May

1. PwC, "Asset and wealth management revolution 2022"
2. Bloomberg Intelligence
3. Bloomberg Intelligence, "MiFID's New Suitability Requirements Could Support ESG ETFs"

2022 proposal around ESG disclosures for investment advisers and firms, requiring the furnishing of comparable and reliable information for investors on how ESG factors are incorporated, specific detail on strategies, and in some cases, GHG emissions associated with portfolio investments.[4]

- Finally, as an indication that ESG is in demand by investors, studies show that investors are willing to pay a premium of 20 basis points more per year for an investment in a fund with an ESG mandate, as compared to an otherwise identical mutual fund without such a directive. Factoring in the 60%+ overlap between ESG and non-ESG index funds, and the willingness by investors to accept lower financial returns in exchange for psychological and societal benefits, the implicit value that investors place on stocks with strong ESG characteristics is even higher than the headline number.[5]
- **Our take: Although sentiment will continuously shift, ESG as an investment strategy is here to stay; sustainable AUM is expected to grow, albeit with greater regulatory scrutiny and quality control.**

2. Ever-evolving regulations to expand the scope of disclosures

- As was the case in 2022, sustainability policies are evolving rapidly and proliferating on a global scale. In parallel, regulations globally are increasingly requiring companies to disclose information regarding the nonfinancial aspects of their business to interested stakeholders.
- In the European Union, the Corporate Sustainability Reporting Directive (CSRD) expands the existing Non-Financial Reporting Directive and should take effect in early 2023. The CSRD introduces detailed reporting requirements, while seeking to ensure that large companies and small and mid-size enterprises (SMEs) meet a vastly expanded scope and detail of nonfinancial reporting obligations, addressing such topics as human rights, environmental impacts, climate change, and the double materiality concept. Although an EU-directive, this will likely impact U.S. and other non-EU companies with EU businesses, albeit with some grace period. The earliest reporting year will be financial year 2024 for companies already subject to the EU's Non-Financial Reporting Directive (NFRD).
- In the U.S., corresponding measures are being taken by the SEC, which proposed "The Enhancement and Standardization of Climate-Related Disclosures for Investors" in March 2022, with the goal to provide more consistent, comprehensive, and reliable information for investors. The proposal would require SEC registrants to provide information about climate-related risks that are reasonably likely to have a material impact on their business, results of operations, or financial condition, along with disclosure of greenhouse gas emissions and certain climate-related financial metrics. Given the high degree of pushback and extended comment periods, we expect the effective date to be delayed, pushing out the first reporting year (for large filers) from FY 2023 to at least FY 2024.
- While the U.S. proposal appears more limited, requiring the disclosure of mainly climate-related risks, human capital and disclosure rules are likely forthcoming, following moves by Europe and as responsible sourcing and human rights rise in importance globally.
- **Our take: The regulatory environment will become more complex, incorporating climate-related risks and in time, human capital risks. Increasing disclosures requirements will compel companies to maintain a pulse on global standards to ensure compliance and competitiveness.**

4. SEC, "ESG Disclosure for Investment Advisers and Investment Companies"
5. National Bureau of Economic Research, "How do Investors Value ESG?"

3. Boards will continue to be challenged on ESG matters

- Regardless of the political climate, the board has a responsibility for overseeing management of a company's material risks, which may include risks related to ESG factors, and balance those with opportunities, while considering stakeholder interests.
- Following several successful activist campaigns, and against a backdrop of volatile markets and declining equity values, boards will need to pay close attention to ESG topics. Shareholders continue submitting proposals to rally the support of institutional investors around environmental and governance issues. With the use of the universal proxy card becoming effective for meetings after August 31, 2022, the SEC has made it even easier for activists to nominate and solicit proxies for the election of board members. With shareholders now able to select individuals from competing slates, we expect heightened focus on the track records and skill sets of specific directors.
- From a regulatory angle, the SEC's proposed climate disclosure rule would require more detail on board and management oversight and expertise, and governance of material climate impacts, greenhouse gas emissions, targets and transition plans. We expect to see increased demand to fill board seats with members holding climate expertise, especially at companies in high GHG-emitting industries.
- Last year, mitigating risks associated with misstating or overstating sustainability actions were in focus, with the concept of "greenwashing" becoming more pronounced and appreciated. This year, "green-hushing" may amplify. Following very public lawsuits related to deceptive marketing, firms are now well-versed on the pitfalls of making unsubstantiated claims – so much so that they may be moving in the opposite direction. Per a recent survey, one in four businesses do not plan to talk about their science-aligned climate targets for fear of drawing scrutiny.[6] Either way, boards will need to continue paying close attention to these issues as management navigates the changing environment and prepare to substantiate the company's public climate disclosures.
- **Our take: Amid economic volatility, regulatory requirements, climate-related risks, activism and legal scrutiny, boards will again be put to the test on ESG matters in 2023. Sustainability oversight at the board level is no longer optional, but rather a key requirement.**

4. Expansion of the energy transition, and the financing options available

- The world is making progress towards cleaner energy, with production of renewable energy having more than doubled over the last decade (2011-2021); in that time, the share of renewable energy of total primary energy consumption has climbed from 9% to 13%.[7] According to the International Renewable Energy Agency (IRENA), the energy transition will require investment of $5.7 trillion per year until 2030.[8]
- On the financing side, clean-energy project finance hit a record high of $164 billion in 2021, but has since wound down; through the first half of 2022, banks logged a near 40% decline in clean energy project finance, as momentum behind solar and wind projects slowed.[9] But this reduced pace is viewed as temporary, caused by several short-term factors (the economic slowdown, supply chain disruptions, and the energy crisis sparked by the war in Ukraine), versus a meaningful shift in financing sentiment. Those factors, however, highlighted the importance of energy security, which will be an important component of the energy transition calculus.
- While much of the transition effort has been focused on electricity generation via wind and solar, we expect sectors outside of power to explore ways to accelerate net zero efforts, and for advancements in other energy sources. Transportation and heavy industry are large swaths of the economy that are ripe for decarbonization, and can make a meaningful impact, between electrification, circularity, operational efficiency, and emerging technologies – the

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6. South Pole, "Net Zero and Beyond: A Deep-dive on Climate Leaders and What's Driving Them"
7. McKinsey, "The Energy Transition: A region-by-region agenda for near-term action"
8. International Renewable Energy Agency (IRENA), "Energy Transition Outlook"
9. McKinsey, "Global Banking Annual Review 2022"

last of which should see a boost from legislation and gradual de-risking of projects. Strides are already being made in carbon capture (CCUS) and nuclear power, while hydrogen plants are moving from pilot projects to industrial scale. Capital providers will be challenged to develop new financing structures that support these nascent sectors. For hard to abate sectors, transition finance is emerging as a means to bridge the gap between lack of clear product fit with sustainable finance, or cautious investor sentiment.[10]

- Clean energy initiatives are attracting capital from a diverse set of participants, including asset managers, infrastructure funds, and institutional investors. Private equity and venture capital firms have doubled and quadrupled investment in certain clean-energy technologies since 2017.[11] Blended finance, which is the strategic use of development finance for the mobilization of additional finance towards the Sustainable Development Goals in developing countries, is also seeing demand growth.[12] As these other capital sources begin playing a bigger role in financing and as emerging technologies start to scale, momentum behind the energy transition should re-accelerate in 2023.
- But the biggest boost to the energy transition, at least in the U.S., is the passing of historic legislation. At nearly $400 billion, the Inflation Reduction Act (IRA) marks the single largest investment in climate and energy in American history, putting the nation on a path to achieving a net-zero economy by 2050. Most of the emissions reductions are expected to come from the power sector; the extension and expansion of key tax credits will spark significant deployment of on-and off-shore wind power, solar power, and battery storage, as well as investment in CCUS, clean hydrogen, standalone storage, and nuclear.
- Emissions reductions are also expected from the industrial, buildings, and transportation sectors, the last of which recently got yet another lift with the release of the U.S. National Blueprint for Transportation Decarbonization. Developed by the Departments of Energy, Transportation, Housing and Urban Development, and the Environmental Protection Agency, the Blueprint is “a landmark strategy” aimed at cutting all greenhouse emissions from the transportation sector by 2050.[13]
- **Our take: After a slowdown in 2022, energy transition projects could see a pickup in 2023, helped by progress across sectors beyond just power, additional pools of capital, and boosted by such historic legislation as the Inflation Reduction Act.**

5. Advancement of climate goals and an emphasis on biodiversity

- Following the convention of two major sessions of the Conference of the Parties in 2022, the global community will seek ongoing accountability for climate goals, and place a greater focus on biodiversity as nature-related risks gain more attention. The 2022 United Nations Climate Change Conference (COP 27) Agreement, signed in November in Egypt, included several milestone achievements. A number of private sector businesses and government-funded initiatives were also announced during the conference, with wide reaching implications for various sectors, including aviation, shipping, energy, automotive, and building materials, to name a few.
- Notable achievements at COP 27 include: 1) an agreement to create a loss and damage finance mechanism in 2023 to support climate-vulnerable developing and lower-income countries, seen as a landmark victory for developing nations; 2) the UN’s launch of a new action plan for covering more of the global population with modern meteorological systems, aligning with COP 27’s renewed focus on adaptation over mitigation to help prevent negative climate issues in the first place; and 3) a call to action by businesses through the We Mean Business Coalition, declaring that 1.5°C is a “limit not a target,” and therefore pushing for more aggressive climate goals for corporations. At the other end, climate activists were disappointed by the failure to progress on developing conclusive plans to shutter or eliminate fossil fuels beyond coal, weaker than expected funding commitments by wealthy nations (no increase above last year’s $100 billion), and the widening of the climate finance gap.

10. HSBC, “Heavy lifting: Why transition finance is vital to combat climate change”
11. McKinsey, “Global Banking Annual Review 2022”
12. OECD “Making Blended Finance Work for the Sustainable Development Goals”
13. U.S. Department of Transportation, “Biden-Harris Administration Releases First-Ever Blueprint to Decarbonize America’s Transportation Sector”

- A month after COP 27, the U.N. Biodiversity Conference (COP15) was held in Montreal, which underscored the concept that business and nature are inextricably connected, and a disturbance to biodiversity has serious consequences for companies, their bottom line, and the larger environment in which they operate. On a somewhat positive note, the ambitious Global Biodiversity Framework (GBF), which looks out to 2050 but also features a number of targets to reach by 2030,[14] was agreed to by every country at COP15, except the U.S. and the Holy See.
- In time, companies could be expected to provide enhanced public nature disclosures, facilitated by the Taskforce for Nature Related Financial Disclosures (TNFD) framework currently in development. And to advance goals, sustainable finance will be a useful tool between banks and companies to facilitate nature-positive projects and enterprises, and support nature-focused objectives, investments, and potential new business in emerging technologies.
- **Our take: The ambitious goals of the UN conferences demonstrate the growing global awareness of climate change and the adverse effects on nature. We expect companies to be held to higher environmental standards, and additional disclosures ahead with the TNFD.**

6. Climate-related financial risk to garner increased attention and guidance

- The impacts of climate change are becoming increasingly evident, not just anecdotally but economically, with the insurance industry experiencing increasing loss trends over the last 20 years. According to Swiss Re, global estimated insured losses from natural catastrophes in the first half of 2022 were $35 billion, 22% above the average of the past ten years, driven by a series of winter storms in Europe, flooding in Australia and South Africa, and storm activity in the U.S.[15]
- Financial regulators globally are studying these trends and considering how climate change can contribute to systemic risk. In the U.S., the OCC has cited climate-related financial risk among key areas of heightened focus for supervisory strategies in FY2023, stating that their focus is on "risk management, not industry policy." To support the effort, the OCC announced in September 2022 the appointment of Dr. Yue (Nina) Chen as Chief Climate Risk Officer, who is tasked with ensuring that national banks and federal savings associations understand and manage their climate-related financial risks.[16]
- Underlying the concern of prudential regulators are the "real economy" impacts of climate change on asset values, insurance availability, corporate profit, public finance, and more. While certain physical and transition risks will manifest themselves over a long period time, certain impacts of climate change are already being faced today in key sectors such as agriculture, real estate, energy, and tourism, highlighting the fiduciary responsibility of management teams and boards to assess the various ways in which climate change can impact their businesses over the near-, medium- and long-term.
- **Our take: Prudential regulators around the world will seek to implement measures that drive financial safety and soundness, considering potential impacts of climate-related risk issues.**

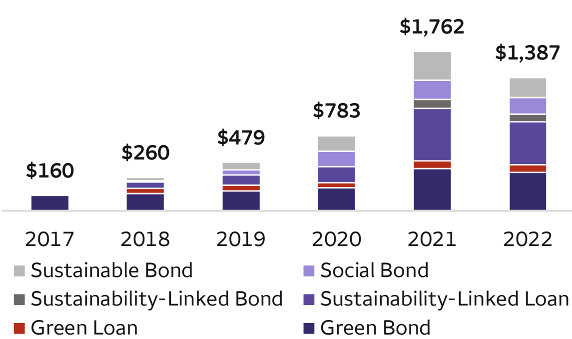
14. Convention on Biological Diversity, "COP15: Nations Adopt Four Goals, 23 Targets For 2030 in Landmark UN Biodiversity Agreement"
15. Swiss Re, "Floods and storms drive global insured catastrophe losses of USD 38 billion in first half of 2022"
16. Office of the Comptroller of the Currency, "Climate-Related Financial Risks"

7. After market-driven slowdown, modest growth in ESG-labeled bond supply

- Global sustainable finance volumes decreased in 2022 in line with the general pullback across capital markets due to volatility and rising interest rates; however, global market penetration of ESG-labeled bonds increased slightly to 13% from 12% in 2021.
- ESG-labeled bond issuance is expected to grow modestly as a percentage of the overall bond market in both USD and EUR due to expected tailwinds, primarily from 1) recent legislation aimed at ‘real economy’ green investments (Inflation Reduction Act and REPowerEU); and the value ESG-labeled structures provide to investors as they defend against greenwashing accusations and attempt to comply with the EU’s Article 8 and 9 ‘sustainable investment’ criteria.

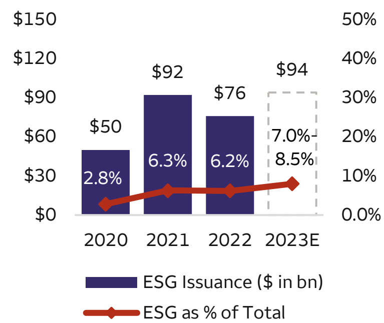
SF Debt Volume Slowed in 2022 Amid Broader Market Volatility

Global Sustainable Financial Volume ($ in billions)



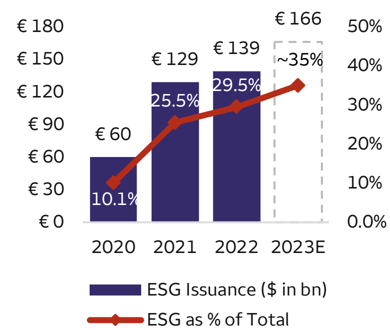
ESG Bond Volumes as of Total IG Issuance

(USD)



ESG Bond Volumes as of Total IG Issuance

(EUR)



Source: Dealogic, Bloomberg, Wells Fargo Securities

- Potential headwinds impacting 2023 issuance include political shifts in the U.S. and the recalibration of the potential signaling benefits of a deal, in addition to economic uncertainty stemming from geopolitical, inflationary, and recessionary risks. For perspective, the relative cooling effect of Red-State divestment totaling ~$5 billion in response to perceived “energy boycotts” compares to ~$66 billion of net inflows into U.S. ESG ETFs in 2022.
- Use of proceeds (UoP) structures (e.g. Green, Social, Sustainable bonds) dominated global supply (92%) as Sustainability-Linked Bonds (SLBs) did not see the growth some had expected in 2022, reflecting a more tempered approach from issuers wary of greenwashing accusations.
- Investors continue to prefer UoP to Sustainability-Linked structures given increased scrutiny around the selection of key performance indicators (KPIs), ambitiousness of sustainability performance targets (SPTs), and the size of potential premiums/step-ups in SLB transactions. SLB performance will come into focus as test dates for coupon step-ups approach.
- European developments to watch in 2023 include:
  - Final version of proposed EU Green Bond Standard anticipated to be released
  - Additional technical screening criteria for the 4 remaining objectives of the EU Taxonomy will increase the number of issuers with potential for Taxonomy-aligned green bond frameworks and provide touchstone for global markets
  - ESMA’s proposed guidelines on fund names using ESG or sustainability-related terms are likely to be implemented in 2023, leading to further segmentation on the buy side following ~$140 billion of fund reclassifications from Article 9 (dark green) to Article 8 (light green) in 2022

- In the UK, the FCA's policy statement on its Sustainability Disclosure Requirements is expected to be released in June 2023, including a "labelling regime" with three sustainability labels
- Recent ECB indications that they may start divesting heavy carbon emitters rather than just re-investing in greener names taking a more aggressive stance than the 'green tilt' announced in July
- Requirement to disclose taxonomy alignment for large corporates will also inform banks as they prepare for Green Asset ratio (GAR) disclosures in January 2024

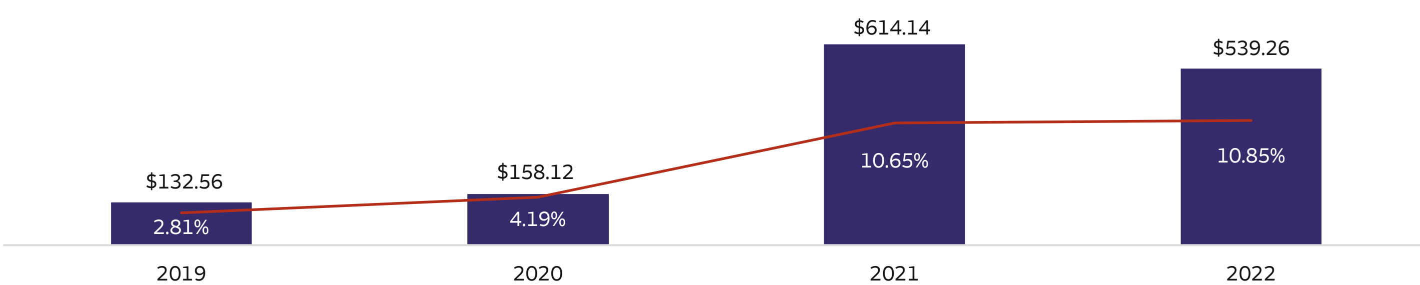
- Inflows into ESG Fixed Income funds were resilient through 2022, outpacing regular-way fund flows as a % of starting AUM. Investors report continued interest from asset owners in sustainable investment options. In addition, Biden's Department of Labor ruling allowing fiduciaries in private sector retirement plans to consider ESG factors provides potential tailwind for sustainable investment strategies.
- **Our take: Incremental investor demand will continue for credible structures, particularly Use of Proceeds transactions, as scarcity value in USD and the benefits for investor reporting in EUR support an ongoing opportunity for issuers to benefit from aligning their financing strategy with their sustainability efforts.**

8. Sustainability-linked loan market to hold ground

- Sustainability-Linked Loans connect the margin of a revolving credit facility or term loan with the borrower's performance of pre-determined, annual sustainability performance targets (SPTs) over the tenor of the loan. The margin can decrease if SPTs are achieved and increase if SPTs are not achieved.
- Total Sustainability-Linked Loan volumes in 2022 were $537 billion, which is 10.8% of the total syndicated loan market and flat from 2021 during which SLLs were 10.5% of the total syndicated loan market.[17] In 2023, we expect SLL volumes to be consistent with 2022.

Despite Lower Volumes in 2022, SLL Marketshare Increased Slightly

Global SLL Volume and Marketshare | ($ in billions)

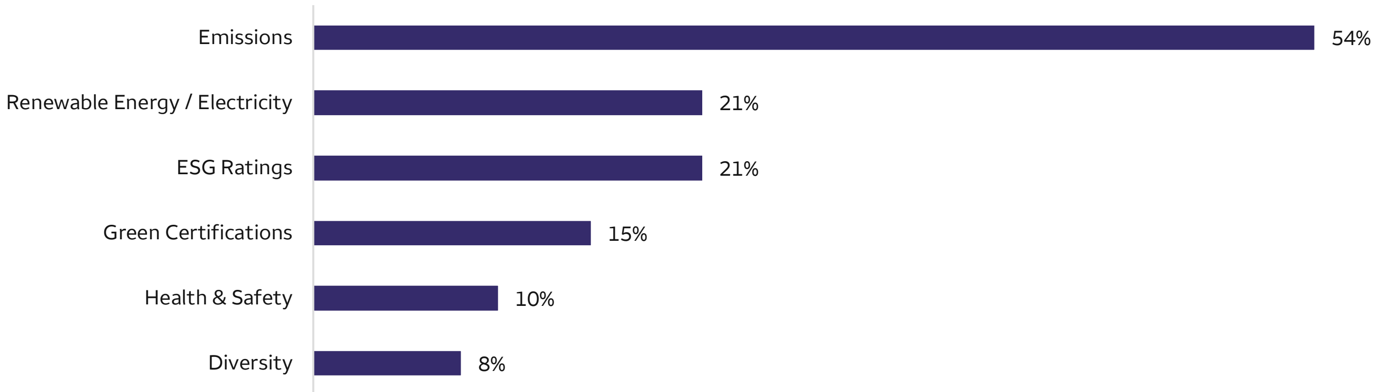


Source: Dealogic

- The most common sectors with SLL issuances in 2022 were Energy, Industrials and Real Estate, and the most common KPIs were greenhouse gas emissions, renewable energy and ESG ratings.[18]

17. Dealogic
18. Wells Fargo Securities, Company Filings and Dealogic

Most Common KPIs in 2022 from U.S. Issuances



Source: Wells Fargo Securities, Company Filings, Dealogic

- In 2023, companies, particularly in higher carbon sectors, may look to use SLLs as a tool reflecting their commitment to sustainability while, at the same time, banks will place increased focus on guiding companies through successful transactions.
- Companies who choose to use an ESG amendment option at loan closing to add ESG KPIs at a later date will increasingly be asked to set a defined time frame (i.e. within 6 months or one year) as opposed to leaving the ESG amendment option open-ended.
- **Our take: 2023 SLL volumes will likely be consistent with 2022, although with increasingly more ambitious and transparent structures. As #3 in the U.S. SLL League Tables and #5 in the Global SLL League Tables, Wells Fargo is well placed to support clients on a best-in class SLL.**[19]

9. Environmental and human elements converge in supply chains

- As companies look to incorporate supply chains into their sustainability goals, they are increasingly focused not only on environmental impact, but also on the human element. Supply chains are being evaluated across their sustainability dimensions, and thereby driving transparency and disclosure.
- In February 2022, the European Commission adopted a proposal for a Directive on corporate sustainability due diligence, aiming to foster sustainable and responsible corporate behavior across global value chains. The proposal requires companies to manage the impact of their activities on the environment, as well as human rights, such as child labor and exploitation of workers. The rules are intended to “advance the green transition and protect human rights in Europe and beyond.”[20] Some member countries already have modern slavery or human rights due diligence laws in place, but the wider-scale EU proposal is expected to drive change more broadly and at a faster pace than country-specific legislation or voluntary measures.
- Spurred by the legislation, Germany drafted its own rule; the Lieferkettensorgfaltspflichtengesetz, commonly shortened to LkSG, and referred to as the Supply Chain Due Diligence Act (SCDDA) went into effect at the start of this year, and requires companies with over 3,000 employees to conduct ESG due diligence concerning human rights and environment-related risks in their supply chains. Some of the issues covered by SCDDA include forced and child labor, unsafe working conditions, harm caused by pollutants, toxic chemical exposure, and unsafe disposal of hazardous waste.

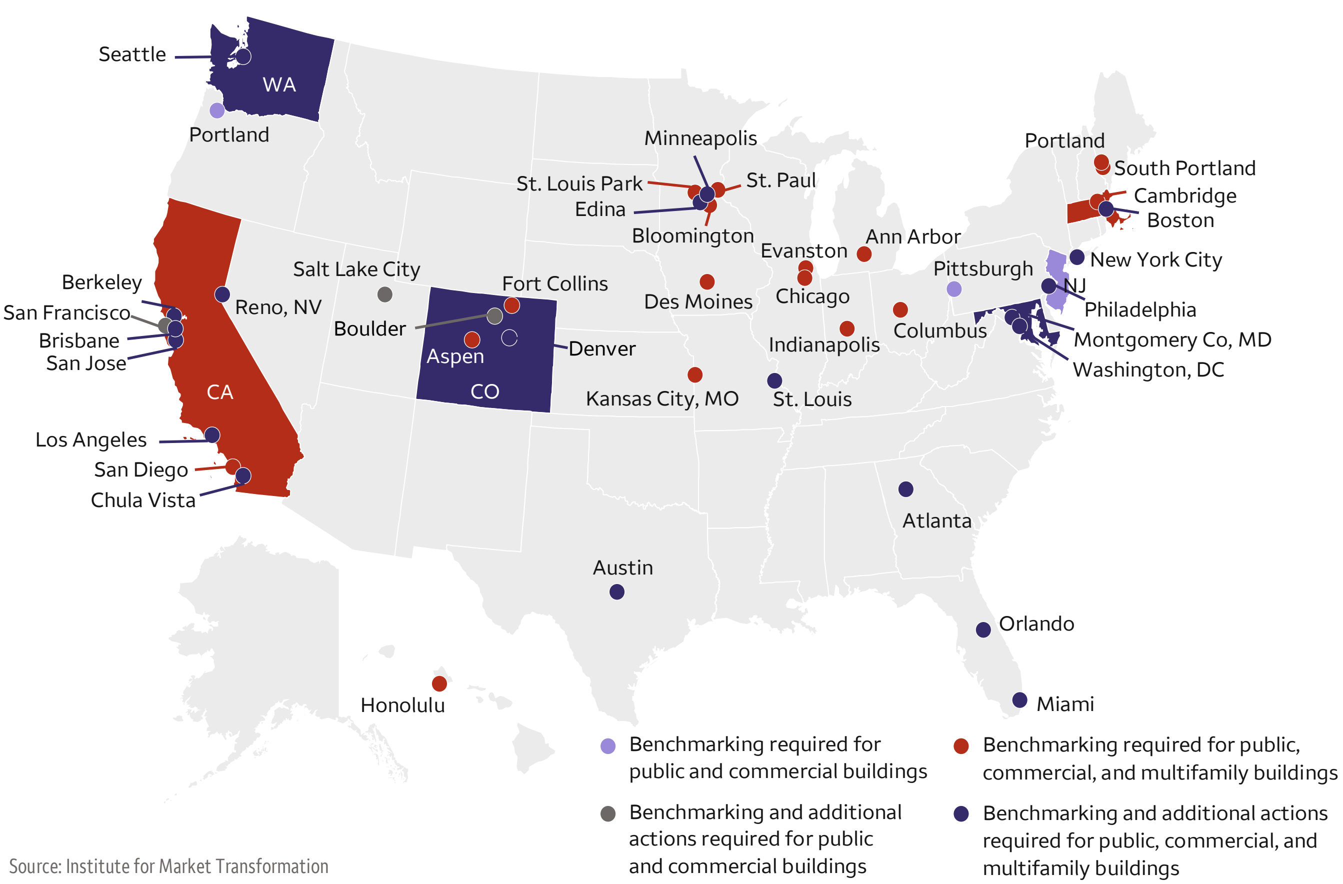
19. Bloomberg
20. European Commission, “Just and sustainable economy: Commission lays down rules for companies to respect human rights and environment in global value chains”

- In the U.S., proposed SEC rule changes include required disclosures on Scope 1 and 2 GHG emissions, and Scope 3 emissions if material, or if the registrant has set a reduction target around this category of emissions. In preparation for reporting, and acknowledging the safe harbor for this complicated set of measurements, companies will be increasingly engaged with suppliers to get a better handle on emissions data.
- While the U.S. trails Europe in terms of the breadth of required disclosures and diligence involving supply chains, the SEC may follow by incorporating more human-rights elements. In June of 2022, disclosure of human capital was included in the commission's short-term rulemaking agenda after noting that an increasing proportion of public companies derive much of their value from such intangible assets as human capital, yet only 15% report their labor costs.
- **Our take: Beyond emissions data, human rights may be a key area of diligence across supply chains, with disclosures prompted by further regulation. As companies seek to comply globally, they will increasingly engage with suppliers, while seeking robust data and more comprehensive impact assessments.**

10. Sustainability becomes a focus in Commercial Real Estate

- Real estate contributes roughly 40% of global GHG emissions. In response, many cities and states are passing legislation requiring commercial property owners to report emissions data and, in some cases, reduce emissions below designated levels or pay fines. For example, New York City's Local Law 97 requires buildings greater than 25,000 square feet (as well as some other specific development types) to report on emissions and adhere to new emissions standards by 2024, with additional emissions reductions by 2030. Buildings will face an annual penalty of $268 per metric ton over the limit. Laws such as these are accelerating transition risk for CRE.

U.S. City, County, and State Policies for Existing Buildings: Benchmarking, Transparency, and Beyond



Source: Institute for Market Transformation

- As energy and/or GHG emissions reporting requirements commence in 2023-2024, Energy Star Portfolio Manager is being leveraged as the primary data repository. Utilization of this system has resulted in a dramatic 75% growth rate in Energy Star Certifications year-over-year according to Energy Star.[21] Broader utilization of Energy Star will provide tenants, owners, and lenders greater transparency into which buildings are most energy efficient.
- Tenants, investors, and asset buyers increasingly have their own net zero ambitions resulting in a "flight to green." Green certified buildings continue to demonstrate higher rental rates, higher occupancy, and lower operating expenses driving a green asset premium.[22]
- The real estate industry is increasingly prioritizing social issues tied to health and wellness as well as diversity, equity and inclusion. 81% of REITs that participated in Nareit's 2021 survey offer programs for tenants and employees that improve work/life balance and 70% of participants have employees with DE&I responsibilities.[23] There is also growing recognition that energy efficiency must be a foundational pillar of housing affordability not just for its economic benefits to tenants but to the long-term livability of buildings.
- Social measurement tools are emerging with the International WELL Building Institute recently releasing the WELL Equity Rating, a vehicle for taking action on diversity, equity and inclusion goals and supporting organizations to drive improvement in company culture and employee health.
- **Our take: With the proliferation of emissions reduction efforts and focus on energy efficiency, pressure will mount on real estate investors to provide more transparency into the sustainability profile of real estate assets. This transparency will drive tenant, lender, and investor decisions resulting in a wider disparity of asset values between brown and green. As more tools and disclosures are available, stakeholder assessment will expand beyond emissions to include a broad array of environmental and social factors.**

21. Source: Energy Star, "Registry of ENERGY STAR Certified Buildings and Plants "
22. Source: CBRE, "Green is Good: The Enduring Rent Premium of LEED-Certified U.S. Office Buildings"
23. Source: Nariet, "REIT Industry ESG Report 2022"

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