Douglass Winthrop

New York Washington, D.C. West Palm Beach

Douglass Winthrop Advisors
Sustainable Equity Strategy

2022 Impact Report

May 26, 2023

Contents

Executive Summary

This Douglass Winthrop Advisors (DWA) Sustainable Equity Strategy Impact Report provides portfolio statistics, company-specific impact highlights, and shareholder engagement synopses that relate to the environmental impact associated with portfolio holdings in 2022. This annual report covers ownership positions across that year, at their average weightings. Please note that despite its 2023 issuance date, this report does not reflect the effect of portfolio changes made in 2023.

At Douglass Winthrop, we integrate environmental factors into the fundamental analysis and investment process of our Sustainable Equity Strategy. We believe that financial outperformance and favorable impact on the environment are often compatible and mutually reinforcing – and both are important to us and to our clients. As such, we take a "double materiality" approach that strives to achieve material results on both a financial and environmental basis. In considering companies where we believe financial vs. environmental tradeoffs are unavoidable, our concentrated approach allows us to simply avoid investing. This selectivity is one of the benefits of high conviction, high-concentration investing.

At the beginning of this report, we recap what we mean by impact. From there, we pivot to consider policy changes (and electoral outcomes) in 2022 that bear on our investing. After touching on the anti-ESG backlash that gathered steam and legal force in some quarters during 2022, we focus primarily on the significant policy developments (and electoral outcomes) that we considered supportive and constructive steps in the road to global decarbonization, and which we in turn expect to benefit our portfolio companies.

We then proceed to discuss our "active ownership" efforts, including summary statistics on our proxy voting on behalf of clients, and overviews of our engagement efforts with, and "asks" of, management teams through letter writing and dialogue. In 2022, we engaged Amazon, Costco, Alphabet, Autodesk and L'Oreal. Our engagement efforts arise from the conviction that stronger environmental performance will translate into better financial and shareholder performance for our portfolio companies, while also being socially and systemically important for human and ecosystem thriving.

We then provide sustainability highlights for an illustrative selection of our companies, specifically Alphabet, Ball Corporation, Canadian National Railway, Schneider Electric and Trimble. We then provide links to the sustainability assessment reports of all of our portfolio companies across 2022. These reports have tended to become more detailed and sophisticated with each passing year, as management teams have embraced and tackled the sustainability challenge and as scrutiny by customers, NGOs and regulators has grown. We commend them to you as compelling further reading.

Finally, we offer a range of impact statistics on our portfolio, produced mostly in accordance with MSCI ESG's methodologies and tools. While we believe such data aggregators often miss important factors that we consider in our proprietary investment and "active ownership" work, we also recognize that many clients value this kind of independent third-party assessment. Here are some highlights from those statistics:

- Based on MSCI's ESG ratings, the DWA Sustainable Equity Strategy's weighted E score was **6.7 out of 10, higher than S&P 500 and MSCI World**, and about equal to MSCI SRI's Environment Score (though our Strategy has a much higher Environment Impact Exposure as % of revenue

than MSCI SRI).

- Consistent with our fossil fuel policy, MSCI ESG's ratings confirm that **our portfolio held 0% fossil fuel reserves, lower than all the three reference indexes** including MSCI SRI. Our Strategy also held zero high-impact fossil fuel reserves, whereas even MSCI SRI has a small amount.

- Our Strategy imposed withdrew less water from the communities in which they operate per unit of sales (i.e., water withdrawal intensity, measured in cubic meters per million in sales). Our water intensity **just over one-third of the S&P 500 average**, and less than half of MSCI SRI and MSCI World.

- Out of our **36 companies held for some or all of 2022, 29 (or 80%) were aligned or strongly aligned to at least one of the nine referenced Sustainable Development Goals** (SDGs) in the estimation of MSCI. Our three highest exposures were as follows:

    - 54.8% of our companies were aligned were to SDG 12 – Responsible Consumption & Production
    - 46.5% of our companies were aligned to SDG 13 – Climate Action
    - 38.9% of our companies were aligned to SDG 7 -- Affordable and Clean Energy

- Overall, **9.6% of revenue from our portfolio companies contributed to one of MSCI's six categories of positive impact on the environment, higher than all three of our reference benchmarks**. However, applying our own proprietary framework to adjust the share of revenues we deem as aligned to MSCIs six categories, as well as adding "climate adaptation" as an eligible solution (in this, we align with the EU, which counts adaptation as one of the six categories in its EU Taxonomy for Sustainable Finance), our environmental impact solutions revenue rose to 17.7%.

- Our **Climate Value at Risk (cVaR) was -5.9%, indicating lower climate risk exposure than all three of our reference indexes**, which range from -11.8% to -16.9% depending on the index.

- Our portfolio is associated with an **Implied Temperature Rise of 2.0°C, an improvement upon last year's ITR of 2.23°C**. This indicates that, based on MSCI's tool, our portfolio is contributing its proportional share of the global carbon budget, and if everyone exceeded their fair shares by a similar proportion, the result would be a global temperature increase of ~2.0°C by 2100 as sought in the Paris Agreement.

    - 66.7% of the companies within the portfolio align with the goal of limiting temperature increase to below 2.0°C.
    - 41.7% align with limiting temperature increase to below 1.5°C, which the UN's Intergovernmental Panel on Climate Change (IPCC) has deemed necessary to limiting risks of severe climate change impacts.

We hope that clients enjoy this report, and if you are not currently invested with us and would like more information, please do not hesitate to reach out.

What Do We Mean by Impact?

1. **Participating in the Large-Scale Reallocation of Capital Flows Toward Solutions:** When we invest client capital into companies that are leaders in environmental performance, or improvers on a favorable trajectory, we contribute to the cumulative flow of capital toward mitigating and adapting to rapidly intensifying challenges including: climate change; freshwater depletion, contamination and stress; agricultural degradation; biodiversity and habitat loss; deforestation and other land-use change; air and water pollution; ocean acidification; pollution from plastics and other persistent, synthetic compounds; and the implications of all of the bove for human health and the meeting of essential needs. These systemic challenges pose a threat to the well-being of current and future generations, as well as to corporate success and market stability. Each dollar that capitalizes companies offering solutions and enhanced resiliency counts, and as our assets under management continue to grow, we will represent a growing share of this crucial global reallocation. Estimates are that we will need $150 trillion of cumulative capital to be invested by 2050 globally to fund the transition to a low-carbon, resource-efficient economy. Our portfolio skews toward large and mid-cap companies, which tend to have much larger operational footprints – whether the energy to run their facilities or the globe-spanning supply chains for their resource inputs – than venture investments, which is where many impact-oriented investors have traditionally focused. Larger companies also tend to have global market reach, touching consumers or business customers across multiple continents. As such, we believe investments in strategies like ours constitute a worthwhile "impact" complement to venture investing and the smaller companies targeted in that asset class.

2. **Thought Leadership and Communications:** Efforts to communicate the sustainability attributes of a company as the basis for our stock purchase can, we believe, drive enhanced demand for the shares over time, and further reinforce the large-scale reallocation referenced above. We engage regularly in such communications, for example Portfolio Manager Dan Abbasi's August 2022 interview with Morningstar on infrastructure renovation to mitigate and adapt to climate change.[1] When corporate executives come to understand that we and a growing portion of their shareholder base recognize and value their sustainability performance, and that we are also comparatively longer term shareholders, this creates virtuous circles that further encourage management to invest in enhancing their sustainability performance. We also invest in training the next generation, internally developing young analyst talent and externally through research collaborations with university students. Our quarterly letters and other communications to clients and prospective clients, many of whom are influential executives and citizens, are another form of thought leadership that we believe has a meaningful cumulative impact over time. Lastly, we meet regularly with our peers in the asset management community to further amplify our views on investment and impact, including annual attendance at events such as the annual Aspen ESG Summit.

3. **Active Ownership:** We engage in "active ownership" to prompt our companies to behave more sustainably. This includes dialogue with management and use of our shareholder proxy vote on behalf of clients who have so authorized us. We gauge the quality and E-orientation of company managements before investing. We favor private and constructive dialogue through letters that make our case, followed by discussions with the management. We formulate our case urging stronger environmental performance through the lens of how doing so will translate into better financial and shareholder performance for the company, while enhancing environmental outcomes on the challenges referenced above. Our active ownership efforts in 2022 are covered later in this report.

Policy Developments in 2022: An ESG Backlash but Overall Tailwinds

ESG Backlash

In 2022, 19 state legislatures passed rules or guidance intended to limit the use of ESG factors and climate considerations for state pension investments, typically by constraining investment decision-making to account for "pecuniary" considerations only. This became characterized as an ESG "backlash" and was based on the argument that ESG investing inappropriately inserts ideological considerations ahead of investment merits. According to this view, how a company positions its strategy and operations in relation to the risks and opportunities associated with climate change and other megatrends will not be material to its financial performance in the coming years or an investment portfolio. We disagree. In our view, integrating environmental risks and opportunities into fundamental analysis is prudent and reflects our objective to protect and grow our clients' capital over the long-term, while also having a favorable impact on the ecological systems on which our economy and well-being depend.

Noteworthy evidence also emerged that the ESG backlash may have been more than a dispassionate assertion about investment merits, and instead an orchestrated effort by fossil fuel interests to delay the transition to a low-carbon economy by staunching the growing reallocation of capital away from the energy sector toward renewables. Documents secured through Freedom of Information Act requests by UK-based NGO InfluenceMap, with whom we partner on certain portfolio company engagements, suggest that a coal industry association helped draft a bill to ban state retirement funds from investing in companies that divest from fossil fuels in West Virginia in March 2021, considered perhaps the first "anti-ESG" bill. While the bill failed in West Virginia, it reportedly, "led to copycat bills in other states such as Texas, where a similar bill became law".[2] In our investing work at the Douglass Winthrop Sustainable Equity Strategy, we recognize that policy can move things forward on the transition to a low-carbon, resource-efficient economy but it can also move things in reverse.

On March 20, 2023, President Joe Biden issued the first veto of his Presidency to deny a Congressionally passed bill that would reportedly have overturned Biden's November 2022 bill making it easier include climate change and other factors in fiduciary retirement decision-making. The rule covers plans that collectively invest $12 trillion in 401(k)s and other retirement plans on behalf of 150 million Americans. The history leading up to this veto is illuminating and relevant for our investment approach. In late 2022, the Department of Labor under President Biden promulgated a new rule on "Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights." This superseded the Department's 2020 rule promulgated under President Trump. Many interpreted the 2022 Biden Rule as encouraging ESG investing, and reversing the 2020 Trump Rule's rejection of ESG investing. But interestingly, the 2022 Biden Rule largely reaffirmed the Department of Labor's longstanding position that an ERISA fiduciary may use ESG investing to improve risk-adjusted returns but not principally to obtain collateral benefits. A Harvard Law School study argued that the Biden Rule was largely consistent with the 2020 Trump Rule and made mostly cosmetic changes to it. In other words, if assessing how a company is positioned to be resilient to climate change is relevant to its risk-adjusted performance over the coming decade, it's fair game under both the Biden rule and the Trump rule it superseded. The "collateral benefits", such as a company's favorable impact on the environment, cannot be the principal basis for a compliant investment approach. But interestingly, it can be used as a tie-breaker under both rules. The Biden rule (which was not overturned due to the veto) was more explicit in enabling this tie-breaking function and did not impose onerous documentation requirements for using it.

Our investing approach is in alignment with both the Biden rule and its predecessor rule promulgated during the Trump Administration: the favorable environmental impacts that we believe our companies are having on the world (as documented in this report) are, in our estimation, consistent with long-term shareholder performance. We do not mean to say there are never tradeoffs, but our focus is on identifying companies to own where economic and environmental performance are mutually reinforcing, or as we sometimes put it "flip sides of the same coin". The fact that the world is still grappling with debates like pro- or anti-ESG speaks to a continuing inefficiency in the capital markets that creates opportunity for active managers like us who possess and apply environmental domain expertise in pursuit of long-term outperformance.

We do believe that conflation of E (Environment), S (Social) and G (Governance) in the ESG concept has created some unfortunate confusion. The term was coined without precise definition to encompass wide-ranging and in some cases unrelated goals.[3] Because these issues require different analytics and expertise, their grouping unfortunately leaves ESG investing vulnerable to the charge that this is an ideological construct. Our special edge is in the E. We believe that any future efforts by elected officials or policy-makers to regulate investment practices should acknowledge the variety of approaches to ESG investing.

It is notable that Europe has not experienced the same anti-ESG phenomenon as seen in the U.S. A Robeco survey in March 2023 found that while nearly half of North America's biggest institutional investors are concerned about facing legal consequences if they consider environmental and social factors, in Europe and the Asia Pacific region, investors are more concerned about precisely the opposite: the risks of failing to address climate change.[4] The Norwegian sovereign fund and French bank AXA, for example, have said they will use their proxy to vote against management teams that don't set net zero carbon targets.

Recognizing again the role of fossil fuel interests in originating and likely sustaining the anti-ESG backlash, we note here that we do not invest in companies that develop and hold fossil fuel reserves. But this sole categorical exclusion is grounded principally in our view on the associated investment risks given the intensifying drive around the world to transition to a low-carbon economy and the favorable economics of doing so. We view the "stranded asset" risk facing fossil fuel companies is high, particularly over our typically long holding period, based on the ongoing electrification of end use markets that will dampen long-term demand for fossil fuels and increasing global efforts to price and reduce the emissions from their combustion. We also find that few commodity-based companies offer the defensible competitive moats we seek, making them price takers rather than affording them pricing power.

In 2022, our policy to not invest in oil and gas was a headwind to our relative investment performance. But long-term we believe this is the prudent approach. Global oil demand forecast is for approximately 100 million barrels a day in 2023, about equal to demand in 2019. The war in Ukraine created a short-term shock, and a reminder that investing in oil and gas means investing in a market dominated by a cartel of petrostates. In 2022 oil companies favored return of capital to shareholders over reinvestment, demonstrating a lack of ample reinvestment opportunities that we look for as a fundamental criterion.[5] We believe that oil and gas are poised to plateau in the next several years and then enter a phase of secular decline.[6] That is a risky proposition for long-term investors, given the risk of permanent asset impairment as the world pivots from fossil fuels to electricity in more end uses, from electric vehicles to

heat pumps. Authoritative prognosticators like the International Energy Agency and Bloomberg New Energy Finance have routinely underestimated the adoption rates of EVs and renewable energy sources. The IEA is now forecasting that globally, renewable energy will see as much installed in the next five years as in the prior 20 years.[7]

Policy Tailwinds

The ESG backlash in the U.S. notwithstanding, we believe that policy changes (and electoral outcomes) in 2022 had favorable implications for our holdings, highlighted below in bold. Taken together, we believe they had the makings of a tipping point toward global decarbonization, and an accelerator of the secular drivers and companies in which the Sustainable Equity Strategy invests. As often happens, bad news was an important, if painful, catalyst for creation of something better. The profoundly bad news of Russia's invasion of Ukraine spurred a short-term race to replace lost oil and gas supply and to keep coal plants open longer, driving 2022 greenhouse gas emissions from fossil fuels up to record levels.[8] But the war also distilled why fossil fuel dependence is a losing game over the mid and longer term, making investments in renewables, efficiency and innovation the superior choice for building prosperous and resilient economies.

We position our portfolio to benefit from the trend toward more stringent environmental policy, typically as a "tailwind" or "upside" rather than part of our "base case" model. This helps us capture potential rewards, while preserving a margin of safety on the downside. We avoid developing or executing on an investment thesis for a company that depends on future policy outcomes that may not transpire, or continuation of existing policies that may be subject to reversal if political tides change. In our "active ownership" work, we typically encourage our portfolio companies to use their policy influence to promote stronger environmental policies. Because we select for companies situated to benefit from such policy stringency, we believe our companies can capture shareholder value through this advocacy while also having a favorable impact on environmental outcomes.

Here are some highlights of what transpired, and examples of how we believe they will favorably influence the prospects of companies that we held in the Sustainable Equity Strategy portfolio as of the end of 2022.

A Breakthrough U.S. Climate Law: The Inflation Reduction Act (IRA), enacted in August 2022, allocates $369 billion in climate tax credits and spending to electric vehicles, solar power, battery storage, heat pumps and energy efficient buildings – and bringing the U.S. objective of halving emissions (below 2005 levels) by 2030 within reach.[9] Because the incentives are uncapped, many experts believe the final spending tally (much in the form of tax credits) will be much higher. Wind and solar PV investment in the U.S. are projected to double to $321 billion by 2030 compared with what it would otherwise have been in that year without the IRA.[10] Altogether the paradigm-shifting law is projected to drive a cumulative $3.5 trillion in investment, mostly private, over the next decade, benefitting our 2022 holdings **Trane, SolarEdge, Generac, NextEra, Aptiv**, **Siemens** and **Goldman Sachs**' Renewable Power Group.

Reshoring of Sustainability-Enabling Chipmaking: In August 2022, the U.S. CHIPS act authorized $52.7 billion for semiconductor manufacturing, prompting **Taiwan Semiconductor** to triple its US investment to $40 billion and to add a second, advanced chip plant to its coming Arizona footprint.[11] The CHIPS Act is also likely to boost demand for **ASML**'s semiconductor lithography equipment. TSM and

ASML are highly profitable holdings with wide moats. They are market-share dominating beneficiaries of our thesis that digital intelligence will enable transformational sustainability innovations across nearly all sectors – from congestion-reducing autonomous cars powered by **Alphabet**'s Waymo and **Aptiv**'s Motional to precision agriculture innovations offered by **Deere** and **Trimble**. (Unlike activist investors urging Alphabet to stop investing in Waymo[12], we value its 2022 progress in offering "flawless"[13] *rider-only* rides through challenging city environments and the opportunity to own a significant share of the ~$200 billion autonomous vehicle market in 2030.[14]) Per Goldman Sachs, semiconductor products have helped reduce carbon dioxide emissions by about 1.7 billion tons in 2020 vs. a 2015 baseline. Goldman (?) expects an incremental 3.6 billion tons of annual emissions reductions contribution by 2025 via energy efficiency and enabling green technologies.

Clean Infrastructure: Spending under the November 2021 $1.2 trillion infrastructure law began to flow in 2022 toward clean drinking water, mass transit, EV charging and new power grid extensions to connect to renewables. We expect to see increasing benefits in the coming years of this historic public spending surge to **Danaher**'s Trojan UV drinking water business[15], **Autodesk**'s Innovyze unit enabling water utilities to optimize their spending[16], **Siemens**' U.S. businesses in rail, power grids and EV chargers, and **United Rentals**' #1 rental equipment business serving roads, bridges, rail and power utilities.

SEC Climate Disclosure Rule: In March 21, 2022, the SEC issued a proposed rule to require publicly traded companies to report information on greenhouse-gas emissions and risks related to climate change. We review CDP disclosures, but these are voluntary. The new SEC proposal would compel publicly traded companies to report greenhouse-gas emissions from their own operations as well as from the energy they consume and to obtain independent certification of their estimates. In some cases, companies also would be required to report greenhouse-gas output of both their supply chains and consumers during the use-phase of the product or service, known as Scope 3 emissions. An SEC official said most companies in the S&P 500 would likely have to report Scope 3 emissions[17]. Companies would have to include the information in SEC filings such as annual reports. The draft rule would require public companies to disclose information about the material impact of climate on their businesses, as well as information about companies' governance, risk management and strategy related to climate risk. The rule was targeted for adoption in April 2023 but has now been pushed back to the fall of 2023. Note that the Douglass Winthrop Sustainable Equity Strategy was a signatory, during the SEC comment period, of CERES Statement of Essential Principles in relation to the rule:
https://ceresorg.formstack.com/forms/sec_climate_disclosure_sign_on_statement

EPA Proposed Rule on PFAS Reporting: On Dec. 5, 2022, the EPA proposed a rule that would improve reporting PFAS to the Toxics Release Inventory (TRI) – even by de minimis users. **Thermo Fisher** offers workflows and instruments for reliable PFAS testing and is positioned to be a go-to provider when this rule is finalized. Detecting per- and polyfluoroalkyl substances (PFAS) in the environment is key to its remediation. PFAS contamination can be determined by one of several regulatory methods including global ASTM regulations, the Stockholm Convention on persistent organic pollutants (POPs), the EU Drinking Water Directive, and other US EPA Methods. Thermo Fisher helps its customers meet the requirements of established regulatory methods to perform targeted analysis of known PFAS compounds or discover previously unknown and evolving PFAS compounds in water, soil and air. Thermo Fisher helps PFAS analytical testing laboratories future-proof themselves in this constantly evolving area of environmental testing.[18]

REPowerEU: Prompted by the Ukraine war and energy crisis, the European Union launched a multi-faceted effort to "make Europe independent from Russian fossil fuels well before 2030."[19] The plan includes cutting red tape to accelerate permitting of renewable energy projects, replacing fossil fuel use in industry and setting higher efficiency targets. By Q3 of 2022, Europe's natural gas consumption had fallen 20% below its five-year average[20] through all-hands-on-deck energy conservation initiatives, a 50% increase in solar deployment as an energy crisis "lifeline"[21] and supercharged demand for heat pumps[22] that use electricity instead of gas. These trends are poised to continue benefit **Schneider Electric**, **SolarEdge**, **Trane** and **Siemens**.

Brazil's Election: In October 2022, Luiz Inácio Lula da Silva won Brazil's presidential runoff over incumbent Jair Bolsonaro, under whom Amazon deforestation had spiked 60%. Lula said he would "do whatever it takes" to achieve zero deforestation18 and intends to use fines, police power and conservation funding to slow the loss of this carbon sink and biodiversity hotspot. Lula will get help from the E.U.'s just-enacted rule against importing commodities produced through deforestation, as well as from multinational corporations that are doing more to clean up their supply chains in response to expectations from customers, employees and other stakeholders. We strive to invest in companies that move ahead of peers and regulations to protect the rainforest and their brand reputations through sustainable sourcing. **L'Oreal**, for example, uses 1,717 raw materials from 313 plant species, 94% of which are traceable and none of these are reportedly linked to deforestation. **Nike**, a leader in circular design has cut its virgin leather use, and therefore cattle ranching pressure on the Amazon, by 50% through its FlyLeather material.

Australia's Election: In May 2022, Australians exhausted by years of record wildfires made climate change a key issue[23] by voting for Anthony Albanese as prime minister. Albanese pledged to nearly double Australia's 2030 target for cuts to carbon emissions. The incumbent had resisted climate action. By September, meaningful reduction targets and a 2050 net-zero target had been enshrined in binding legislation.[24] In 2022 we assessed leading equipment suppliers bringing electrification, autonomy and efficiency to the mining supply chain in Australia and around the world, given that copper, bauxite and other commodities are crucial in the transition to a low-carbon economy.

International Climate Negotiations in Cairo: The annual Conference of the Parties ("COP27") climate summit was held in Sharm el-Sheikh, Egypt, in November 2022. Many were disappointed that no significant new steps were taken to curb emissions. The Glasgow Climate Pact adopted at COP26 in late 2021 had requested that parties "revisit and strengthen their 2030 targets" to align with the Paris Climate Agreement of 2015 temperature goal. But by the time of COP 27, only 34 of 194 parties had submitted new or updated Nationally Determined Contributions (NDCs). The E.U., which had already strengthened its emissions reduction target in 2020, announced that it would further boost that goal to 57% from 55% by 2030. Twenty additional countries signed the Global Methane Pledge, launched at COP26 to reduce short-lived but potent methane emissions by 30% by 2030 from 2020 levels, bringing the total to 150 (including 12 of the top 20 methane emitters). China, which has not joined, announced it would soon finalize its plan to address methane emissions. Nature-based solutions were included in a UN climate negotiations' cover decision for the first time. Outside the formal negotiations, the launch of the Forest and Climate Leader's Partnership (FCLP) brought together 28 countries to halt and reverse forest loss and degradation by 2030. Brazil, Indonesia and the Democratic Republic of the Congo announced an important partnership to cooperate on forest preservation. Finally, a breakthrough was achieved to help

vulnerable countries deal with “losses and damages” from the impacts of climate change. The UN also announced a ~$3 billion plan to ensure everyone on the planet is covered by early-warning systems in the next five years to bolster countries’ ability to prepare for hazardous weather. Developing countries argued that developed countries' prior commitment to provide $100 billion annually to support their efforts to reduce emissions and adapt to climate change has not been met, as well as concerns that most of the finance is coming in the form of loans, increasing the debt burden in debt-stressed countries.

New Montreal Global Biodiversity Framework and the 30X30 Target: In December 2022, the Biodiversity Conference of the Parties met at “COP 15” and negotiated the Kunming-Montreal Global Biodiversity Framework (“GBF”, which can be understood as the biodiversity equivalent of the Paris Agreement). Note that the U.S. has participated in the talks as a non-member. The U.S. has previously made its own domestic commitment to the 30X30 framework (conserve at least 30% of the world’s land by 2030) and championed the inclusion of such a provision in the GBF. The U.S. Special Envoy for Biodiversity and Assistant Secretary of State Monica Medina said at the Montreal meeting: “While we aren’t party to it, we can still be guided by the GBF.”[25] The GBF encapsulated well the consequences of not executing against its global targets (emphasis added): “Without such action, there will be a further acceleration in the global rate of species extinction, which is already at least tens to hundreds of times higher than it has averaged over the past 10 million years.”[26] Among the GBF’s targets for 2030, a short seven years away (emphasis added) are the following[27]:

- Effective conservation and management of at least 30% of the world’s lands, inland waters, coastal areas and oceans, with emphasis on areas of particular importance for biodiversity and ecosystem functioning and services. (Currently 17% and 10% of the world’s terrestrial and marine areas respectively are under protection.)

- Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over.

- Cut global food waste in half and significantly reduce over consumption and waste generation.

- Reduce pollution risks and the negative impact of pollution from all sources, by 2030, to levels that are not harmful to biodiversity and ecosystem functions…including preventing, reducing, and working towards eliminating plastic pollution.

- Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.

- Prevent the introduction of priority invasive alien species and reduce by at least half the introduction and establishment of other known or potential invasive alien species, and eradicate or control invasive alien species on islands and other priority sites.

Spotlight: Trimble & the Global Biodiversity Framework Targets on Invasive Species

Our 2023 portfolio holding Trimble provides competencies in precise geo-positioning that were used to help map an invasive species and preserve important habitat[1] in Northern Ireland's Strangford Lough, the largest, most ecologically diverse inlet in the British Isles. An invasive grass species called Spartina anglica is threatening the region and potentially impacting feeding habitats for thousands of wildfowl and waders. HeritageNI, a drone and mapping company based in Northern Ireland, set out to map the distribution of Spartina. The company had planned to conduct the survey via drone, which had the necessary resolution to capture the spectral signature of Spartina's specific shade of green. The problem, however, was that the technique struggled to identify Spartina when it decays and becomes brown, so it turned to the trained eye of a human. HeritageNI opted for Trimble's Catalyst solution, a subscription-based GNSS (Global Navigation Satellite System) solution with a plug-and-play USB antenna and smartphone compatibility. HeritageNI registered more than 30,000 GNSS data points and entered them into the Trimble UAV Ground Control app for digitization and interpretation, providing the Northern Ireland Environment Agency an accurate picture of nearly every occurrence of Spartina in the lough and thereby effective means to prioritize its conservation efforts.

How We Map the Investable Solutions

The DWA E-Map is our proprietary tool for mapping the investable universe for the Sustainable Equity Strategy. It comprises our Strategic Roadmaps for the nine investable categories below, including for each: Total Addressable Market, profitability levels across the value chain, category leaders and disruptors, forecasts of changing axes of competition (drawing on key experts, futurists, and our own assessments), quality and defensibility of technology IP in each vs. commoditization pressures, level of capital formation, regulatory progression and changing consumer/customer expectations. The E-Map includes narrative and spreadsheet maps of the categories and are continuously updated as we reassess each category based on new information and insights. Note that we make no internal or external commitments to include or maintain exposure to all nine of the categories of the E-Map through our holdings at any given time. We have thematic flexibility to vary our portfolio exposure based on our integrated assessments of the economic fundamentals and the E-thesis for our current and prospective holdings. The nine categories are::

1. Sustainable Transport: Vehicles are being electrified, enabling lower emissions and digital business models from sharing to autonomy.
2. Renewables: A multi-decade shift from fossil fuels to renewables + storage is still "early innings" from utility-scale to distributed generation.

3. Food, Fisheries & Sustainable Ag: Precision agriculture will reduce input and regenerate soils, sequestering carbon and boosting food security, as consumer dietary expectations also evolve.
4. Smart Buildings & Cities: Net zero buildings & factories feature IoT intelligence, lighting, HVAC and motors, renewable materials and on-site power, while cities are digitalized for low-carbon efficiency and quality of life.
5. Water Quality & Efficiency: Water stress is driving investments in water technology and infrastructure.
6. Waste, Materials & Industrial Decarbonization: Materials innovation and circular design of products & packaging are changing waste flows & management.
7. Environmentally Related Human Health: Natural, low-toxicity personal care & home care products gain share while the healthcare system prepares for climate-induced increases in vector-borne disease.
8. Sustainable Finance: Ratings firms and ESG indices are crucial referees of climate-induced asset re-pricings, risk transfers and sustainable investment flows to a low-carbon economy.
9. Sustainable Data: AI is boosting eco-efficiency by enabling dematerialization, modeling, transparency & embedded intelligence.

DWA E-Map vs. the UN Sustainable Development Goals

Source: https://sdgs.un.org/goals

The UN Sustainable Development Goals (SDGs), adopted in 2015, include 17 goals, each supported by specific targets and indicators, that constitute one of the most influential and widely referenced strategic roadmaps for the planet's joint developmental and environmental future.[28] Companies and investment managers often use the SDG framework to categorize the impact of their portfolios, and sometimes to quantify it. The nine categories in our DWA E-Map broadly align with nine of the SDG goals: 3, 6, 7, 9, 11,

12, 13, 14, 15. See below for a diagram of their cross-mapping. Some companies' products and services apply to multiple SDGs and multiple DWA E- Map categories.

	1. Sustainable Transport	2. Renewables, Storage & Grid 2.0	3. Food, Fisheries & Sustainable Ag	4. Smart Buildings & Cities	5.Water Quality and Efficiency	6. Waste, Materials Circularity & Industrial Decarbonization	7. Environmentally Related Human Health	8. Sustainable Finance	9. Sustainable Data
SDG 3	√		√		√		√	√	√
SDG 6					√		√	√	√
SDG 7		√						√	√
SDG 9		√		√		√		√	√
SDG 11				√				√	√
SDG 12			√			√		√	√
SDG 13	√	√		√				√	√
SDG 14			√					√	√
SDG 15			√	√		√	√	√	√

DWA E-Map vs. Our 2022 Holdings

	E-Solution or E-Advantaged	1. Sustainable Transport	2. Renewables, Storage & Grid 2.0	3. Food, Fisheries & Sustainable Ag	4. Smart Buildings & Cities	5.Water Quality and Efficiency	6. Waste, Materials Circularity & Industrial Decarbonization	7. Environmentally Related Human Health	8. Sustainable Finance	9. Sustainable Data
Alphabet	EA	√	√	√	√			√		√
Airbus	EA	√								
Amazon	EA	√	√							
AON Plc	EA								√	
Apple	EA						√	√		
Aptiv PLC	ESP	√			√					
ASML	EA						√			√
Autodesk	EA				√	√	√			
Ball Corp	EA						√			
Canadian Nat'l Rail	EA	√								
Costco	EA			√						
Danaher	ESP			√		√		√		
Deere	ESP			√		√				
Generac	ESP		√		√					
Goldman Sachs	EA		√						√	
Hannon Armstrong	ESP									
L'Oreal	EA			√			√	√		
Schneider Electric	ESP		√		√		√			
Siemens	ESP	√			√		√			
Thermo Fisher	EA			√		√		√		
Trane Technologies	ESP	√		√	√					
Microsoft	EA		√	√						√
Moody's	EA								√	
NextEra Energy	ESP		√							
New York Times	EA									√
Nike	EA						√			
Salesforce	EA		√							√
S&P Global	EA								√	
SolarEdge	ESP		√		√					
Starbucks	EA		√	√			√			
Taiwan Semi	EA									√
Trex	ESP				√		√			
Trimble	ESP	√		√	√	√				
United Rentals	EA				√		√			
Waste Management	ESP	√	√				√			
Xylem	ESP					√		√		

Other Maps of the Solutions that We Use

The DWA E-Map integrates qualitative and quantitative findings and insights from authoritative maps by others of the path to a low-carbon, resource-efficient economy. Examples of sources include:

- The International Energy Agency's Net Zero Roadmap:
  - https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach

- Project Drawdown: a set of 93 technologies and practices to reduce concentrations of GHGs in the atmosphere, in three areas of action: Reduce Sources, Support Sinks, Improve society:
  - https://drawdown.org/

- The Climate Action 100+ (CA100+): a group of NGOs and asset owners that assess 171 "focus companies" that are the largest emitters on their net zero ambitions, their reduction targets (short-term, medium term, long-term), the quality of their decarbonization strategy, the alignment of their capital allocation to their goals, their climate policy engagement, climate governance, attentiveness to a just transition and their TCFD disclosure:
  - www.climateaction100.org

- The EnRoads Simulator: a high-level tool for understanding carbon reduction magnitudes by sector and their interactivity with other drivers on the path to a low-carbon future, including energy supply, transport, buildings & industry, population & economic growth rates; land, food & industry emissions; and carbon removal through afforestation and technology:
  - https://www.climateinteractive.org/en-roads/

- The Sustainable Development Goals: a map of 17 goals, 169 targets and additional indicators adopted by all United Nations Member States in 2015, providing a shared blueprint for peace and prosperity for people and the planet, now and into the future. Later in this report we outline how our portfolio holdings align to the SDGs, using MSCI's tool: https://sdgs.un.org/goals

- The Transition Pathway Initiative: a center based at the London School of Economics and Political Sciences: an independent source of research and data into the progress being made by the financial and corporate world in making the transition to a low-carbon economy:
  - https://www.transitionpathwayinitiative.org/

- The Breakthrough Energy Coalition (and Breakthrough Energy Ventures) and its map of the 5 Grand Challenges and associated innovations:
  - https://breakthroughenergy.org/our-approach/grand-challenges/
  - And Bill Gates' accessible book and notes on the climate challenge: https://www.gatesnotes.com/My-new-climate-book-is-finally-here

- Speed and Scale: Venture Capitalist John Doerr's map and initiative to drive accelerated action on climate change, across: decarbonizing the grid, addressing agriculture & nature, industrial decarbonization, policy/movement action and innovation and investment:
  - https://speedandscale.com/about/

Building the Capacity of the Next Generation

Whether investing to protect a financial legacy for future generations or considering how today's corporate actions will affect the environment on which future generations will depend, we engage naturally in "cathedral thinking." This concept has been attributed to medieval cathedral builders who set out plans for magnificent cathedrals knowing that they would consume the work lives of multiple successive generations and that the original designers would not live to see their vision come to fruition. For us, this means recruiting and nurturing the next generation of talent within our firm so it will be well prepared to sustain our firm's high-quality offering for decades to come. It also means working with promising faculty and students at other educational institutions that are leading the way in research on sustainable finance.

In this context, our team maintains a close relationship with Columbia University's Sustainable Investing Research Initiative (SIRI) and its Founding Director Caroline Flammer.[29] SIRI is an interdisciplinary project based at the School of International and Public Affairs and drawing on Columbia Climate School, Columbia Business School, Columbia Law School, the Faculty of Arts and Sciences, and the School of Engineering and Applied Sciences. This relationship was formed out of DWA's recurring invitation to and participation in the Aspen Institute's ESG meeting, particularly its segment on academic research.

In late 2022, DWA worked with Professor Flammer to recruit a select group of Columbia University graduate students to do a group project. DWA's "Active Ownership" program engages in direct dialogue with our management teams about how they can do even better on environmental performance in furtherance of both shareholder value and favorable environmental outcomes for society. The project sought to explore the "universal operator" concept that we have formulated and written about previously, which speaks to the systemic, non-diversifiable exposure to climate change impacts and serves as a corollary to the "universal owner" concept that has taken root in the institutional asset owner community.

The "universal owner" concept refers to the idea that the world's largest asset owners — Japan's Government Pension Investment Fund (GPIF), Norway's GPF, CalPERS in the U.S. and others — possess such substantial, widely diversified holdings that overall global economic performance (and systemic risks thereto such as climate change) matters more for the future value of their portfolios than the performance of any individual company or sector. This has formed the theoretical underpinning of their growing collaborations to take on systemic risks such as climate change. We have translated this concept of universality from the owner level down to the company level. Most of our individual companies have globe-spanning operations, markets and supply chains. They are, in other words, "universal operators."

If droughts and temperatures increase unabated, our food service and retail companies will face growing risks in sourcing agricultural commodities. If deforestation is not slowed, our apparel and cosmetics companies will confront input cost and availability concerns for "forest risk commodities" (FRCs) such as palm oil, soy, timber and cattle. If climate change is not mitigated and sea level rises six feet or more in coming decades, our technology and industrial companies with coastal facilities will face asset write-downs and enormous relocation disruptions. If triple-digit temperatures come to afflict more regions of the world, labor well-being and productivity will be strained in sectors such as farming or renewable power installation for which outdoor exposure is unavoidable. All of these are systemic risks to which many of our companies, as "universal operators" are unavoidably exposed despite important efforts to reduce

their relative exposure.

DWA's Sustainable Equity Strategy strives to own companies that are investing strategically in resiliency to these physical and market risks from climate change and those selling solutions that will support others in coping with them. These insights about differential and advantaged exposures are instrumental to how we construct a concentrated portfolio in pursuit of outperformance and societal impact, which we consider flip sides of the same coin. But we also recognize that even the better positioned companies will share in worsening systemic exposures if climate action is not accelerated. As such we are encouraging our companies to think like "universal operators" and to act more urgently. Questions our graduate student team was asked to investigate in this consulting project included:

- As companies strive to identify and insulate their own enterprise (inclusive of owned operations plus supply chains and customer markets) from systemic climate risks -- through geographic diversification, modification/contraction of target markets, purchase of insurance and other privately controllable means – can we identify cases where such efforts can be deemed un-economic or even futile over a ~10-year horizon and should be redirected toward collective action to mitigate systemic climate risk, e.g., cooperative corporate efforts such as the First Movers Coalition or joint efforts to promote stronger sector-wide or economy-wide climate policies?

- Are there quantitative threshold effects in the selected cases that can be generalized as wider guidelines for sustainable investing and active ownership thereto, related to the scale of the enterprise? Examples of researchable scale effects might include a company's purchased share of a climate-sensitive global commodity, or the geographic extent of its customer markets in relation to the geography of climate impacts.

DWA Portfolio Manager Dan Abbasi interfaced weekly with the Columbia research team as they developed insights on these questions in the spring of 2023. This project tested the "universal operator" concept by applying it to three case studies of our portfolio companies: Deere, Airbus and Nike. Project deliverables were to be produced in mid-2023 after issuance of this report.

Portfolio Impact Statistics

We now move to the portfolio statistics section of this impact report. Here our proprietary views take a back seat, because we want to offer clients statistics that draw primarily on an independent source, a "referee" of sorts. We subscribe to MSCI's ESG data services. We have found their coverage of our investable universe to be robust, their data often illuminating and well organized, and their tools useful. We know and value the MSCI analysts and interact with them regularly as their methodologies continue to evolve. We use MSCI's service for ongoing research support and "sanity checks" and to provide tools for efficiently informing portfolio watchlists in our investment funnel and for producing statistics such as we share below.

It is important to note upfront that while we use MSCI as an originator and aggregator of relevant insights, we never rely on its final ratings to drive our investment decisions. Instead we use our own proprietary E-Assess tool, which imports information from MSCI ESG and a diverse third-party data sources, including "watchdog NGOs" operating largely outside of the financial markets, and then elicits and

structures our own qualitative and quantitative judgments on various dimensions of a company's environmental performance, and the materiality of that performance for its operating and financial results. Importantly, this also produces an independent view of a given company that will typically vary from MSCI ESG's scores and grades, as well as from the thousands of other investment professionals using those MSCI outputs.

Some of the limitations we see in MSCI ESG data are:

- MSCI's top-level grades combine Environmental, Social and Governance factors in varying weights (though they do allow the user to also see the E scores in isolation, as seen in the portfolio statistics below). We focus primarily on the E, which is where our differentiated expertise lies, and our own qualitative judgment on the materiality and investment relevance of any particular E factor, which often varies from MSCI's assessment.

- MSCI data is especially focused on providing a snapshot of a company's *current* environmental metrics, though it also compiles and assesses forward-looking data on corporate policies, targets, scenarios, opportunities and risk exposures. Our MSCI-derived statistics primarily reflect the former (e.g., carbon intensity), but our investing is informed more by the latter, including proprietary insights we develop about where we believe a company is heading in the short-, medium- and long-term. Relatedly, we often find investment opportunity in "improver" companies that are commencing a credible improvement trajectory on environmental performance that has yet to be realized in their current environmental metrics (or their financial performance or equity prices).

- MSCI data regarding a company's environmentally relevant opportunity set typically focuses on direct opportunities, whereas some of our most creative investment theses arise from considering the first and second derivative opportunities, or the indirect but crucial enablers of the transition to a low-carbon economy. Our investments in such companies, typically in the E-advantaged portion of our dual analytical model, are not always thematically obvious, and the company's sustainability contributions are not always evident in the statistics compiled by MSCI.

MSCI ESG Portfolio Scores

Metric	DWA SES*	S&P500**	MSCI SRI**	MSCI World**
MSCI ESG Rating	AA	AAA	AAA	AA
Environment Score (0-10)	6.7	5.7	6.8	6.1
Social Score (0-10)	5.3	4.9	5.7	5.1
Governance Score (0-10)	5.8	6.1	6.4	5.8
Weighted Average Carbon Intensity (t CO2e/$M sales)	137.2	231.2	54.8	134.3
Weighted Average Carbon Intensity (t CO2e/$M sales) ex. NextEra Inc.	67.8	231.2	54.8	134.3
Fossil Fuel Reserves (%)	0.0%	4.6%	1.0%	7.5%
High Impact Fossil Fuel Reserves (%)	0.0%	4.4%	0.6%	7.0%
Exposure to High Water Risk (%)	11.6%	7.5%	6.8%	5.5%
Total Water Withdrawal Intensity (m3/$M sales)	10,619	28,752	22,429	24,538

**Weighted average holdings from 01.01.2022 to 12.31.2022*

***holdings as of 12.31.2022*

- Recognizing the issue of confounding tradeoffs across the E, S and G, as discussed, the Sustainable Equity Strategy's MSCI ESG rating in 2022 was AA, which matches the MSCI World index and is one notch below the MSCI's SRI and S&P 500 rating of AAA. However, the strategy intentionally focuses on the E pillar within ESG, and on this pillar of MSCI's three-party scoring system, MSCI awards the DWA Sustainable Equity Strategy a 6.7/10, higher than S&P 500 and MSCI World. Although our strategy is on par with MSCI SRI's Environment Score, it has a much higher Environment Impact Exposure as % of revenue.
- As shown, the Sustainable Equity Strategy had a weighted carbon intensity (i.e., tons of carbon dioxide equivalent per dollar of sales) that is higher than the three reference benchmarks. This is driven principally by one outlier, **NextEra Energy** (NEE), without which our portfolio's carbon intensity is substantially lower than the S&P 500 and MSCI World and somewhat higher than the MSCI SRI index. NextEra's regulated utilities arm, Florida Power & Light (FPL), has significant natural gas-fired capacity, Importantly, it is rapidly growing utility-scale solar installations in its service areas. Solar now accounts for 11% of net generation capacity[30], up from 1% in 2017.[31] In its 2022 10-year site plan, FPL outlined its ambitions to add 9.4GW of new capacity through 2031[32]. NextEra Energy's non-regulated wholesale development and operations arm, NextEra Energy Resources (NEER), had a development backlog of 19GW of solar, wind and storage projects as of Jan. 25, 2023.[33]
- **Waste Management (WM)** was the second largest driver of carbon intensity in the portfolio. With 254 active solid waste landfills and 200+ closed landfills, Waste Management captured 120 million MMbtu of landfill gas in 2021, converting 45% of that into electricity or renewable natural gas (RNG). In 2021, RNG was used to power more than 53% of Waste Management's total truck fleet. After announcing a $1.625 billion Sustainability Capex plan in last year, WM is expanding its green ambitions: $1.215 billion investment in 20 new LFG to RNG facilities that are expected to generate 25 million MMbtu of RNG annually by 2026; $1 billion in material recovery facility (MRF) upgrades that will boost recycling capacity by an incremental 2.8 million tons by 2026[34]. Returns on these sustainability investments are on track to be much higher than reinvestments into acquisition of more solid waste acquisition and they reflect

proactive environmental stewardship.

- **Canadian National (CNI)**, a 2022 addition to our portfolio, is the third largest driver of carbon intensity among our holdings because of the usage of diesel to power their locomotives. CNI also is the North American leader in fuel efficiency, consuming 15% less fuel per gross ton mile than the peer average[35]. As a pioneer in Precision Scheduled Railroading (PSR), Canadian National is driving further innovation in automation and advanced technology through its next gen Digital Scheduled Railroading (DSR). Furthermore, CNI is satisfying growing customer demand for low carbon forms of freight/service transport. Compared with trucking, rail freight is three to four times more efficient than trucks and can reduce GHG emissions by up to 75% on average[36]. Not only will this support decarbonization of the global supply chain, but it will also boost revenue in CNI's intermodal transport business.
- Our weighted portfolio exposure to high water risk was 11.60%.
    - The top contributor to our portfolio water risk score was **Waste Management (WM)**. Because it is in of the solid waste management industry and it has limited water exposure mitigation measures, MSCI deems it a high risk. We agree there is room for improvement: WM's net freshwater consumption per dollar of sales increased three years in a row from 2019 through 2021. WM does utilize recycled water through its direction operations: hauling operations uses recycled water for truck maintenance; landfill operations use recycled water for soil stabilization and fugitive dust emission control; and renewable energy projects used recycled water for steam turbines. We are watching WM's water management strategy closely and evaluating it as an engagement topic in our "active ownership" program.
    - **Taiwan Semiconductor (TSM)** was identified by MSCI as another high-water risk. It is true that a high proportion of TSM's operations is in industrial segments prone to high water intensity, and its facility footprint is situated in regions affected by oversubscribed water resources. However, TSM has an 87.5% water recycling rate, and is targeting a 30% reduction in unit water consumption by 2030[37]. Further, the company has announced an on-site industrial water reclamation plant as part of the $40 billion investment in Arizona. When completed, it would allow TSMC Arizona to achieve near zero liquid discharge.[38]
    - MSCI's "water stress" portfolio score focuses on risk exposure, but does not give countervailing credit for our companies that are selling solutions to tackle the issue of water scarcity, including **Xylem (XYL)**, which provides a comprehensive lineup of equipment, technology and services into the transport, treatment, testing, and efficient use of water across utility and industrial markets, and **Danaher (DHR)**, whose Pall, Hach and Trojan businesses offer a range of water solutions from energy-efficient UV water filtration to advanced water analytics.

UN Sustainable Development Goals

See section above for discussion of the UN Sustainable Development Goals and how these map to our DWA E-Map. MSCI ESG's data service provides an SDG Alignment Methodology that independently evaluates the alignment of individual companies through their products, services and operations. For our portfolio, this evaluation yielded the following data:

- Out of our 36 companies held for some or all of 2022, 29 (**80%**) were aligned or strongly aligned to at least one of the nine referenced SDGs, in the estimation of MSCI;
- Our three highest exposures were to SDG 12 (**54.8%**), SDG 13 (**46.5%**), and SDG 7 (**38.9%**);
- We were relatively under-exposed to SDGs 3, 14, 15;
- Three of 36 companies were "Strongly Aligned" with the nine referenced SDGs: **Xylem, SolarEdge,** and **Canadian National**
- Two of 36 companies were "Strongly Misaligned" with the nine referenced SDGs:
    - **Airbus** is strongly misaligned with SDG 9 and 11: the company was implicated in at least one very severe and other controversies, including the fatal Air France flight 447 crash, involving an Airbus A320, resulting in 97 deaths and 2 injuries in Pakistan, and other similar incidents; and
    - **Thermo Fisher** is strongly misaligned with SDG 11: because of allegations of enabling surveillance of ethnic minorities in China.

MSCI Sustainable Impact Metrics

MSCI also uses a proprietary methodology for estimating the percentage of a company's products and services that map to its six categories of positive impact on the environment: (1) alternative energy; (2) energy efficiency; (3) green building; (4) sustainable water; (5) pollution prevention; and (6) sustainable agriculture.

MSCI Environment Impact Exposure (% of revenue)

Metric	DWA SES*	S&P500**	MSCI SRI**	MSCI World**
Alternative Energy	3.5%	0.9%	0.7%	0.4%
Energy Efficiency	5.3%	1.1%	3.2%	1.9%
Green Building	0.0%	0.6%	0.3%	0.4%
Sustainable Water	0.4%	0.2%	0.2%	0.1%
Pollution	0.4%	0.4%	0.3%	0.2%
Sustainable Agriculture	0.0%	0.1%	0.1%	0.0%
Total	**9.6%**	**3.5%**	**4.9%**	**3.1%**
E-Solution Only	**19.9%**	**3.5%**	**4.9%**	**3.1%**

**Weighted average holdings from 01.01.2022 to 12.31.2022*

***holdings as of 12.31.2022*

Source: MSCI

Overall, **9.6%** of revenue from our portfolio companies contributed to one of MSCI's six categories, higher than all three of our reference benchmarks. When we consider only the DWA companies that fall into the E-Solutions side of our dual analytic framework, that figure rises to **19.9%** or **3-5x** higher than our benchmarks.

Standouts included:

- **SolarEdge (SEDG)**, one of the world's largest sellers of inverters for residential and commercial solar systems, was **86%** aligned. Not only does it have high revenue exposure to environmental impact solutions, but also has one of the highest organic sales growth profile in our portfolio. In 2022, SEDG shipped 10,491 MW of inverter and optimizer products, a 46.5% increase from the last year. Strong commercial demand out of Europe, driven by energy resilience needs and the favorable economics of renewable generation, boosted sales in a year of geopolitical turmoil. The large and rapidly growing installed base has had a substantial impact: between 2020-2021, SEDG customers have produced 38,451 GWh of renewables electricity[39]. In addition, SEDG recently launched their residential home storage product, further expanding their addressable market in the clean energy space.

- **Xylem (XYL)** was **48%** aligned.

- **Schneider Electric (SBS** a French multinational providing energy management and industrial automation solutions, was assessed as **28%** aligned.

Again, recognizing that we often vary from the assessments provided by MSCI and other data providers, we apply our own proprietary framework to adjust the share of revenues we deem as aligned to MSCIs six categories, as well as add "climate adaptation" as an eligible solution (in this, we align with the EU, which counts adaptation as one of the six categories in its EU Taxonomy for Sustainable Finance). The materiality threshold for inclusion in our E-Solution category is 15% of revenue, as of today or in the coming five years per our growth projections. The headline is that the environmental impact solutions revenue rose from 9.6% using MSCI's method to **17.7% using our proprietary method** for our Sustainable Equity Strategy portfolio as a whole across 2022. For E-Solution providers only, this adjusted figure rose to **41.3%**, while for E-Advantaged companies only it remained at **5.1%** on a weighted basis, even after proprietary adjustments for two E-Advantaged companies. Within the E-Solutions group, we made proprietary upward adjustments to **Danaher**, **Schneider Electric**, **Xylem**, **SolarEdge, Generac, Hannon Armstrong, Siemens, Trimble** as well as the following two, for which we offer brief rationales:

- **Deere (DE)** was added to our portfolio in 2022 as an E-Solution provider because of its precision agriculture offerings, which boost crop protection yield, drive planting efficiency and reduce emissions. One example is the See & Spray Ultimate: by using computer vision and machine learning, See & Spray Ultimate identifies weeds and healthy crops separately, allowing the ExactApply nozzle to apply herbicide accurately. It can reduce non-residual herbicide use by more than two thirds, generating significant savings for farmers and limits damage to the soil. In 2022, Deere has serviced ~151mn of Sustainably Engaged Acres (incorporated two or more technology solutions and sustainable process over 12 months), with ambitious to reach 375mn by 2030[40]. Incorporating our estimates for precision agriculture sales, we adjust its revenue upward from MSCI's 0.6% to **5.2%.** This is expected to increase to 15% within the next five years with rising adoption and new product launches (zero emissions tractors, spraying drones, autonomous tractors etc.).

- **Trane's (TT)** revenue exposure was also adjusted upward to **35%** from 2.2%**.** As a market leader in commercial and residential heating, ventilation and air conditioning (HVAC) solutions, Trane's product portfolio tackles the issue of higher energy demands and need to lower emissions.

Trane's product innovation, from its EcoWise HVAC products to ThermoKing's fully electric refrigeration units, are on track to help its customers reduce carbon emissions by one gigaton by 2030. In 2021, Trane's Clean Revenue, defined as products and services that facility energy or emissions reductions, accounted for 35% of sales/[41]

As for the ***E-Advantaged*** side of our dual analytical filter, we use **15%** as a general, not strict, figure of merit to validate that an E-Advantage meets a minimum materiality threshold across at least one of our five traditional DWA economic filters. Examples include:

- **Higher brand value: L'Oréal (OR)** is the world's most valuable beauty brand, with a market cap of $11.2 billion, more than **15%** higher than second place Estee Lauder[42]. L'Oreal's proprietary SPOT tool for conducting life-cycle sustainability assessments on new and renovated products, which we highlighted in our report last year, is being released to the public. Starting with Garnier hair products in the US, L'Oreal is making environmental impact data for individual products available on the website, allowing customers to assess and compare the products they put on their skin. We believe this contributes to customer loyalty and enhance the company's moat in the long run. Surveys have shown that a growing portion of consumers (64% in 2022) consider product sustainability as an important factor in the purchase of beauty products.[43]

- **Higher willingness-to-pay: Nike**'s **(NKE)** robust efforts to reduce the environmental impact of its manufacturing process are cited in a study by RunRepeat, which also found that of the 2,556 shoes in its database from 34 brands, the 89 shoes from Nike and others that it qualified as eco-sneakers commanded a **69%** price premium[44].

- **Higher pricing power than peers: Taiwan Semiconductor**'s **(TSM)** gross margins were 59.6% in 2022, more than **15%** higher than other foundries and well above its long-term average target of 53%. Further, management has indicated that chips manufactured at its new Arizona facility would be priced at a premium, allowing TSM to offset higher operational costs and maintain its industry-leading margin.

- **High R&D as % of sales: Autodesk (ADSK)** reinvested **20%** of sales into R&D in 2022, developing new functionalities to meet growing sustainability demands from customers. In 2021, Spacemaker, an ADSK product that supplies cloud-based AI software for urban development, introduced microclimate analysis. The tools enable architects and developers to mitigate urban heat island effects, which increase energy consumption for cooling purposes, by simulating more efficient design options for city layouts. ADSK is further developing new functionalities in total carbon management and stormwater management[45].

- **Lower cost of capital:** In November 2021, **Thermo Fisher (TMO)** issued a zero coupon, €550 billion sustainability bond due 2025. On March 30, 2023, the bond had a yield to maturity of 3.43%, **-32%** lower than the average yield on similar A-rated, non-green issuances (which was 5.10%). The coupon was also much lower than other TMO bonds issued of a similar duration. The proceeds were allocated toward COVID -19 testing,

treatment and therapeutics purposes, enabling 1b+ PCR diagnostics worldwide and 100+ low/middle income countries served.[46]

MSCI Climate Value at Risk (cVAR)

As defined by the Task Force on Climate-related Financial Disclosures (TCFD), climate risk can be categorized into two categories:

1. Transition risk (Policy Risk + Tech Opportunities) how the transition toward a low carbon economy will impact a company's performance, through extensive policy, legal, technology and market changes; and

2. Physical risks: the risks associated with the direct impact of climate change on a company's operations, such as extreme temperatures, water availability, food security.

MSCI's Climate VAR framework is a method for quantifying the percentage impact on a portfolio's valuation from each type of risk under various transition and physical scenarios. MSCI's Low Carbon Transition Risk figures below include the aggregate policy costs and risks faced by our portfolio companies due to their emissions profile, and nets out positive green revenue and patent opportunities associated the companies' technologies. MSCI's scenarios vary by temperature targets and the "pathways" to achieve such temperature targets, and reflect assumptions and approaches employed in different Integrated Assessment Models (IAMs). For the figures reported below for the DWA Sustainable Equity Strategy portfolio, we use a 2°C scenario produced by the AIM/CGE 2.0 Integrated Assessment Model that is characterized by mitigation action starting in 2021. MSCI ESG Research's physical risk analysis assesses changes in global temperatures, precipitation levels as well as flooding and cyclones caused by climate change by relying on the past 35 years of observed extreme weather to set a historical baseline. The numbers in the table illustrate the change in the physical risk exposure from today's climate until 2100. All figures below are for the Sustainable Equity Strategy's Weighted Average 2022 portfolio holdings.

MSCI Climate VAR (Model: AIM CGE | 2°C | Advance, Aggressive)

Scenario	DWA SES*	SPX**	MSCI SRI**	MSCI World**
Policy Risk	-2.8%	-7.7%	-4.0%	-6.0%
+Technology Opportunities	2.4%	2.6%	2.6%	3.4%
=Low Carbon Transition Risk	-0.4%	-5.1%	-1.4%	-2.6%
Physical Climate Risk	-5.5%	-11.7%	-10.4%	-11.6%
Aggregate Climate VaR	**-5.9%**	**-16.9%**	**-11.8%**	**-14.2%**

**Weighted average holdings from 01.01.2022 to 12.31.2022*
***holdings as of 12.31.2022*
Source: MSCI

Per MSCI's methodology, the total impact on our portfolio from climate transition risk (policy risk offset by technology opportunities) is **-0.4%.** The largest contributor on a weighted basis was **Waste Management (WM).** The net transition VaR for WM was -31.8%, caused by their high Scope 1 emissions of 16.98mt CO2/year in 2021. To align with a 2ºC global emissions scenario, MSCI estimates that WM needs to reduce their scope one emissions by 16.58 CO2/year (or 99.81%) by

2036, incurring a cost of 8.4mn/year by 2036.

The total impact on our portfolio from physical risk was -5.5%. On a weighted basis, the biggest driver was **NextEra (NEE)**, which operates two regulated utilities in Florida. High exposure to tropical cyclones (-15.91%) and coastal flooding (-3.51%) in the region contribute to the physical climate VaR of -19.70%. Since 2006, NEE has invested over $5 billion in storm and flooding resilience measures, including: 1) hardening or undergrounding power lines; 2) upgrading transmission line structures from wood to concrete/steel; 3) installing pumps/flood control structures in high-risk flood zones; and 4) deploying mobile substations and transformers that can be used during floods.[47]These measures have created value for both NEE and their customers: in September 2022, Hurricane Ian became the fifth strongest hurricane to make landfall in the continental US, but NEE did not lose a single transmission pole or tower and was able to restore service to two-thirds of its customers after the first full day of restoration.[48]

As noted in the table, our Aggregate Climate VaR is **-5.9%,** lower than all three of our reference indexes, meaning that, per MSCI's methodology, our 2022 portfolio was less exposed to climate risk than the constituents of those indexes as a whole, which range from **-11.8%** to **-16.9%** depending on the index.

Science Based Targets and Net Zero Commitments

The Science Based Targets Initiative (SBTi) — a partnership between CDP, the United Nations Global Compact, World Resources Institute, and the Worldwide Fund for Nature — serves as a third-party assessor for validating whether a company's emissions reduction targets align with the Paris Agreement, meaning they are consistent with a pathway to maintaining warming below 2°C. In October 2021, SBTi further initiated the more stringent Net-Zero Standard. Findings on the target status of our portfolio companies follow:

Metric	DWA SES*	DWA SES by % of portfolio
# of companies with approved SBT	19.4%	24.4%
# of companies with committed SBT	50.0%	46.9%
# of companies with Net Zero Commitments according to SBTi	30.6%	30.7%

**Weighted average holdings from 01.01.2022 to 12.31.2022*

Source: https://sciencebasedtargets.org/

- Across 2022, 27 (**69.4%)** of the companies in the DWA Sustainable Equity Strategy fulfilled at least one of the SBTi categories.

- Eighteen of our companies (**50.0%)** had "approved targets" (or 46.9% by weighting), meaning their targets were independently validated by the SBTi. As of March 2021, only 19% of S&P 500 companies that met a comparable standard, even though over two-thirds of S&P 500 companies were considered to have some form of emissions reduction targets. This is an improvement over 2021, where only 12 of our portfolio companies had approved targets.

- Seven (**19.4%)** of our portfolio companies had "committed targets" (or 24.4% by weighting), meaning they had committed to setting a Science-Based Target within 24 months.

- Eleven (**30.6%)** of our portfolio companies had committed to the more stringent Net Zero Standard (or 30.7% by weighting), which means they had committed to reducing all their GHG emissions at a rate consistent with reaching net-zero emissions at the global or sector level in alignment with a 1.5°C pathway. This standard also covered Scope 3 emissions, which is often omitted from headline carbon neutral pledges. Scope 3 covers emissions in a company's full value chain, from its supplier base down to the post-sale phase when customers use its products. Many companies have resisted this extended responsibility for emissions reduction, which leads us to be especially appreciative that 11 of our companies have committed to this challenging standard.

Implied Temperature Rise

Using MSCI's Implied Temperature Rise Calculator [49] for portfolio assessment, the results are as follows:

- Using a Transient Response to Cumulative CO2 Emissions (TCRE) factor of 0.000545 °C/GtCO2e, which is the per unit increase in temperature over 2°C caused by each additional unit of additional emissions, our portfolio is associated with an Implied Temperature Rise of **2.0°C**, an improvement upon last year's ITR of 2.23°C. 66.7% of the companies within the portfolio align with the goal of limiting temperature increase to below 2.0°C as outline in the Paris Agreement, and 41.7% align with limiting temperature increase to below 1.5°C, which the UN's Intergovernmental Panel on Climate Change (IPCC) has deemed necessary to limiting risks of severe climate change impacts[50].

- A fund's Implied Temperature Rise measures, in aggregate, a fund's temperature alignment (in °C) to keeping the world's temperature rise to 2°C by 2100. Our strategy's ITR of 2°C indicates that, based on MSCI's tool, our portfolio is contributing its proportional share of the global carbon budget, and if everyone exceeded their fair shares by a similar proportion, the result would be a global temperature increase of ~2.0°C by 2100.

E.U. Sustainable Finance Regulations

This section briefly covers the E.U. Sustainable Finance Regulations, including the E.U. Taxonomy, the Corporate Sustainability Reporting Directive (CSRD), the Sustainable Finance Disclosure Regulation (SFDR), and the Principle Adverse Indicators. Douglass Winthrop Advisors is not based in Europe, currently has no E.U.-based clients in the Sustainable Equity Strategy and is not under legal mandate to comply with the SFDR. However, we are monitoring the E.U.'s evolving program and considering voluntary disclosures aligned with it over time. This report makes informal disclosures but is not being formally submitted to any authorities.

The E.U.'s Sustainable Finance Regulations have been advancing rapidly in recent years and

implementation of its complementary parts are rolling out in stages. They are complex and voluminous, so the following is only a brief overview:

1. **The E.U. Taxonomy:** A classification system for translating the Union's environmental goals, including 2050 carbon neutrality, into detailed sector-specific screening criteria that validate whether an activity is making a "substantial contribution" to one of six key objectives (including climate change mitigation and adaptation) while doing "no significant harm" to the others. The Taxonomy criteria are being cross-referenced by a set of rules being rolled out in stages to govern sustainability disclosures by both companies and asset managers as noted below.[51]

2. **Corporate Sustainability Reporting Directive (CSRD):** The European Union's Corporate Sustainability Reporting Directive (CSRD) was finalized in December 2022, with reporting obligations beginning in 2024-2025, depending on the entity. It requires detailed reporting by corporations with securities listed on an E.U.-regulated market, even if domiciled elsewhere. CSRD will impact many more entities than are reporting under current E.U. Non-Financial Reporting Directive (NFRD). It will require companies to disclose which of their activities are eligible for classification under the Taxonomy and furthermore what proportion of their sales and expenditures (operational and capital) meet the relevant quantitative criteria.

3. **Sustainable Finance Disclosure Regulation (SFDR):** This multi-faceted rule that began rolling out in stages in March 2021 and mandates that asset managers offering financial products make certain disclosures, including what portion of their underlying corporate holdings are E.U. Taxonomy-compliant, thereby enabling clients to make more informed sustainable investing choices. SFDR reporting obligations are to begin in June 2023. However, the ability of asset managers to comply with the SFDR depends on whether companies they hold in their portfolios comply with the NFRD and emerging CSRD, specifically whether they are disclosing their taxonomy-alignment. E.U.-domiciled companies are still in the process of assessing and reporting their taxonomy aligned revenue, therefore many E.U.-based asset managers have stated that as of 2022 there is insufficient data to report taxonomy alignment.

4. **Principle Adverse Impact metrics (PAI):** Under SFDR, financial market participants (FMP) are required to disclose indicators that quantify sustainability risk at an entity and product level. Unlike the E.U. Taxonomy, which aim to promote positive environmental contributions, PAIs specifically focus on identifying whether and how certain investments may generate a negative impact. These 18 mandatory and 46 additional factors cover environmental, social, human rights, anti-corruption and anti-bribery matters. Further, FMPs are required to discuss how they consider PAIs in the investment process, state due diligence policies and outline targets to avoid or reduce PAIs identified. Currently, PAI reporting is still in its early stages and suffers from two main issues: 1. Lack of data availability on company level 2. Data is required to reported on an absolute level, rather than intensity figure, which makes it difficult to compare funds of varying sizes.

Based on MSCI's tools for estimating E.U. Taxonomy alignment at this preliminary stage, **9.6%** of the revenue of the DWA Sustainable Equity Strategy's 2022 holdings were Taxonomy-aligned. On a voluntary basis, we have also internally calculated estimates of Principle Adverse Impact

Indicators for DWA Sustainable Equity Strategy based on our understanding of the PAI formulas and the data reported for our companies by MSCI. Please see the Appendix for these PAI figures.

The SFDR also required managers self-categorize as one of the following:

- Article 6 strategies: no sustainability objective
- Article 8 "light green" strategies "promote, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices."
- Article 9 "dark green" strategies: "have sustainable investment as its objective or a reduction in carbon emissions as its objective."

As of January 2023, Article 8 and 9 funds are required to provide pre-contractual, periodic and website disclosures to substantiate their claims in each category. Article 6, 8, 9 funds are also required to report their portfolio's Sustainability Risks and Principle Adverse Impact Metrics (PAI's) by June 2023. To address Sustainability Risks, asset managers must establish a policy on the integration of sustainability risks. For PAIs, managers must consider their impact on investment decisions and report related indices. In addition, ESMA, the Union's financial markets regulator and supervisor, has implemented guidelines on use of ESG/Sustainability-related terms in an investment product's name.

In December 2022, Morningstar estimated that 52.2% of E.U. fund assets are classified as Article 8 and only 3.3% as Article 9[52]. While DWA is not a European investment manager and not subject to SFDR regulations, we intend to explore whether to characterize our offering as an Article 8 or 9 strategy in presenting our portfolio to European investors.

Active Ownership: Proxy Voting and Engagement Highlights

Through our client-delegated use of shareholder proxy voting and through dialogue with management or our "active ownership" efforts entail encouraging portfolio companies to behave more sustainably.

Highlights of our 2022 Voting on Behalf of Clients

Overall Statistics

- 100% of votable meetings voted
- 84.3% policy was with majority, 15.7% against majority
- 56.7% Against Mgmt Votes, 43.3% For Mgmt Votes
- 354 votable proposals, 354 proposals voted on

Management Proposals (Environmental)

- Canadian National Railway Company (CNI): DWA voted "For" proposal for Advisory Vote on Climate Change in support of Mgmt (Passed)
- Microsoft Corporation (MSFT): DWA voted "Against" proposal to Report on Cost/Benefit Analysis

of Diversity and Inclusion (Failed)

Shareholder Proposals (Environmental)

- 11 votable proposals, 11 proposals voted on (2 were E&S Blended)
- DWA voted 100% in support Environmental Shareholder Proposals, all were Against Mgmt

Costco Wholesale Corporation (COST)

- **DWA voted Against Mgmt in support of shareholder proposal to Report on GHG Emissions Reduction Targets (Passed)**

Highlights of our 2022 Dialogues with Management

As to debates about the efficacy of engagement, we are clear-eyed in recognizing that this will vary and that we are one voice among many that management considers. What we have found so far is good receptivity by management to our engagement outreach, based less on the size and voting power of our holdings in a company, and more on their recognition that they can benefit from feedback based on the collective decades of environmental domain expertise residing in our team. This experience makes some management teams eager to hear us out as they chart their path on climate and other issues, both because of the substantive value of our input and because we are indicative of wider investor trends to which they want to be attuned as ESG asset flows intensify. Our typical approach is to partner with a leading NGO or other expert that specializes in the domain on which we're engaging a company.

One strand of the Sustainability Equity Strategy's "active ownership" work is proxy voting. For those clients who have authorized us to do so, we vote their proxies for all of our portfolio holdings in line with strong climate action. We have subscribed to Institutional Shareholder Services' (ISS) Climate Proxy Voting Policy and we use its infrastructure, ProxyExchange, to execute on these votes. Launched in March 2020, the ISS Climate Policy is based on principles developed from widely recognized international frameworks such as the Taskforce for Climate-related Financial Disclosures (TCFD), using a scorecard approach that reflects climate-related risk factors and performance indicators.

Also relevant to our proxy voting is that the Sustainable Equity Strategy has joined Say on Climate[53], which uses engagement and shareholder resolutions to encourage companies to:

1. Disclose their emissions;
2. Present a credible, multi-stage plan to reduce them;
3. Submit their plans and progress to an annual shareholder vote (where appropriate and note that it is not always appropriate given concerns that such votes can inadvertently rubber stamp inadequate plans, a matter of live discussion among collaborators in this initiative.

We believe the Say on Climate initiative is enhancing the drive for corporate accountability and we are encouraging all of the portfolio companies in the Sustainable Equity Strategy to meet its conditions, while we also vote in favor of shareholder resolutions to this end.

Our three priority areas for engaging our portfolio companies remain:

1. Climate Change: Full-scope (1,2,3) greenhouse gas emissions disclosure, emissions reduction targets and plans, often (but not always) submitted for annual shareholder review and approval as to sufficiency and progress (Key collaborators: Say on Climate, As You Sow, CERES).

2. Corporate Advocacy: Urging our companies to deploy their resources and influence to promote climate/environmental policy (Key collaborator: InfluenceMap).

3. Sustainable Use of Biological Resources: Avoiding deforestation, overfishing and other practices that undermine the biological integrity, biodiversity and the viability of resources on which we and future generations depend. (Key Collaborators: Sustainable Fisheries Partnership and Global Canopy Programme).

Examples of the Sustainable Equity Strategy engagements in 2022 follow.

Costco:

Costco has initiated environmental and sustainability measures aimed at enhancing its operational and financial performance while addressing rising stakeholder concerns. The company's strategy includes increasing its market share and expanding its membership base, which currently stands at 68 million out of 123 million households in the US and sees the incorporation of sustainability as a necessary part of financial growth.

For example, Costco is prioritizing shelf space for responsibly produced products under its Kirkland Signature brand, which accounts for approximately 15% of its product sales. The company is also reducing waste by decreasing the use of cardboard, plastic, metals, and reducing food waste through partnerships with organizations like Feeding America. We believe these sustainability initiatives could lead to an increase in sales growth, driven by an increase in Costco membership on a per-store basis and higher spending levels per member as consumer preferences shift towards sustainable products.

MSCI has rated Costco with an 'A', while CDP has given ratings ranging from 'D' to 'F' on aspects such as climate change mitigation efforts and management of water resources and forests within its supply chain. These mixed ratings reflect concerns regarding Costco's historical supply chain labor standards among other issues. Costco is actively working towards improving its ESG profile.

On climate change, Costco has long been in the “improver” category, a company whose inherent business model efficiencies have reduced emissions relative to business-as-usual retail behavior, but where progress is due for acceleration. Emissions attributable to Costco have increased over the last four years and the company hadn’t yet detailed an action plan for measuring, disclosing and reducing most of its indirect emissions.

In January 2022, we voted our authorized client proxies in support of a successful shareholder resolution urging the company to reduce carbon emissions faster and more aggressively than its previously outlined action plan. The proposal was filed by Green Century at Costco's Annual General Meeting. The proposal directed the company to set net zero-aligned targets, as Costco was identified as one of only three of the largest S&P 50 companies that had not yet set a major climate commitment.

Costco's board of directors did not support the proposal and said before the Annual General Meeting that "we need more time to determine how we can achieve meaningful and operationally viable" emissions reductions. Despite Costco's board recommending against the resolution, it passed with significant support from shareholders at 70%.

In response to the resolution, Costco has since committed to setting climate targets to reduce emissions across its full value chain. This includes a commitment to disclose its aggregate Scope 3 emissions as part of a revised Climate Action Plan in December 2022, and plans to set Scope 3 reduction targets in 2023. Furthermore, Costco pledged to update its Scope 1 and 2 emissions targets and action plans as part of the revised plan in December 2022. The proposal had recommended that Costco adopt a fixed timetable and targeted limits on emissions by June 2022, about six months earlier than the company's own timeline for its climate action plan. Nonetheless, we deem the company's actions as responsive to the successful resolution.

Costco has engaged with several seafood organizations for product certification as part of its commitment to offering more sustainable food options. This is an area where we have engaged the company. We have sent multiple letters and had discussions with Costco management encouraging them to build on the company's track record of sustainable fish procurement by taking an even more systematic and muscular approach. We conveyed that we believe this would enhance Costco's security of supply, the loyalty of its membership base (whose recurring subscription comprises the heart of its business model), and its competitive positioning relative to peers like Walmart, which has been making forceful commitments to become a "regenerative" company in fisheries and other areas).

Costco has been responsive and has included on our calls key executives such as Ken Kimble, vice president and general manager overseeing the procurement teams on fish. They have indicated that their lean business model precludes them from being responsive to certain disclosure practices and have so far resisted our requests to participate in the Ocean Disclosure Project (ODP), which is currently used by 40 companies, including global brands like Aldi, Walmart, and Lidl, and many major US retailers. The ODP lists all the fisheries these companies are sourcing from and reports the progress of those fisheries toward sustainability. Transparency platforms like ODP have become the norm in ESG reporting and are increasingly referenced by investors.

The Sustainable Fisheries Partnership, our key NGO partner in this engagement, created the ODP, however its use is not limited to SFP partners. Costco has indicated that its primary NGO partner on fisheries is WWF and argued that this is another reason not to participate in the ODP. Our response was that over half of the current participants disclosing on ODP are not affiliated with SFP and some partner with other NGOs. Our view is that use of the ODP would capture the significant sustainability achievements that Costco has reported publicly and would clarify the scope of that progress across all seafood resources used annually by Costco. It would also help encourage Costco's suppliers – via participation in Fishery Improvement Projects monitored on the ODP platform – to engage governments at all levels to establish crucial supportive policies.

Amazon:

Amazon has set targets to achieve net-zero carbon emissions by 2040. It has invested heavily in renewable energy projects, sustainable transportation solutions, and circular economy practices. The company has also committed to reducing food waste and increasing food donations across its operations. In 2021, Amazon reported a 1.9% reduction in its overall carbon intensity despite rapid business growth. The company reached an 85% renewable energy usage rate across its operations and facilitated over 3.5 gigawatts of renewable energy capacity in Europe alone. Amazon has also introduced electric delivery vehicles and zero-emission vehicles for package deliveries in various regions.

We believe shareholder engagement can be an important lever for inducing corporations to use their influence to help bring about strong governmental policy on environmental matters. As such, our engagement activities include a major focus on urging companies to advocate forcefully in support of strong climate policy and regulations, both directly and through their trade associations. Our non-profit partner on this work is InfluenceMap a London-based think tank that produces independent analysis and grades on how companies use their government lobbying and advertising resources to accelerate or impede climate policy. Among our key asks, we have urged Amazon to:

1. Increase transparent, positive advocacy across a range of climate-related policy issues. InfluenceMap's LobbyMap tool shows that Amazon achieves an 80/100% 'Organization Score' for its direct lobbying activities. While Amazon's top-line communications are positive, the company shows limited public engagement on specific climate-related policies required to meet the goals of the Paris Agreement. We asked Amazon to engage forcefully in favor of: (i) passing the climate provisions of the Build Back Better Act; (ii) the pending EPA methane rule; and (iii) the Administration's proposed standards for heavy duty vehicles. Doing so could improve Amazon's InfluenceMap scores. In addition, we urged Amazon to respond to the U.S. SEC's proposed climate disclosure rule, including by: a) issuing a statement of support for the proposal, b) publicly disavowing the U.S. Chamber of Commerce's negative position, and c) committing to work inside as a member of the U.S. Chamber to improve its position.

2. Publish a detailed annual review to ensure that all of its direct and indirect lobbying activities (via trade associations) are consistent with the 1.5ºC goal of the Paris Agreement. This should include clearly reporting on specific cases of misalignment, as well as the steps taken to address specific cases of misalignment, in line with the Global Standards on Responsible Climate Lobbying launched by investors in March 2022. Amazon achieves a 62/100% 'Relationship Score' on LobbyMap for its indirect lobbying. Amazon's membership in the U.S. Chamber of Commerce is an area of particular concern. The Chamber achieves an E- grade for its obstruction of urgently needed climate policy in the U.S. and, according to recent InfluenceMap research, does not appear to be improving in its climate policy engagement. Relatedly, also in the category of indirect engagement, we applauded Amazon for joining with 2000+ companies in the *Race to Zero Coalition – Business Ambition for 1.5C.* Over half of the coalition members assessed by InfluenceMap, including Amazon, have links to industry groups that are impeding needed climate policy. The Race to Zero initiative announced at COP26 that it will work with InfluenceMap and

Race to Zero members to accelerate policy action toward alignment with the Paris Alignment. including by influencing their trade associations. We urged Amazon to intensify its efforts to encourage fellow members of this coalition, including many of its suppliers who are among the 2000+ members, to be similarly constructive.

3. Harness Amazon's Platform Strength through the Climate Pledge Friendly designation and Prohibition of Disinformation: Amazon has indicated here that new certifications will be added to its pioneering Climate Pledge Friendly system. Given the priority of strong government policy to mitigate climate change within what the IPCC has called our "rapidly closing window," we urged Amazon to include InfluenceMap assessments as part of its Climate Pledge Friendly program, making this rigorous research available to its users as they browse for products on the Amazon website. This would be an instance where the Climate Pledge Friendly designation would encompass not just *product*-based certifications, but *company*-based evaluations. InfluenceMap has developed a red-orange-red traffic light system as part of the Climate Action 100+ benchmark process for easy screening of the degree to which companies are negative or positive on climate policy action. We asked Amazon to use this same system to display whether such companies are Climate Pledge Friendly or not, in relation to its support for, or opposition to, climate policy action. We also supplied Amazon with the list of ~100 consumer-facing companies that have been assessed by InfluenceMap, which would in turn cover a much larger number of stock keeping units (SKUs) displayed on Amazon.com for sale by these companies.

4. Use its platform strength is in the area of online advertising. There is a growing drive toward holding companies accountable for climate-related disinformation. Dan Abbasi of the DWA Sustainable Equity Strategy team spoke at a February 2022 White House event on how segments of industry have used strategic disinformation to delay much needed action to mitigate climate change. Accordingly we asked Amazon to accept and adopt the official definition of climate disinformation and misinformation as defined at COP26. We further ask that Amazon create an 'Ad Library', along the lines of that proposed under The Social Media Disclosure and Transparency of Advertisements Act (DATA) of 2021. Given its status as a major advertising platform, Amazon should use this definition of climate mis- or disinformation, which extends to greenwashing, to implement related policies, including but not limited to refusing to publish ads if they contain climate misinformation or disinformation based on the definition. This policy should be further extended to refusing to publish advertising from entities known to repeatedly or actively publish climate mis- or disinformation under the definition. Separately, the Social Media DATA Act advises that websites or mobile apps that sell ads and have more than 100 million monthly users should grant researchers access to ad libraries containing searchable, machine-readable data about the ads they serve, whether political or others. Such an ad library will allow researchers to assist on this global and multi-faceted issue.

Alphabet:

We have urged Alphabet to:

1. Increase transparent, positive advocacy across a range of climate-related policy issues. InfluenceMap's LobbyMap assessment shows that Alphabet achieves an 81/100% 'Organization Score' for its direct lobbying activities. This is a high score informed by positive climate advocacy in the last few years as well as recent improvements in transparency, including Google's September 2022 policy briefs outlining its positions on decarbonization and electricity policy. With an Engagement Intensity of 25%, there is still room for Alphabet to increase its advocacy on climate. We ask that the company engage forcefully in support of: (i) an ambitious supplementary rule on methane emissions, expected to be released by the U.S. EPA for public comment imminently; (ii) U.S. permitting legislation, if introduced in the coming months, that advances renewable energy transmission while avoiding the buildout fossil fuel infrastructure; and (iii) E.U. energy transition policy, including the 45% 2030 renewable energy target (Repower EU) and the phase-out of fossil gas incentives by 2027 and all fossil gas heating by 2040 (Energy Performance of Buildings Directive), with a particular focus on engaging E.U. Member States in the Council. (More policy intervention opportunities will be added to InfluenceMap's U.S., E.U., Japan, and South Korea platforms in 2023).

2. Publish a detailed annual review to ensure that all of its direct and indirect lobbying activities via trade associations are consistent with the 1.5ºC goal of the Paris Agreement. This should include clearly reporting on specific cases of misalignment, as well as the steps taken to address specific cases of misalignment, in line with the Global Standard on Responsible Climate Lobbying launched by investors in March 2022. Alphabet achieves an inadequate 64/100% 'Relationship Score' on LobbyMap for its indirect lobbying. Its membership in the U.S. Chamber of Commerce is an area of particular concern: the Chamber achieves a 28% Organization Score for its obstruction of urgently needed climate policy in the US and, according to recent InfluenceMap research, does not appear to be improving in its climate policy engagement.

3. Accept and adopt the full definition of climate disinformation, beyond climate denial, as defined at COP26 and apply this to the full range of advertising available on Alphabet's platforms, including YouTube and Google searches. Given Alphabet's role as a major platform for advertising – and building on the steps it has already taken in 2022 to curb the spread of climate disinformation – Alphabet should use this definition of climate disinformation to implement related policies, including but not limited to refusing to publish ads if they contain climate disinformation. We ask Alphabet, in light of recent research, to consider implementing a policy to ban selling advertising to repeat offenders of climate disinformation and denial.

4. Create a transparent 'Ad Library' (or ad repository as defined in the E.U.'s Digital Services Act), along the lines of that proposed under recent policy measures in the E.U. (Digital Services Act) and the US (The Social Media Disclosure and Transparency of Advertisements (DATA) Act of 2021). The Social Media DATA Act advises that websites or mobile apps that sell ads and have more than 100 million monthly users should grant researchers access to ad libraries containing searchable, machine-readable data about the ads they serve, whether political or others. Similarly, the E.U.'s Digital Services Act calls for enhanced transparency for all advertising on online platforms and access to data for researchers. We ask that Alphabet also extend the ad repository to regions outside of the E.U.

Autodesk:

Autodesk, a software company, provides design and engineering solutions for various industries, including architecture, engineering, construction, manufacturing, media, and entertainment. Autodesk's environmental footprint is comparatively small and, in the words of its VP of Sustainability, Lynelle Cameron, "what matters most is that it shows a path for our customers to become net zero. That's where the greatest impact lies."[54] Autodesk's suite of tools enabling the design and construction/production of buildings and manufactured products for a low-carbon future sits at the core of our thesis for Autodesk, in terms of impact and entrenching its moat as the go-to design software. This includes its pioneering co-leadership role in developing the Embodied Carbon in Construction Calculator (EC3). Its tools facilitate the optimization of energy consumption, waste reduction, and water conservation in building, infrastructure, and industrial projects. Additionally, Autodesk offers advanced capabilities such as microclimate analysis for evaluating outdoor thermal comfort and the Total Carbon tool for assessing the embodied carbon in building designs.

On September 22, 2022, in the midst of New York's Climate Week, Douglass Winthrop hosted an expert event with Peter Sweatman, a Madrid-based policy entrepreneur who crafted the Mortgage Portfolio Standards proposal that is poised to become E.U. law, pending final trilogues between the E.U. Commission, the E.U. Parliament and the E.U. Council. Experts from finance, environmental groups and DWA clients attended.

This event paved the way for our shareholder engagement with Autodesk in relation to the E.U.'s pending revision to its Energy Performance in Buildings Directive (EPBD), which includes key provisions related to Minimum Energy Performance Standards (MEPS), Energy Performance Certificates (EPCs) and the innovative Mortgage Portfolio Standards (MPS) concept. Sweatman is our expert partner in this ongoing engagement.

In October 2022 we held an in-depth session with a cross-functional Autodesk team about how we believe it can both accelerate implementation of, and benefit from, the coming step-up in stringency for the EPBD. Among the game-changing implications of the revised EPBD, if finalized, as of 2030 all new buildings in the EU will be required to be zero-emission (2027 for all new public buildings). We expect there will be a revised push to increase harmonization of EPC standards across member states, including potentially setting MEPS threshold targets at the E.U. level. In the E.U.'s highly developed markets, we believe the primary opportunity from the rule will be to accelerate a renovation wave of the existing building stock and that the new Mortgage Portfolio Standards will be a crucial innovation to accelerate finance-led action

from member states. Details remain to be worked out about how stringent member states will be in terms of trajectories, requiring a mortgage portfolio's holdings to elevate their EPC grades, but the direction of travel is now much clearer.

We have urged Autodesk to seize this opportunity to drive business results and wider impact in three ways:

1. To engage actively in this final stage of the regulatory process, promoting maximum stringency in its provisions requiring building renovations, and associated uplift in the EPC grades, of the E.U. building stock. We believe the participants in the trilogues will be emboldened to make the EPBD rules, including those embedded in the Mortgage Portfolio Standards, even more stringent in terms of energy efficiency if they know that tools from Autodesk, the leading AEC tool provider, will be available to facilitate and enable easy fulfillment of the rules. Autodesk should be vocal and engaged in the process and should back this up by acting on point #2 below.

2. To create generative design capabilities and other tools and workflows in its AEC (Architecture, Engineering, Contracting) suite (including Revit, Construction Cloud, EC3, etc.) to implement the EPBD's revised regulatory prescriptions as specified in MEPS, EPCs and MPS. We ask Autodesk to go the extra mile and develop plug-ins to align with each member state's pending implementation pathway, and 2023-revised National Energy and Climate Plans (NECPs).

- To create new connectivity tools for financial institutions that will be obligated to act under the Mortgage Portfolio Standards; we believe this will meaningfully enlarge Autodesk's Total Addressable Market and facilitating cross-collaboration with its existing customer sets. The Autodesk team has told us that, in their estimation, financial holders of mortgage portfolios are a diffuse part of the firm's "asset owner" stakeholder segment, and that Autodesk is not really engaged directly in providing enabling tools for them to understand: 1) the energy efficiency performance (and associated EPCs) of the buildings in its portfolios; and 2) the specifications, costs and payback prioritizations of potential renovations to elevate the EPC at the building level (nor, in aggregate, at the portfolio level that will be assessed in Mortgage Portfolio Standards). Some banks recognize the physical and transition risk in their mortgage books and are leaning toward Artificial Intelligence/Machine Learning solutions to calculate their EPCs. Autodesk is currently looking at adapting SpaceMaker to meet certain needs in this area. Externalities around operational performance and emissions are not currently factored into the upfront cost estimators in Autodesk tools. We believe that Autodesk can and should provide these mortgage holders a plug-in and dashboard to help them understand the coming stranded asset risk they face under the MPS as well as the economic rationale to voluntarily upgrade portfolios ahead of schedule for better economic and carbon performance. We believe this will add a new segment of paid users for Autodesk tools, providing a revenue lift while supporting accelerated renovations for global impact. We further believe that asset owners and managers could use Autodesk software to collaborate on renovation workflows with contracting firms.

Following our engagement, though not necessarily attributable to it, Autodesk signed an industry letter in spring of 2023 urging E.U. policymakers to adopt an ambitious and future-proof EPBD (also

referenced on page 81 of Autodesk's Impact Report). The company is also engaging directly and through industry associations with the Council, the E.U. Parliament, and the European Commission's negotiators ahead of the "Trilogue" phase of the EPBD revision.

As for the functionality we have requested that Autodesk create, management has said that they are engaging with customers to build the tools they need to fulfill their obligations not just for EPBD but across the globe. They execute this through a series of public roadmaps where their customers prioritize what's most important for them. this process has led to initiatives like its sustainability functionality in Forma, and updates to its embodied carbon calculations in Revit.

In general, we have found that Autodesk is concerned about the expense of customizing its tools to meet the multi-country chessboard of implementing national regulations that will follow the revised EPBD and needs local partners to move this forward. They have noted that such partners could harness Autodesk's form creation tool for the ADSK Construction Cloud to capture the current EPC grades and renovation pathways to improve them. Autodesk's Insight energy efficiency toolkit is currently primarily manual, and not tied to E.U.'s Energy Performance Certificates. Autodesk's advantaged platform approach generates the data required for third parties and Autodesk customers to build their own EPC reports in Forge.

Autodesk's Revit will tell you how to get to net zero for new construction but streamlining it for retrofit is a task that remains to be developed, e.g., taking a science-based approach on what to renovate, then doing deep dives to re-engineer the building design. Our understanding is that the net zero pathway does not feed into the EPC grade and is focused more on how engineers are supposed to design. Autodesk competitors have published numbers that are unreliable, and we believe that there is room for Autodesk to be the most reliable on science-based carbon targets that is backed by data.

We have urged Autodesk to push further beyond its template-centric approach and into detailed design tools that are explicitly linked to EPC grades, and to do so on a country-by-country basis. We believe this will produce upside for Autodesk in terms of brand equity, widening its moat as the AEC software leader, and generating sales. Autodesk already cites how its Insight product ties to the American Institute of Architects' 2030 Commitments and other green building initiatives. We believe it is time for Autodesk to link to one of the most profound, game-changing laws in the world to drive massive building renovations through Minimum Energy Performance Standards, Energy Performance Certificate grade levels and aggregate scores under Mortgage Portfolio Standards.

L'Oreal:

L'Oréal, a global cosmetics, skincare, haircare company, has addressed sustainability through initiatives such as sustainable packaging practices and green chemistry principles to improve product formulas' environmental impact. S&P Global Ratings assigned L'Oréal an ESG Evaluation score of 85 out of 100, indicating preparedness and sustainability in its operations. L'Oréal has set targets to achieve zero Scope 1 and 2 greenhouse gas (GHG) emissions from all operated sites by 2025, to reduce 'cradle-to-shelf' Scopes 1, 2, and 3 GHG emissions by 14% per unit of sold product by 2025, and to ensure that 50% of the Group's plastics used in packaging are from recycled or bio-based sources by 2025.To support its sustainability goals, L'Oréal launched an inaugural public bond offering in 2022, including a sustainability-linked tranche. This sustainability-linked bond aligns with L'Oréal's Sustainability-Linked Financing

Framework and includes emissions reductions and sustainable packaging Sustainability Performance Targets (SPTs). L'Oréal has received an 'AAA' score from CDP for the sixth consecutive year. While L'Oréal has made improvements sustainability, it acknowledges the need for improvement. The company faces challenges with sustainable packaging and has received criticism for its reliance on palm oil-based products. We have asked L'Oreal to:

1. Seize a prominent first-mover position by complying ahead of schedule with the E.U.'s just-adopted landmark law against importing commodities resulting from deforestation AND by voluntarily extending its compliance with the law to L'Oreal's non-E.U. markets. In December 2022, the E.U. Commission agreed on a new law to ban the trade of specific forest-risk commodities. On April 19, 2022, the E.U. Parliament overwhelmingly adopted the law. And on May 16, 2022, the E.U. Council gave the final go-ahead, commencing a 20-day clock to come into force, and thereafter 18 months for large companies to comply by verifying that that the goods (including palm oil, soy and paper) they import into the E.U. market do not come from land newly deforested since Dec. 31, 2020. Non-compliance will impose fines of up to 4% of sales. We believe this landmark law provides L'Oreal an opportunity to dramatically enhance its leadership position and asked the company to:

    - Commit to execute compliance faster than the required 18 months after the law comes into force shortly. This will establish L'Oreal as a first-mover, boosting customer loyalty, regulator goodwill and prompting faster beneficial impact on forests and associated emissions reduction.

    - Voluntarily extend its compliance with the E.U. rules to all markets in which the firm operates. This will avoid the logistical costs and challenges of segregating L'Oreal's supply chains, and it will reinforce pressure on competitors in other markets, as well as on national regulatory authorities to follow the E.U.'s lead.

    - Given that the E.U. has already indicated that it will be reviewing whether to augment the new law by adding "other wooded land" in one year and other critical ecosystems in two years, we asked L'Oreal to use its considerable influence to encourage this step. Specifically, we encourage L'Oreal to urge the E.U. to extend its importation prohibition to inputs derived from newly converted land in biodiverse savannahs like the Cerrado in Brazil (a massive area roughly the size of Ukraine).

2. Move diligently to improve its Forest 500 score for the 2023 report. We appreciate that, per the Forest 500 annual report for 2022, L'Oreal was one of only 50 of 350 assessed companies that are monitoring its suppliers/sourcing regions for every commodity they're assessed for. At the same time, we believe L'Oreal can and should make aggressive efforts to raise its overall Forest 500 score from 50/100 and specifically to elevate its commodity-specific Paper and Soy scores, and to do so before the 2023 report. See: https://forest500.org/rankings/companies/loreal-groupe

3. Meet the investor expectations of companies set out by the Finance Sector Deforestation Action initiative. DWA's Sustainable Equity Strategy supports the principles of the Finance Sector Deforestation Action (FSDA) commitment that were launched in Glasgow at COP 26 and expanded in 2022 at COP 27 in Cairo. It now represents 38 financial institutions with more than $8.9 trillion in AUM are committed to eliminating agricultural commodity-driven deforestation risks (from cattle, soy, palm oil, pulp, and paper) in their investment and lending portfolios by 2025. We partner in our deforestation related engagements with Global Canopy which publishes the Forest 500 and is a member of the Finance and Deforestation Advisory Group that assists signatories with data, tools, and best practices: https://climatechampions.unfccc.int/wp-content/uploads/2022/09/FSDA-Investor-expectations-of-companies-16.09.2022.docx.pdf

4. Assess whether L'Oreal should set a Forest, Land and Agriculture (FLAG) target as part of it Science-based Target. We appreciate that L'Oreal has committed to set both a near-term and net-zero target for greenhouse gas emissions in alignment with the Science-based Target Initiative. The Science-based Target Initiative has now also specified guidance for companies to set a Forest, Land and Agriculture Target (FLAG) as a pillar of their overall target, both near-term and longer term. Given L'Oreal's use of palm oil, paper and soy, we believe it may be appropriate for L'Oreal to set FLAG targets. Please see: https://sciencebasedtargets.org/sectors/forest-land-and-agriculture

5. Boost its active engagement with climate policy, conduct an industry association review, and spur trade associations to stronger favorable influence on climate change and land-use issues. Given the "rapidly closing window" for effective climate action, it's imperative for sustainability leaders like L'Oreal to go beyond voluntary action and use the weight of its influence with governments around the world to promote strong policy action. As noted, we asked L'Oreal to encourage the E.U. to continue expanding its newly adopted deforestation rule to cover biodiverse savannahs. We further asked L'Oreal to meet with the InfluenceMap team about how the company can raise its LobbyMap score and particularly how to boost its active policy engagement on crucial climate issues that the organization is assessing. We requested that L'Oreal conduct an industry association review in line with the Global Standard on Responsible Climate Lobbying (see here for better practice), and subsequently meet with its trade associations to systematically ask that their policy influence efforts on climate change and land-use be modified to be much more supportive of the stringency we need. Please see: https://lobbymap.org/company/L-Oreal

We note that our requests to L'Oreal are deeply interconnected. When L'Oreal acts effectively on one, it will simultaneously boost its performance on one or more of the others. For example, meeting the FSDA expectations for deforestation-free and conversion-free production or sourcing by 2025, with associated hectare disclosures, will overlap with the FLAG goal-setting we have requested in relation to the Science-based Target Initiative. We believe actions on the above will boost L'Oreal's brand equity, customer loyalty, community license-to-operate, and supply assurance, while reducing its adverse exposure to recently adopted and future policy and regulatory constraints.

L'Oreal has not, to date, been responsive to our requests, and we are seeking to engage the L'Oreal USA team as a next step.

Sustainability Illustrations from our 2022 Portfolio Companies

In this section, we provide sustainability highlights from five of our holdings. These are selected not because they are the most sustainable of our holdings, but simply because they are diverse illustrations from a variety of sectors. Because we are a low-turnover strategy, those 2022 holdings not covered this year may well be covered next year, or the year after. This year, we highlight Alphabet, Ball Corporation, Canadian National Railway, Schneider Electric and Trimble.

Alphabet

Clients sometimes ask us what Alphabet is doing in a sustainability strategy. After all, isn't it a search company that generates most of its revenue from advertising?

Yes, but search is an ideal tool – an information "utility" really -- to drive more sustainable choices. At Douglass Winthrop, we consider not only a company's ability to decarbonize its operations but also to use its reach to drive emissions reduction among customers and the world at large. Google's refers to its founding mission as "Organize the world's information and make it universally accessible and useful"— as something that applies to its ability to accelerate progress in climate information and action. The company recognizes that a sustainable future will be built upon billions of decisions made by governments, organizations, and individuals, and that it is uniquely positioned to help deliver the information required to achieve this future. Google's aspiration is to help individuals, cities, and other partners ***collectively reduce 1 gigaton of their carbon equivalent emissions annually by 2030***. Examples:

- When someone uses Google Search in the U.S. to look for furnaces or water heaters, suggestions in Google's Shopping tab help narrow their search to cost-effective and efficient options such as heat pumps.

- Google's Project Sunroof helps people searching for solar energy on Google decide whether to go solar. It uses AI to analyze high-resolution aerial mapping and 3D modeling of residential roofs, making estimations of solar potential faster and easier.

- Global searches for "e-bikes" have doubled over the past three years. In 2022, Google added over 56,000 miles of bike lanes and bikeable roads to Google Maps.

- Maps, Search, and Nest reach billions of individual users around the world in supporting decisions on home energy use and transportation.

- Google supplies physical climate risk data. It now includes 80 countries in Google's Flood Hub platform, covering 460 million people globally. And it offers real-time wildfire boundaries in Search and Maps.

- Chief Sustainability Officer Kate Brandt announced that In 2022, Google reached its goal to help 1 billion people make more sustainable choices through its products, through eco-friendly routing in Google Maps (1.2m tons of emissions avoided), energy efficiency features in Google Nest

thermostats (112billion kWh of energy saved for 10 years through 2022), and carbon emissions information in Google Flights (99% of itineraries on Google Flights include carbon emission estimates).

Google is also helping cities and other organizations reduce their emissions:

- Environmental Insights Explorer (made climate data available to 40,000 cities). Google Earth Engine (now an enterprise-grade service through Google Cloud), and Data Commons to support decisions that cities and organizations will have to make.

- Google's Startups for Sustainable Development program has supported 400 startups with climate and nature-related data.

Google's impact is being accelerated through AI. Google is leveraging its capabilities and experience in artificial intelligence, machine learning, and cloud computing to develop solutions for environmental sustainability. Examples:

- This includes optimizing data center cooling, enabling smart home energy management, and providing geospatial data analysis for monitoring environmental changes.

- Google's Green Light is an AI-based tool that helps city traffic engineers optimize the timing of light changes to reduce stop-and-go traffic. Google's recent tests in Hamburg, Germany, showed that at traffic lights with its AI-driven recommendations, cars made over 25% fewer stops, resulting in approximately 10% fewer emissions.

- Google's "Other Bet" Waymo harnesses AI and remains, we believe, an embedded growth option that will be material to our Alphabet position within our long-term holding period. Waymo's fleet of shared electric vehicles provides a fully autonomous ride hailing service in Phoenix and San Francisco, and more cities await. Waymo's EV fleet is matched with 100% renewable electricity.

Google is also a corporate leader in renewable energy procurement and use, galvanizing change at grids across the world. It has matched 100% of its own global electricity use with renewable energy purchases for the last six years, and now has a moonshot goal to achieve net-zero emissions across all of its operations and value chain, and as part of that goal, to run on 24/7 carbon-free energy on every grid where we operate. AI's computing intensity is making this moonshot even more challenging.

- In 2022, Google achieved approximately 64% round-the-clock carbon-free energy ("CFE") across all of its data center sites, inclusive of those operated by third parties. In 2022, Google signed 20 more renewable energy agreements, bringing its total to 80+ agreements totaling ~0 GW of clean energy generation capacity. The company projects it will spend ~$10 billion to purchase clean energy through 2040.

- In additional operational achievements regarding its own footprint, Google set a 2025 goal to make product packaging for consumer hardware products plastic-free by 2025, and as of 2022, this was 96% (though down 1% from 2021, when it was 97%).

- For 2022, Google received an A from CDP for its climate disclosure, up from an A- in 2021.

Sources for the Alphabet / Google sustainability highlights above can be found in the endnotes.[55]

Ball Corporation

Ball Corporation set 2030 Sustainability Goals focused on areas such as health, safety, diversity, climate leadership, circularity, and responsible sourcing. The company also released a Climate Transition Plan outlining its strategy to evolve into a fully circular and decarbonized business. This plan targets critical emissions reductions by 2030, with additional milestones set for 2050 or earlier.

In 2022, the company reported a global beverage packaging average of 66% recycled content. Ball is working to achieve a 2030 goal of using aluminum that consists of 85% recycled content to produce beverage cans, bottles and cups in the regions where Ball operates.

In addition, Ball Corporation has obtained Aluminum Stewardship Initiative (ASI) certification for several of its beverage packaging facilities and the company is increasingly sourcing renewable energy, with 44% of its global electricity demand coming from renewable sources in 2021.

The company has been recognized by various organizations for its sustainability achievements, including being named to the 2021 Dow Jones Sustainability Indices (DJSI) World and North America for the eighth consecutive year. It has also received an A- grade from CDP for its climate change efforts and has been included in Newsweek's list of America's Most Responsible Companies.

Aluminum's inherent properties of infinite recyclability and durability makes Ball a champion of the circular economy. Customers and consumers are choosing this substrate more and more. Ball seeks to elevate the aluminum platform and improving product stewardship as it executes its net zero roadmap and champions a circular economy and closed-loop recycling, Ball Corporation is committed to increasing the global recycling rate for aluminum cans, bottles and cups to 90% by 2030 through a comprehensive approach designed to improve public policy, address the need for critical recycling infrastructure, and educate consumers on the role they play.

Ball joined the World Economic Forum's First Movers Coalition in an effort to lead collaboration across the aluminum industry's value chain and prioritize circularity and decarbonization.

Global aluminum can demand is expected to increase significantly by 2030. To address the need for capability growth through vertical integration and to create more robust, sustainable supplies of aluminum, Ball is partnering within the industry to construct state-of-the-art aluminum can sheet rolling mills and a recycling center. These actions reflect the company's goal to improve recycling infrastructure, while investing in its own supply chain to ensure a reliable and steady supply of aluminum well into the future.

Ball Aerospace holds key roles in numerous Earth observation and weather programs, such as the Ozone

Mapping and Profiler Suite (OMPS) instrument that provides critical information on the health of the Earth's ozone layer and the Weather System Follow-on-Microwave (WSF-M) satellite that, once launched, will provide valuable insights related to oceanic surface winds, tropical cyclone intensity and other important environmental data.

Ball's ability to champion aluminum is rooted in making it an effective substrate for design and merchandising. DWA looks for companies where sustainability performance reinforces the core value proposition of the business. Ball's beverage businesses have the broadest array of can sizes, shapes and designs of any company in the marketplace. Highlights include:

- More than 50 of its beverage packaging plants are strategically located within proximity to key customers, and over 49% of its 2022 can shipments being specialty cans.

- Ball Corporation remains the center for graphic excellence and its digital printing lab at the Jacareí plant in São Paulo, Brazil, allows customers to design their own cans with no limitation on colors or prints.

- The intersection of Ball innovation and sustainability spans beyond cans, whether it is impact-extruded aluminum bottles, game-changing aluminum cups, or bottles designed for reuse.

- In September 2022, Ball announced a partnership with Boomerang to create aluminum bottles for a truly circular and highly scalable bottling system that has the potential to change the way we consume beverages. This innovative system can wash, rinse, filter, fill and cap 3,000 bottles of premium water every eight hours.

- The Ball Aluminum Cup®, which is now being manufactured with 90% recycled content, is available in a variety of sizes to support customer and consumer needs in sports and entertainment, food service, retail and beverage industries.

Sources for the Ball sustainability highlights above can be found in the endnotes.[56]

Canadian National Railway

Canadian National Railway (CN) has implemented initiatives to reduce its environmental impact, especially reducing greenhouse gas (GHG) emissions. The company has set a target to reduce its Scope 1 and 2 GHG emission intensity by 43% by 2030, using 2019 levels as a baseline. In 2021, CN achieved a 3.3% reduction in GHG emission intensity compared to the previous year. Furthermore, the company has made a long-term commitment to achieving net-zero carbon emissions by 2050. In addition to GHG emissions, CN has also targeted a reduction in air emissions intensity. The company had set a goal to reduce air emissions intensity by 6% by 2022, using 2017 levels as a baseline. CN successfully achieved this target in 2021.

To help in achieving these goals, CN has explored the use of renewable fuels in its locomotive fleet. The company has partnered with Progress Rail and Renewable Energy Group (REG) to investigate the potential of high-level renewable fuel blends, including biodiesel and renewable diesel.

The company has consistently diverted approximately 95% of its operational waste from landfills annually, in line with its sustainability goals. CN has also set a goal of planting three million trees by 2030. In 2021, CN planted 112,000 trees, bringing the total number of trees planted since 2012 to 2.3 million.

Our impact thesis on CN centers on the inherent environmental advantages or rail. Railroads are approximately 4X more fuel-efficient than trucks. On top of this, CN is a leader in the North American rail industry, consuming almost 15% less fuel per gross ton mile than the industry average. CN has achieved a 43% reduction of locomotive carbon emissions intensity since 1993.

Governance of these issues has also improved. In 2022, five of 11 Board members had direct competence on climate-related issues. The performance goals of the COO, CFO, and Senior Director, Sustainability include improvements in CN's fuel efficiency, in line with the Canadian rail industry medium-term emission intensity reduction target of 6% by 2022 from a 2017 baseline and the Company's long-term science-based target to reduce GHG emission intensity for Scope 1 and 2 (tCO2e/gross ton miles) by 43% by 2030, based on 2019 levels.

With 87% of CN's Scope 1 emissions generated from rail operations, the company believes the best way to reduce its carbon footprint is by continuously improving our rail efficiency. The company's low-carbon transition plan and business strategy focuses on five key strategic areas: fleet renewal, innovative technologies, big data analytics, operating practices, and cleaner fuels.

CN proclaims itself a supporter of the Paris Agreement and enables shareholders to vote annually on its Climate Action Plan. Its Climate Action Plan includes annual disclosure of GHG emissions aligned to the TCFD recommendations, a science-based 2030 emission intensity reduction target, and annual progress update. The first non-binding vote took place at the AGM of shareholders in April 2021.

Other highlights:

- In 2022, CN's released its third Task Force on Climate-related Financial Disclosures (TCFD) report which expanded on the results of its qualitative and quantitative climate change scenario analysis and the climate-related risks and opportunities.

- The company is also committed to efficiency in its non-rail fleet including its intermodal equipment and trucking fleet, On Company Service (OCS) vehicles and Great Lakes shipping vessels. Together, these represent 9% of CN's total carbon footprint. The company has achieved a 33% carbon reduction from electricity at key yards since 2011. It is using fewer rail cars and locomotives to ship more freight. It is operating through efficient routing protocols.

- In terms of circular economy initiatives, CN is reusing materials from its buildings and yards, including used oil, concrete ties, engine coolants, and wastewater from treatment plants to wash locomotives.

- CN received the Clean Corporate Citizen (C3) designation for its Flat Rock, Flint, Port Huron, Battle Creek & Pontiac yards in Michigan.

- Through CN's EcoConnexions Program, the company is engaging employees on waste

management issues, including recycling initiatives on paper and cardboard, plastic, batteries, electronic waste, scrap metals, rail, railcars and rail ties.

Sources for the Canadian National Railway sustainability highlights above can be found in the endnotes.[57]

Schneider Electric

Schneider Electric, an energy management and automation solutions company, has set sustainability goals under its Schneider Sustainability Impact (SSI) program, with 11 global targets to be achieved by 2025. One target is to help customers save or avoid 800 million metric tons of carbon emissions by 2025.

Additionally, Schneider Electric has set Net-Zero targets, validated by the Science Based Targets initiative, for its value chain. It was one of the first companies to do so.

The company's zero-carbon journey began with its top 1,000 suppliers in 2021. So far, it has helped them reduce their operational CO2 emissions by close to 10% and it intends to accelerate this momentum towards 50% reduction by 2025.

In 2022, Schneider Electric's solutions and projects facilitated access to clean energy by 5.5 million people. The company also trained approximately 70,000 individuals in energy management programs to enable the development the sustainable energy sector workforce.

Independent ESG rating providers recognized Schneider Electric's leadership, with best-in-sector rankings from S&P Global, CDP, Moody's ESG Solutions, and Corporate Knights' Global 100.

- "Impact revenues" (using an internal Schneider methodology) represented close to 72% of the Group's total revenues in 2022 (its 2025 target is 80%)
- To further contribute to a new electric and digital world, 100% of Schneider Electric's innovation projects are aligned with its purpose, more than 90% being either strictly green or neutral.
- There are 11 Schneider Sustainability Impact (SSIs) metrics, plus 1 relating to Localization:
    - SSI #2 delivered +93MTCO2e saved and avoided for customers, a net improvement compared to 2021 (+84MTCO2e), driven by good progress in Power Purchase Agreements services and Variable Speed Drives sales. This brings the total company contribution to saving/avoiding CO2e to 440m (inclusive of the 263m ton baseline in 2020), toward the 2025 goal of saving/avoiding 800m tons. DWA Note: For context, the world emits over 50bn tons per year, making Schneider's nearly 1bn tons saved/avoided a highly material contribution.
    - The Zero Carbon Project (SSI #3) recorded a 10% progress (vs 1% in 2021) thanks to the CO2 emissions efficiencies achieved by close to 1,000 onboarded suppliers.

- 45% of the Group's primary and secondary packaging is now free from single-use plastic, and uses only recycled cardboard, compared to 21% in 2021 (2025 target is 100%)

- Schneider committed to having 100% of its sites adopt local biodiversity conservation and restoration programs, and 100% of its sites in water-stressed areas to deploy a water conservation strategy and related action plan by 2025. In 2022, SSE #8 made good progress with 17% of sites putting biodiversity programs in place, as well as SSE #11 as 48% of sites have adopted and implemented water conservation action plans.

- SF6 is a potent greenhouse gas used in electrical switchgear. Schneider has a 2025 objective to substitute 100% of its relevant offers to customers with SF6-Free medium voltage technologies, and in 2022 was at 41.5%, up from 26% in the baseline year of 2020.

Sources for the above can be found in the endnotes.[58]

Trimble

Trimble, an industrial technology company, has set climate goals that have been approved by the Science Based Targets initiative (SBTi). The key commitments include reducing absolute scope 1 and 2 emissions by 50% by 2030 from a 2019 baseline, achieving 100% annual sourcing of renewable electricity by 2025, and decreasing absolute scope 3 emissions from fuel and energy-related activities, business travel, and upstream transportation by 50% by 2030 from a 2019 baseline. Additionally, Trimble aims to collaborate with 70% of its suppliers to establish science-based emission reduction targets by 2026. The company has also joined global initiatives such as the Business Ambition for 1.5°C campaign, We Mean Business Coalition, and Race to Zero Campaign.

Trimble's integrated solutions are designed to enhance operational efficiency, reduce fuel consumption, lower greenhouse gas emissions, and improve accuracy for heavy earthmoving equipment, ultimately leading to faster project completion times. The company has introduced updated versions of its Tekla software solutions, incorporating features like dynamic embodied carbon calculation functionality to support sustainable design processes and enable the construction of net-zero buildings.

DWA's E-thesis for Trimble centers on its leverage for impact through customer solutions: Trimble solutions offer 25–50% efficiency gains over traditional solutions and up to 30% cost savings over traditional solutions. Trimble's portfolio of hardware and software solutions are suited to provide essential industries with the efficiency and performance necessary to optimize their operations. These industries also represent some of the greatest opportunities to accelerate sustainable outcomes in our world. The company tracks and reports how these efficiency gains translate to carbon reduction. Examples:

- Trimble enables millions of metric tons of CO2-equivalent emissions per % gain of efficiency /optimization through its core competencies in positioning / modeling / connectivity / data analytics across its 4 verticals:

1. Agriculture: 40 / 15 Co2 leverage MMtCO2e / % efficiency gains per year
   Most efficient field navigation and disbursement of agricultural inputs

2. Transportation: 90 / 5 ratio of MMtCO2e / % efficiency gains per year
   Improved capacity utilization and route optimization reduces fuel use.

3. Geospatial: 40 / 1 ratio of MMtCO2e / % efficiency gains per year
   Helping to minimize scrap, rework, and resource waste.

4. Construction: 80 / 30 ratio of MMtCO2e / % efficiency gains per year
   Fewer passes on construction site yields reduced machine time.

For the first time, in 2022, Trimble published a report aligned with the Task Force on Climate-Related Financial Disclosures (TCFD. This report outlines Trimble's commitment to addressing climate change risk in a comprehensive manner, sharing progress on goals, strategies and governance practices.

Trimble also incorporate environmental performance into its compensation model. It added a People & Planet" modifier to its our executive long-term incentive program.

To help it drive toward a net-zero future, Trimble is working to:

- Source 100% renewable energy by 2025
  - As of end of 2022, Trimble is 36% of the way toward the 100% goal.

- Cut our Greenhouse Gas (GHG) footprint in half by 2030.

  - 100% of Trimble's Scope 1 and 2 emissions are tracked to the facility level, with primary data automation software coming online which will track 80% of our utility consumption beginning in 2023.

- Engage 70% of suppliers to set their own science-based targets by 2026.

  - As of end of 2022, 25% of Trimble's suppliers set science-based targets.

In Sweden, Trimble's Danderyd facility procures its heating from approximately 99% renewable sources: 59% from heat recovery, 15% from heat pumps and 25% from hydropower, which results in extremely low carbon emissions (approximately 2 grams of CO2 per kWh delivered).

Trimble is an innovation-centric company and reinvests consistently to support its sustainability goals. Key metrics include:

- 65% of R&D in software
- 1000 unique patients
- $540m in 2022 R&D spend
- 13-15% of sales spent on R&D. Investing in analytics, cloud, autonomy

Sources for he Trimble sustainability highlights covered above can be found in the endnotes.[59]

Links to Sustainability Reports for All of Our Holdings

In this section, we have provided links to the most recent sustainability reports of each of our portfolio holdings in 2022. They have grown to be more detailed and sophisticated with each passing year.

Alphabet (GOOGL)

https://www.gstatic.com/gumdrop/sustainability/google-2023-environmental-report.pdf

Airbus (AIR)

https://sustainability-approach.airbus.com

Amazon (AMZN)

https://sustainability.aboutamazon.com/2022-report

AON (AON)

https://www.aon.com/getmedia/0329134d-3079-4fed-a1e9-ea5ce7b7c33b/aon-2022-esg-impact-report.pdf

Apple (AAPL)

https://www.apple.com/environment/pdf/Apple_Environmental_Progress_Report_2023.pdf

Aptiv (APTV)

https://www.aptiv.com/docs/default-source/sustainability-report/2023_Aptiv_SustainabilityReport.pdf

ASML (ASML)

https://www.asml.com/en/company/sustainability

Autodesk (ADSK)

https://damassets.autodesk.net/content/dam/autodesk/www/pdfs/autodesk-fy2023-impact-report-rollout-final-160523.pdf

Ball Corp (BALL)

https://www.ball.com/getmedia/cf6d3fc9-95de-482c-a219-adfe2c6f86d1/Ball2022_CR_PDF_031423-FINAL.pdf

Canadian National Railway (CNI)

https://www.cn.ca/en/delivering-responsibly/environment/

Costco (COST)

https://mobilecontent.costco.com/live/resource/img/static-us-landing-pages/5aClimate-Action-Plan.pdf

Danaher (DHR)

https://www.danaher.com/sites/default/files/2023-10/danaher-2023-sustainability-report.pdf

Deere (DE)

https://www.deere.com/assets/pdfs/common/our-company/sustainability/sustainability-report-2022.pdf

Generac (GNRC)

https://www.generac.com/GeneracCorporate/media/Library/Images/ESG/Generac_ESG_Report_2022_Final.pdf

Goldman Sachs (GS)

https://www.goldmansachs.com/our-commitments/sustainability/2022-sustainability-report/multimedia/report.pdf

Hannon Armstrong (HASI)

https://www.hasi.com/wp-content/uploads/2023/04/HASI903_ESG_WEB_IR_2023_Spread.pdf

L'Oreal (OR)

https://www.loreal-finance.com/en/annual-report-2022/social-environmental-performance/

Microsoft (MSFT)

https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RW15mgm

Moody's (MCO)

https://www.moodys.com/sites/products/ProductAttachments/Sustainability/2022-tcfd-report.pdf

NextEra Energy (NEE)

https://www.nexteraenergy.com/content/dam/nee/us/en/pdf/2022_NEE_ESG_Report_Final.pdf

New York Times (NYT)

https://www.nytco.com/environmental-social-and-governance/

Nike (NKE)

https://about.nike.com/en/newsroom/reports/fy22-nike-inc-impact-report

Salesforce (CRM)

https://www.salesforce.com/company/sustainability/

S&P Global (SPGI)

https://www.spglobal.com/en/who-we-are/corporate-responsibility/impact-report-2022.pdf

https://www.spglobal.com/esg/csa/yearbook/2022/downloads/spglobal_sustainability_yearbook_2022.pdf

Siemens (SIEGY)

https://assets.new.siemens.com/siemens/assets/api/uuid:c1088e4f-4d7f-4fa5-8e8e-33398ecf5361/sustainability-report-fy2022.pdf

SolarEdge (SEDG)

https://sustainability.solaredge.com/sustainability-report/solaredge-sustainability-report-2022

Starbucks (SBUX)

https://stories.starbucks.com/uploads/2023/06/Starbucks-2022-Global-Environmental-and-Social-Impact-Report.pdf

Schneider Electric (SBSGY)

https://www.se.com/ww/en/assets/564/document/396659/2022-sustainability-report.pdf

Taiwan Semiconductor (TSM)

https://esg.tsmc.com/download/file/2021_sustainabilityReport/english/e-all.pdf

Thermo Fisher (TMO)

https://corporate.thermofisher.com/content/dam/tfcorpsite/documents/corporate-social-responsibility/2022%20Corporate%20Social%20Responsibility%20Report.pdf

Trane Technologies (TT)

https://www.tranetechnologies.com/content/dam/cs-corporate/pdf/sustainability/annual/2022-ESG-Report.pdf

Trex (TREX)

https://images.trex.com/is/content/trexcompany/trex-esg-report-2022pdf

Trimble (TRMB)

https://www.trimble.com/downloads/4K6TJvfQn5fT6yn253RiEK/0c3ad99e7eb9457eebd5237b09a745b7/trimble-sustainability-report-2022.pdf

United Rentals (URI)

https://www.unitedrentals.com/sites/default/files/press-releases/2022_CRRPDF.pdf

Waste Management (WM)

https://sustainability.wm.com/downloads/WM_2022_SR.pdf

Xylem (XYL)

https://www.xylem.com/siteassets/sustainability/2022/2022_xylem_sustainability_report_r01.pdf

Appendix

Principle Adverse Impact (PAI) Indicators for the Douglass Winthrop Sustainable Equity Strategy

Below are the estimates of Principle Adverse Impact Indicators that we have estimated for our strategy:

Environmental **EU SFDR Adverse Impact Indicators and reporting metrics**		**DWA SES**	**Coverage Ratio**
1. GHG Emissions	Scope 1 GHG emissions (tCO2e): Measures the carbon emissions for which an investor is responsible by their equity ownership: calculated by taking portfolio market value (EUR) of each company, dividing by company's enterprise value, then multiplying by the company's latest emissions data (tCO2e). Sum the total for all companies to get the portfolio wide financed emissions.	2,671	100%
	Scope 2 GHG emissions (tCO2e): Measures the carbon emissions for which an investor is responsible by their equity ownership: calculated by taking portfolio market value (EUR) of each company, dividing by company's enterprise value, then multiplying by the company's latest emissions data (tCO2e). Sum the total for all companies to get the portfolio wide financed emissions.	385	100%
	Scope 3 GHG emissions (tCO2e): Measures the carbon emissions for which an investor is responsible by their equity ownership: calculated by taking portfolio market value (EUR) of each company, dividing by company's enterprise value, then multiplying by the company's latest emissions data (tCO2e). Sum the total for all companies to get the portfolio wide financed emissions.	16,375	100%
	Total GHG emissions (tCO2e)	19,431	100%
2. Carbon Footprint	Sum of portfolio companies' Total GHG Emissions (Scopes 1, 2 and 3) weighted by the portfolio's value of investment in a company and by the company's most recently available enterprise value including cash, adjusted to show the emissions associated with 1 million EUR invested in the portfolio.	632	100%
3. GHG Intensity of investee companies	GHG Intensity of investee companies (t/EUR million sales): Measures a portfolio's exposure to carbon-intensive companies, defined as the portfolio weighted average of companies' carbon intensity (Total GHG emissions/EUR million sales)	600.	100%
4. Exposure to companies active in the fossil fuel sector	Portfolio exposure to companies engaged in fossil fuel-related activities, including exploration, extraction, mining, storage, distribution and trading of oil and gas, production and distribution of thermal coal, and production, distribution, storage, and reserves of metallurgical coal.	7.3%	100%

Environmental - continued EU SFDR Adverse Impact Indicators and reporting metrics		DWA ES	Coverage Ratio
5. Share of non-renewable energy consumption and production	The company's energy consumption and/or production from non-renewable sources as a percentage of total energy use and/or generation	62.6%	91%
6. Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector based on the European Nomenclature of Economic Activities (NACE)	See last table below	100%
7. Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas and have been implicated in controversies with severe or very severe adverse impact on the environment	2%	100%
8. Emissions to water	Tonnes of direct emissions of priority substances and populants that were discharged into bodies of water generated by investee companies per million EUR invested, expressed as a weighted average	3.2	9%
9. Hazardous waste ratio	Tonnes of hazardous waste generated by investee companies per million EUR invested, expressed as a weighted average	1.2	40%

Social EU SFDR Adverse Impact Indicators and reporting Metrics		DWA ES	Coverage Ratio
10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of Investments in investee companies that have been involved in violations of the UNGC principles for OECD Guidelines for Multinational Enterprises	0	100%
11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance /complaints handing mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	59.3%	100%
12. Unadjusted gender pay gap	The difference between the average gross hourly earnings of male and female employees as a percentage of male gross earnings	20%	30%
13. Board gender diversity	Average ratio of female to male board members in investee companies	53.3%	100%
14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in landmines, cluster munitions, chemical weapons or biological weapons. Note: Industry tie includes ownership, manufacture or investment. Landmines do not include related safety products.	0	100%

Sovereign EU SFDR Adverse Impact Indicators and reporting Metrics			
15. GHG intensity	GHG Intensity of investee countries: tons of CO2e emissions per EUR million GDP of the country	No data	NA
16. Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law	0	100%

Real Estate EU SFDR Adverse Impact Indicators and reporting Metrics			
17. Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels	No data	NA
18. Exposure to energy-inefficient real estate assets	Share of investments in energy-inefficient real estate assets	No data	NA

Source: MSCI

6. Energy consumption intensity per high impact climate sector (GWh per million EUR)

A - Agriculture, forestry and fishing	0
B - Mining and quarrying	0
C - Manufacturing	0.031
D - Electricity, gas, steam and air conditioning supply	0.029
E - Water supply; sewerage; waste management and remediation activities	0.040
F - Construction	0
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.031
H - Transporting and storage	0.015
L - Real estate activities	0

MSCI EU Taxonomy Methodology

Exhibit 1: EU Taxonomy Environmental Objectives v. MSCI Sustainable Impact Metrics Environmental Impact Themes

EU Taxonomy Environmental Objectives	MSCI Sustainable Impact Metrics: Environmental Impact Solutions
Climate Change Mitigation	• Alternative Energy • Carbon Energy and Efficiency • Green Building • Sustainable Agriculture (e.g. forest management, no-deforestation provisions)
Climate Change Adaptation	• Alternative Energy • Carbon Energy and Efficiency • Green Building • Sustainable Water (e.g. drought resistant seeds)
Sustainable Use and Protection of Water and Marine Resources	• Sustainable Water • Pollution Prevention & Control
Transition to a Circular Economy	• Sustainable Water • Pollution Prevention & Control (e.g. recycling)
Pollution Prevention and Control	• Pollution Prevention & Control • Sustainable Water
Protection and Restoration of Biodiversity and Ecosystems	• Sustainable Water • Sustainable Agriculture • Pollution Prevention & Control

**Source: MSCI*

[1] https://www.morningstar.com/stocks/industrials-stocks-construction-sector-will-profit-global-warming-forces-rebuilding
[2] https://influencemap.org/report/Anti-ESG-and-the-Fossil-Fuel-Sector-21873 and https://www.investmentexecutive.com/inside-track_/dustyn-lanz/will-canada-import-americas-anti-esg-campaign/
[3] https://www.euromoney.com/article/294dqz2h1pqywgbyh3zls/esg/the-united-nations-free-thinkers-who-coined-the-term-esg-and-changed-the-world#:~:text=James%20Gifford's%20life%20changed%20when,ESG'%20and%20changed%20the%20world and https://www.ecgi.global/sites/default/files/working_papers/documents/esgcoverecgifinal.pdf
[4] https://www.bloomberg.com/news/articles/2023-03-21/us-investors-fear-legal-action-as-esg-splits-global-markets
[5] https://www.bloomberg.com/news/articles/2022-10-28/big-oil-faces-backlash-for-handing-record-profits-toinvestors
[6] https://www.nytimes.com/2023/06/14/business/oil-demand-slowing.html
[7] https://www.iea.org/news/renewable-power-s-growth-is-being-turbocharged-as-countries-seek-to-strengthen-energy-security
[8] https://www.weforum.org/agenda/2022/11/global-co2-emissions-fossil-fuels-hit-record-2022/
[9] https://energyinnovation.org/wp-content/uploads/2022/08/Updated-Inflation-Reduction-Act-Modeling-Using-the-Energy-Policy-Simulator.pdf
[10] https://repeatproject.org/docs/REPEAT_IRA_Prelminary_Report_2022-08-04.pdf
[11] https://www.cnbc.com/2022/12/06/tsmc-to-up-arizona-investment-to-40-billion-with-second-semiconductor-chip-plant.html
[12] www.tcifund.com/files/corporateengageement/alphabet/15th%20November%202022.pdf
[13] https://www.sfgate.com/tech/article/riding-san-francisco-driverless-car-17683611.php
[14] https://www.globenewswire.com/en/news-release/2022/10/10/2531178/0/en/Autonomous-Car-Market-Size-to-Reach-196-97-Billion-by-2030-CAGR-25-7-Confirms-Strategic-Market-Research.html#:~:text=As%20per%20the%20Research%20Report,approximately%20%24196.97%20billion%20by%202030.
[15] https://www.danaher.com/our-businesses/environmental-applied-solutions/trojan-technologies
[16] https://theconstructionbroadsheet.com/innovyze-ceo-water-infrastructure-a-collaborative-effort-p487-176.htm
[17] https://www.wsj.com/articles/sec-to-float-mandatory-disclosure-of-climate-change-risks-emissions-11647874814?mod=article_inline
[18] https://www.thermofisher.com/us/en/home/industrial/environmental/environmental-contaminant-analysis/emerging-contaminants/pfas-testing.html
[19] https://www.iea.org/policies/15688-repowereu-plan-joint-european-action-on-gas-supply-security
[20] https://www.euronews.com/my-europe/2022/10/21/what-measures-are-european-countries-taking-to-conserve-energy
[21] https://www.powermag.com/new-report-shows-eu-solar-installations-rise-nearly-50/#:%7E:text=A%20new%20report%20from%20industry,41.4%20GW%20of%20generation%20capacity
[22] https://www.reuters.com/business/energy/heat-pumps-hyped-up-holiday-wish-lists-european-households-maguire-2022-11-30/
[23] https://www.cnbc.com/2022/05/24/australias-election-was-all-about-climate-change-heres-what-it-means-for-businesses.html
[24] https://www.jdsupra.com/legalnews/new-legislation-shaping-australia-s-1456106/#:%7E:text=With%20the%20commencement%20of%20the%20Climate%20Change%20Act%20and%20the,are%20now%20enshrined%20in%20legislation
[25] https://www.theguardian.com/environment/2022/dec/17/cop15-us-biodiversity-cbd
[26] https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022
[27] https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022
[28] https://sdgs.un.org/goals
[29] https://www.sipa.columbia.edu/global-research-impact/initiatives/sustainable-investing-research-initiative-siri
[30] NextEra Energy 2022 10-K
[31] NextEra Energy 2017 10-K
[32] Florida Power & Light Ten Year Power Plant Site Plan 2022-2031
[33] https://www.investor.nexteraenergy.com/~/media/Files/N/NEE-IR/reports-and-fillings/quarterly-earnings/2022/Q4/2023-0125_NEEQ42022News%20Release%20Final.pdf
[34] https://investors.wm.com/static-files/be30e757-5be7-4b30-9c26-473fa1ca88f3
[35] https://cdn.metrio.net/clients/cn/indicators-assets/reporting/current-reports/Sustainability-Report-2020-en.pdf
[36] Canadian National 2022 CDP Climate Response
[37] https://esg.tsmc.com/en/focus/greenManufacturing/waterResourceManagement.html
[38] https://pr.tsmc.com/english/news/2977
[39] SolarEdge 2021 Sustainability Report
[40] Deere 2022 Sustainability Report
[41] Trane Technologies 2021 Annual Report
[42] https://brandfinance.com/press-releases/loreal-is-looking-good-as-worlds-most-valuable-cosmetics-brand
[43] https://www.gcimagazine.com/consumers-markets/article/22249829/consumers-sustainable-beauty-attitudes
[44] https://runrepeat.com/eco-sneakers-research
[45] Autodesk 2022 Impact Report
[46] https://corporate.thermofisher.com/content/dam/tfcorpsite/home/corporate-social-responsibility/approach/sustainable-finance/Sustainability%20Bond%20Report%202022%20-%20Thermo%20Fisher%20Scientific.pdf
[47] NextEra Energy 2022 ESG Report
[48] https://www.nexteraenergy.com/content/dam/nee/us/en/pdf/2022_NEE_ESG_Report_Final.pdf

[49] https://www.msci.com/our-solutions/climate-investing/net-zero-solutions/implied-temperature-rise

[50] https://unfccc.int/process-and-meetings/the-paris-agreement

[51] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en?msclkid=1f1765d7bb6911ec8954e0685fda8b34

[52] https://www.reuters.com/business/sustainable-business/more-eu-green-funds-re-badged-amid-regulatory-drive-morningstar-2023-01-26/

[53] https://www.sayonclimate.org/

[54] https://www.engineering.com/story/lynelle-cameron-the-conscience-of-autodesk

[55] Sources for Alphabet / Google sustainability highlights:

- https://cloud.google.com/blog/topics/sustainability/new-tools-to-measure-and-reduce-your-environmental-impact
- https://cloud.google.com/blog/transform/2023-google-cloud-sustainability-survey
- https://blog.google/outreach-initiatives/sustainability/cop27-google-climate-action/
- https://cloud.google.com/blog/topics/sustainability/google-cloud-2022-sustainability-year-in-review
- https://cloud.google.com/blog/topics/sustainability/how-partners-benefit-from-google-cloud-ready-sustainability
- https://cloud.google.com/blog/topics/sustainability/new-programs-and-tools-for-sustainable-transformation
- https://blog.google/outreach-initiatives/sustainability/sustainability-2021/
- https://cloud.google.com/blog/topics/sustainability/new-survey-reveals-executives-views-about-sustainability
- https://blog.google/outreach-initiatives/sustainability/equitable-clean-energy-transition/
- https://fortune.com/2022/09/12/google-has-one-of-big-techs-most-aggressive-sustainability-plans-heres-its-3-step-playbook-for-helping-the-planet/

[56] Sources for the Ball sustainability highlights:

- https://investors.ball.com/news-and-presentations/news-releases/news-releases-details/2023/Ball-Corporation-Releases-Climate-Transition-Plan-and-2022-Annual-Combined-Financial-and-Sustainability-Report/default.aspx
- https://www.ball.com/newswire/article/124106/ball-corporation-recognized-in-top-1-percent-of-industry-by-sp-global-in-the
- https://www.prnewswire.com/news-releases/ball-corporation-releases-climate-transition-plan-and-2022-annual-combined-financial-and-sustainability-report- 301773755.html
- https://investors.ball.com/news-and-presentations/news-releases/news-releases-details/2023/Ball-Corporation-Recognized-by-Several-Leading-Organizatio ns-for-its-Sustainability-and-Workplace-Achievements/default.aspx
- https://www.ball.com/newswire/article/124113/ball-releases-inaugural-combined-annual-and-sustainability-report
- https://investors.ball.com/news-and-presentations/news-releases/news-releases-details/2021/Ball-Corporation-Named-to-2021-Dow-Jones-Sustainability-World-and-North-America-Indices/default.aspx
- https://esgnews.com/ball-corporation-recognized-in-top-1-percent-of-industry-by-sp-global-in-the-sustainability-yearbook-2022
- https://investors.ball.com/news-and-presentations/news-releases/news-releases-details/2023/Ball-Corporation-Achieves-Aluminium-Stewardship-Iniative-S ustainability-Certification-for-Aluminum-Packaging/default.aspx

[57] Sources for the Canadian National Railway sustainability highlights:

- https://www.globenewswire.com/en/news-release/2022/09/14/2516121/0/en/CN-Releases-2021-Sustainability-Report-Data-Supplement.html
- https://sustainabilitymag.com/diversity-and-inclusion-dandi/how-canadian-national-sustainable-transport-enterprise
- https://www.csrwire.com/reports/735286/powering-sustainable-growth-cn-releases-sustainability-report
- https://www.globenewswire.com/news-release/2022/12/12/2571797/0/en/CN-s-Leadership-in-Sustainability-Recognized-Named-to-the-Dow-Jones-Sustain ability-World-Index-for-11th-Straight-Year.html
- https://www.lumberbluebook.com/2022/09/14/canadian-national-releases-2021-sustainability-report-data-supplement
- https://www.railwayage.com/freight/class-i/cn-issues-sustainability-report/
- https://www.globenewswire.com/news-release/2021/11/03/2326404/0/en/CN-and-Progress-Rail-Advance-Sustainability-Efforts-with-a-Renewable-Fuels-Pa rtnership.html

[58] Sources for Schneider Electric sustainability higlights:

- https://www.se.com/ww/en/about-us/newsroom/news/press-releases/schneider-electric-closes-2022-with-strong-sustainability-impact-results-63eb57e413f0 d16fb60800b4
- https://www.se.com/ww/en/about-us/newsroom/news/press-releases/schneider-electric-achieves-outstanding-performance-in-four-corporate-sustainability-r atings-61dc0c995f5ee11e06775214
- https://www.se.com/ww/en/about-us/newsroom/news/press-releases/schneider-electric-in-global-100-most-sustainable-corporations-for-12th-year-in-a-row- 63c13cc51fee39702e069f14
- https://www.businesswire.com/news/home/20220112005168/en/Schneider-Electric-Achieves-Outstanding-Performance-in-Four-Corporate-

Sustainability-Ratings
- https://sustainabilitymag.com/sustainability/schneider-electrics-sustainability-programme-shows-promise-esg-emissions

[59]Sources for Trimble sustainability highlights:
- https://www.prnewswire.com/news-releases/trimble-sets-ambitious-climate-goals-for-reducing-greenhouse-gas-emissions-in-line-with-a-net-zero-future-301 615245.html
- https://esgnews.com/trimble-sets-ambitious-climate-goals-for-reducing-greenhouse-gas-emissions-in-line-with-a-net-zero-future
- https://www.esgtoday.com/trimble-set-goals-to-slash-emissions-source-100-renewable-energy
- https://www.sustainabilitymenews.com/construction/trimble-advances-towards-net-zero-future-with-new-sustainability-goals
- https://www.businesstoday.me/business/trimble-advances-towards-net-zero-future-with-new-goals-in-latest-sustainability-report/
- https://www.constructionweekonline.in/business/trimble-advances-towards-net-zero-future-with-new-goals-in-latest-sustainability-report
- https://www.gpsworld.com/trimble-sets-climate-goals-to-reduce-greenhouse-gas-emissions/