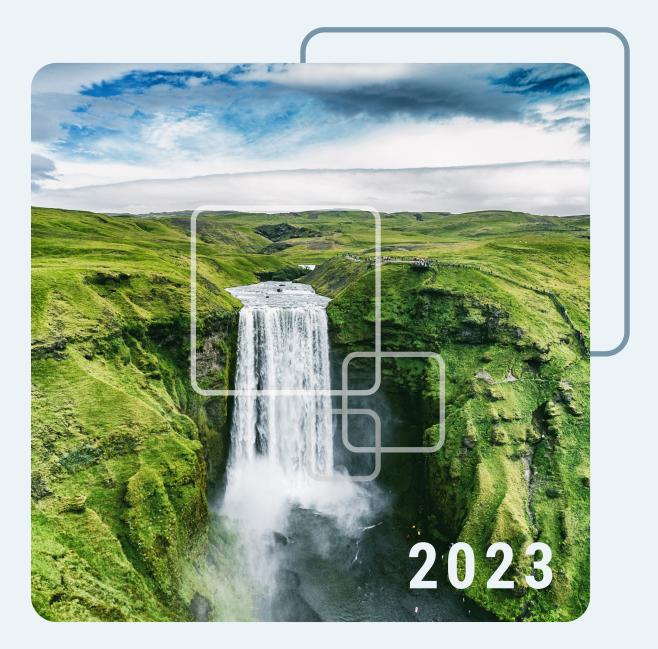
# GMO | TCFD REPORT



# TCFD REPORT

GMO's approach to climate change is built on the recognition that climate-related risks and opportunities can have a significant impact in the long term. Due to this, we consider climate-related factors across our investment processes, aiming to identify and assess both the physical and transition risks associated with climate change. Our strategy involves managing our portfolio carbon footprint mainly by actively engaging with investee companies to encourage sustainable practices and support the transition to a low-carbon economy. We also seek to identify and invest in companies that we believe will increasingly profit in a transitioning economy. Furthermore, considering climate change-related risks in the context of running GMO's business influences our global operational practices.

Reflecting our commitment, in 2019 GMO endorsed the Taskforce on Climate-related Financial Disclosures (TCFD), which promotes relevant, complete, comparable disclosures on management of climate-related financial risks. This is our first TCFD Report, and in it we discuss how we approach climate-related risks and opportunities from two main perspectives – investment and operational – within the framework set by TCFD to discuss governance, strategy, risk management, and metrics and targets.

#### Governance

GMO's Board of Directors oversees the integration of climate considerations into our overall strategy, risk management processes, and decision making. At every quarterly Board meeting, senior management and the Head of ESG and Sustainability provide updates on our overarching responsible investing progress, including discussion of climate change. The Board also gets specific updates or education from time to time. For example, in 2023 the Board received presentations on our Indirect Emissions Model and related Horizons Strategy, both of which are discussed earlier in this Sustainability and Responsible Investing Report. Finally, the Board reviews GMO's annual reporting, such as this Sustainability and Responsible Investing Report and our 2023 UK Stewardship Code Report.

The Board supports GMO's commitment to achieve net zero carbon emissions by 2050 and our joining the Net Zero Asset Managers initiative in 2021. Related, in 2022 the Board approved our initial targets of reducing GMO's portfolio carbon footprint intensity by 65% between 2019 and 2030 and increasing the assets covered by this commitment from 50% to 65% by 2025. Scott Hayward, GMO's CEO, has established the ESG Oversight Committee, which includes members of the senior management team, to create an executive leadership group with the aim of advancing our consideration of ESG and climate-related risks. The ESG Oversight Committee is responsible for setting the firm's ESG and climate change priorities, developing strategies to meet those priorities, and overseeing the responsible investing program.

Based on corporate priorities and needs, the ESG Oversight Committee uses a few sub-committees to help in the discharge of its responsibilities. The relevant subcommittees for our climate change approach are:

- Investment Sub-Committee: This sub-committee is led by GMO's Head of Investment Teams and Head of Investment Risk and Trading, and it includes the Heads of all GMO investment teams. The group monitors and reviews GMO's ESG exposures and oversees our net zero commitment and climate change-related strategy.
- Stewardship Sub-Committee: This sub-committee is led by GMO's General Counsel and Head of ESG and Sustainability. It oversees GMO's proxy voting and engagement activities and monitors the firm's thematic engagement areas, such as climate change in 2022 and 2023.

#### Strategy

Our approach to climate change is built on the recognition that climate-related risks and opportunities can have a significant impact on investment outcomes across all time horizons. We invest for our clients over the long term. "Long term" means different time periods for different investment teams at GMO, based on the dynamics of different investment theses and markets. For the purposes of this Report, we consider the following time horizons: short term = 1-3 years; medium term = 5-7 years; and long term = 7+ years.

We focus on fostering dialogue across our investment teams to qualitatively assess the direction of travel for potential climate change pathways. Identifying and analyzing the potential ways the world could change in the future must encompass a number of plausible scenarios that depart from history and "business-as-usual." While popular guidance is to conduct quantitative scenario analysis, we do not think that the current methodologies for modeling transition and physical risk pathways and translating that to financial and economic growth capture potential outcomes accurately or reliably enough for use in investment decision-making processes, hence our choice of qualitative assessment.

#### CLIMATE-RELATED RISKS

2022 was the sixth warmest year on record based on data from the National Oceanic and Atmospheric Administration (NOAA), and the ten warmest years on the technical record all occurred since 2010. This warming climate has led to more frequent and extreme weather events – the U.S. alone has experienced 23 separate weather and climate disasters costing at least \$1 billion so far in 2023. Altogether, losses arising from global temperature rise have increased significantly over the last 40 years. Adjusted for inflation, the value of insured losses has risen 5-7% per year since 1992.

Moreover, while insured losses are large, the actual financial impact is often much larger. For example, severe drought and heatwave hit both Germany and China in 2022. Low water levels at the Rhine in Germany impeded shipping and industrial production. In China's Sichuan province, power rationing hit factories belonging to some of the world's biggest electronics companies, including Apple, Foxconn, and Intel. The province is also the epicenter of China's lithium mining industry, pushing up the cost of electric car batteries.

To make matters worse, there are stark differences between how the world will be impacted by warming of 1.5 degrees Celsius and warming of 2 degrees Celsius or more (as compared to the pre-industrial era). We risk reaching climate tipping points that will result in runaway climate changes impossible to reverse, such as the loss of glaciers.

Aside from having profound, concerning effects on the world, the impact of this scale is also likely to pose challenges to our ability to help our clients achieve their financial goals. The physical risks from a warming climate are anticipated to increase significantly over the period to 2100 and beyond. These risks are classified as acute (driven by an event such as a flood or storm) and chronic (arising from longer-term shifts in climate patterns) and could have financial implications for organizations such as damage to assets, negative impacts on employee health and safety, interruption of operations, and disruption to supply chains.

Actions taken to mitigate global temperature rise can also create transition risk for companies. Financial implications of transition risk include increase costs due to policies and regulations aimed at curbing emissions, loss of market share as consumers shift away from high-emissions products and services, and disruption and premature obsolescence of assets from newer, climate-friendly technologies.

The interaction between transition risk and physical risks poses a challenge for investors like GMO who must manage short-, medium-, and long-term risks for clients. The speed and timing of transition has a direct bearing on the risks and opportunities faced by GMO. To try and understand this, we monitor how four key characteristics of the economy our progressing.

We believe these climate catalysts can indicate the status of climate-related opportunities and risk. For one example, as more and more countries make net zero commitments that are followed up by policies, regulations, and actions to support decarbonization, portfolio companies face greater financial risk through potentially higher input costs as suppliers need to adjust to new requirements. For another, as the costs for fossil fuel-free alternatives continue to decline, companies that are completely dependent on the continued demand for fossil fuels may become stranded, while companies that produce or supply these technologies could financially benefit.

#### WE MONITOR 4 KEY CLIMATE CATALYSTS

Policy and Regulations	State of Technology	<b>Consumer Demand</b>	Investor Capital Flows		
$\checkmark$	$\sim$	$\sim$	$\sim$		
Climate policy can support improved capital allocation and consumption decisions by companies and households	Technology needs to be commercially available to allow businesses and households to decarbonize	On the demand side, consumers need to shift consumption patterns toward low and zero-carbon alternatives	Providers of capital can help technologies commercialize and scale, which in turn enhances technological adoption by consumers		
	What do v	we look for?			
<ul> <li>How much of global emissions are covered by a net zero policy?</li> <li>What is the global average price on carbon?</li> </ul>	<ul> <li>What low carbon alternatives exist and how does their cost and quality compare to their emissions-intensive alternatives?</li> </ul>	<ul> <li>Where are investors putting their capital to work?</li> <li>How much capital is being managed to net zero commitments?</li> </ul>	<ul> <li>What inroads have been made in low carbon alternatives?</li> <li>What is the EV penetration rate?</li> </ul>		
	<ul> <li>How much does it cost to remove emissions?</li> </ul>				

## CLIMATE RISK AND OPPORTUNITY IN THE SHORT AND MEDIUM TERM

As previously mentioned, we are already experiencing the physical risks arising from warming temperatures. Over the short- to medium-term, acute risks can impact physical assets directly. For instance, flooding can cause premature or rapid depreciation, increasing costs, decreasing productivity, and lowering profit margins. Water scarcity and drought can also heighten risks for companies such as those engaged in agriculture, food, and mining. Consideration of physical impacts over the short-term is incorporated in our ESG analysis and may be a topic of engagements with companies.

While the technology exists today to decarbonize our economy, it is not always ready for commercial scale – but this is changing quickly. The costs for wind and solar have dropped 63% and 83% between 2009 and 2023, respectively, and have been competitive with conventional power generation in many markets since 2015. Similarly, battery costs continue to fall – today, batteries are 88% cheaper per kilowatt hour than in 2010. The decline in the cost of renewable power generation and storage poses risks to fossil-fuel-based power sources and opportunities for those investing in renewables. We have oriented some of our investment portfolios around these shortand medium-term opportunities.

In 2017, we launched the Climate Change Strategy, which seeks total return by investing in companies helping the world to mitigate or adapt to the negative impacts of climate change. And in 2023, we have created a new Horizons Strategy, which takes a systematic approach to investing in green revenue opportunities while reducing portfolio carbon emissions.

Importantly, investments in climate solutions are critically needed to transition the economy towards a net zero future. Investments such as these contribute to mitigating longerterm risks from a warming climate.

### CLIMATE RISK AND OPPORTUNITY IN THE LONG TERM

GMO has a Climate Action Plan that incorporates four primary areas for long-term impact: 1) investing in climate solutions (outlined earlier in this section); 2) reducing our portfolio carbon footprint primarily through integration of climate risk assessments; 3) engaging with companies to disclose and execute on transition plans; and 4) encouraging policymakers and regulators to take proactive and orderly responses to climate change mitigation.

Given the significant risk stemming from global warming as a result of carbon emissions, GMO has committed to support a transition to a net zero economy by 2050 and has set an initial target of reducing our net zero portfolio carbon footprint intensity by 65% by 2030 and to zero by 2050 or sooner, in line with global efforts to limit global warming to 1.5 degrees Celsius. Our net zero portfolio currently covers about 50% of our assets, and we are looking to grow that to 60% by 2025. Our net zero portfolio does not include assets held in separately managed accounts unless we have been directed by the client to include their assets.

Demand growth for clean energy materials as the energy transition unfolds will be significant. The World Bank estimates that the production of minerals such as graphite, lithium, and cobalt could increase by nearly 500% by 2050. Over 3 billion tons of minerals and metals will be needed to deploy wind, solar, and geothermal power, as well as build energy storage, if we are to keep global warming to less than 2 degrees Celsius. Added to this is industrialization of developing economies, population growth, and declining supplies of cheap, easy-toaccess natural resources. Combined, we believe all of these factors will cause a broad rise in resource prices, and so we manage a Resources Strategy seeking to identify companies in public equity markets that we believe will benefit from these price dynamics, across a diversified portfolio of energy, metals, agriculture, and water.

#### **Risk Management**

Our ESG Oversight Committee discusses and prioritizes how we can respond to climate change. One way that GMO has decided to act is by committing to achieve net zero emissions by 2050. In line with this, we joined the Net Zero Asset Managers initiative, and in 2022 we developed and announced our interim net zero targets and plan.

We also aim to address climate risk through active engagement at an international, regional, and industry level to encourage clear, stable, and long-term policy making and regulations.

Integration of ESG factors into GMO investment processes is overseen by our ESG Oversight Committee, but portfolio managers are ultimately accountable for implementing ESG policies within their strategies. In practice, they and their investment team colleagues have integrated ESG factors into various portfolio construction processes.

Broadly speaking, sector analysts handle corporate engagement within their coverage areas, although portfolio managers may assign team members specific engagement responsibilities. The teams continue to evolve and enhance their approaches by conducting focused research within their respective areas of expertise, and they coordinate and collaborate across the firm to share insights on an ad-hoc, project, or committee basis. In some cases, products have specific climate-related constraints.

#### ESG MONITORING

Many portfolio management teams have systematized parameters around ESG principles within their portfolio construction processes, including a number of models that consider climate risk factors, such as the following examples.

In 2022, our ESG Research team completed building a GMO Indirect Emissions model, which we can now use to estimate all direct and indirect emission flows between companies within value chains. This new model can give our investment teams insights into which companies are most and least exposed to climate transition risks and is discussed earlier in this Sustainability and Responsible Investing Report.

Centrally, we have developed an internal ESG dashboard for investment teams to monitor their climate-related exposures relative to their benchmarks and any GMO targets over time. Our "Carbon Dashboard" tracks portfolio carbon footprints and intensities and measures the weighted average carbon intensity of company revenues against market benchmarks and our portfolio carbon footprint reduction targets. It provides attribution capabilities so that portfolio managers can better understand what is driving their carbon footprint performance.

Below is a snapshot of our carbon attribution, where we can see that stock selection in materials and energy sectors have driven a decline in our portfolio carbon footprint from our 2019 baseline. This was offset somewhat by allocating more to these high-intensity sectors.

#### RISK MONITORING RESOURCES

GMO has a dedicated Risk Monitoring team led by our Head of Investment Risk and Trading, Roy Henriksson, who is a direct report of our CEO. This team leads our top-down oversight of investment risk.

Roy and the Risk Monitoring team continually assess potential macro and asymmetric sources of investment risk. As part of this process, the team monitors exposures and positions of all GMO portfolios, focusing on major changes within a strategy, and has ongoing conversations with the portfolio managers related to their exposures. Portfolios are evaluated across a wide range of risk metrics related to both absolute and relative performance, as well as liquidity and counterparty risk.

#### INVESTMENT MODELS THAT CONSIDER CLIMATE CHANGE

Model	ESG Score for Companies	Emerging Market Score for Equities	Emerging Market Scores for Sovereign and Quasi-Sovereign Debt
Climate Risk	<ul> <li>Energy management</li> </ul>	<ul> <li>Renewable energy</li> </ul>	<ul> <li>Energy transition</li> </ul>
Factors Addressed	<ul> <li>GHG emissions</li> </ul>	<ul> <li>GHG emissions</li> </ul>	<ul> <li>Environmental impact</li> </ul>
Addressed	<ul> <li>Materials sourcing</li> </ul>	<ul> <li>Physical risk</li> </ul>	<ul> <li>Physical risk</li> </ul>
	<ul> <li>Physical risk</li> </ul>	<ul> <li>Fresh water</li> </ul>	
	<ul> <li>Product lifecycle</li> </ul>	<ul> <li>Protection of natural resources</li> </ul>	
	management	<ul> <li>Pollution</li> </ul>	

#### CARBON FOOTPRINT ATTRIBUTION REPORT

Brinson Attribution for Filled Carbon Footprint Intensity

	2022 Weight	2019 Weight	Active Weight	2022 Carbon Footprint	2019 Carbon Footprint	Allocation	Selection	( Total	2022 Contribution to Carbon Footprint	As % of Portfolio Carbon Footprint	2019 Contribution to Carbon Footprint	As % of Portfolio Carbon Footprint
GICS Sector Name												
Materials	10.56	7.14	3.41	529.44	1165.22	32.27	-67.13	-34.86	55.90	41.91	83.24	37.80
Industrials	12.95	10.31	2.64	118.59	148.88	-1.88	-3.92	-5.81	15.36	11.52	15.35	6.97
Energy	8.37	5.92	2.44	414.24	891.87	16.41	-39.96	-23.55	34.66	25.99	52.83	23.99
Information Technology	18.39	16.84	1.55	25.90	33.41	-2.89	-1.38	-4.27	4.76	3.57	5.63	2.56
Health Care	11.58	11.44	0.14	8.69	8.42	-0.30	0.03	-0.27	1.01	0.75	0.96	0.44
Consumer Staples	7.72	7.59	0.12	72.39	56.50	-0.20	1.23	1.02	5.59	4.19	4.29	1.95
<b>Consumer Discretionary</b>	9.93	9.91	0.02	33.42	195.65	-0.01	-16.11	-16.12	3.32	2.49	19.39	8.81
<b>Communication Services</b>	5.27	5.57	-0.30	12.07	20.49	0.60	-0.44	0.15	0.64	0.48	1.14	0.52
Utilities	1.51	3.51	-2.00	485.28	1035.50	-16.29	-8.30	-24.59	7.32	5.49	36.31	16.49
Real Estate	1.07	3.42	-2.35	23.79	17.26	4.77	0.07	4.84	0.26	0.19	0.59	0.27
Financials	12.60	18.13	-5.52	34.20	2.53	12.02	3.99	16.02	4.31	3.23	0.46	0.21
Unclassified	0.03	0.20	-0.17	715.76	7.17	0.35	0.24	0.59	0.24	0.18	0.01	0.01
TOTAL	100.00	100.00	0.00	133.36	220.21	44.85	-131.70	-86.85	133.36	100.00	220.21	100.00

GMO has a regularly scheduled Risk Insights Forum (RIF), which brings together senior managers of the firm, including from each of our investment teams, to discuss market risks and longer-term macro trends that may lead to areas of future concern. Part of the RIF discussions includes a review of GMO strategy positioning, liquidity, and counterparty risks. Our Investments ESG sub-committee, of which Roy is a co-chair, monitors portfolio-specific ESG risks.

Our centralized top-down approach complements the bottomup risk management conducted by our investment teams in managing their portfolios. A key advantage of having this monitoring function is the ability to uncover concentrated or systemic risks that may have significant organization-wide impact to GMO across strategies and asset classes.

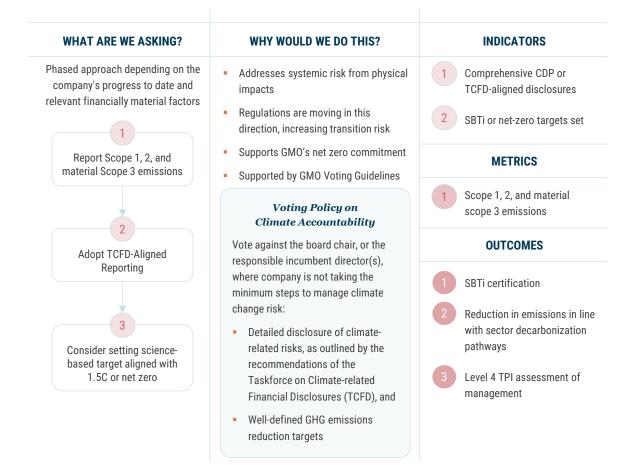
# ENGAGING WITH COMPANIES AND POLICYMAKERS

Our 2023 Engagement Plan continues our climate-focused work from 2022. We are focused on the largest contributors to our net zero portfolio carbon footprint to encourage them to report scope 1, scope 2, and scope 3 greenhouse gas emissions, adopt climate change risk reporting following the recommendations of TCFD, and consider setting sciencebased targets that are aligned with keeping global warming to 1.5 degrees Celsius at most.

Furthermore, in March 2022 GMO signed on to the CDP Non-Disclosure Campaign (NDC), a collaborative initiative that enables investment managers to drive corporate transparency around companies' management of climate change-related exposures. We previously signed on to the CDP Science-based Targets initiative in 2021 and continued to support it in 2022. Through our participation in the NDC, GMO investment teams have encouraged improved environmental risk disclosure from companies held in our portfolios, including the following work.

In support of our climate change priorities, GMO also signed the 2022 Global Investor Statement to Governments on the Climate Crisis, a joint statement addressed to all world governments urging them to implement policies that limit global temperature rise to no more than 1.5 degrees Celsius and to act consistently with a just transition.

#### OVERVIEW OF GMO APPROACH TO CLIMATE CHANGE-FOCUSED ENGAGEMENT



Initiative	CDP Non-Disclosure Campaign (NDC)
lssue	Transparency around companies' management of climate change-related exposures
GMO Participants	Systematic Equity Team: Michelle Morphew, ESG Team: Hardik Shah, Usonian Japan Equity Team: Fumie Kikuchi
Objective	GMO participates in the NDC, a collaborative initiative that enables investment managers to drive corporate transparency around companies' management of climate change-related exposures. This complements our involvement in the CDP Science-Based Targets Initiative. Through our participation, GMO investment teams encourage improved environmental risk disclosure from companies held in our portfolios.
Action	In 2022, via letters and phone calls, we led engagements with 11 non-disclosing companies and reached out to another 4 non-disclosing companies that were not included in the CDP campaign.
Outcome	As of January 2023, 5 of those companies had submitted data through the CDP Platform, we had a call with 1 other company to discuss further, and we are still awaiting responses from the others.

In general, we vote against the board chair or responsible incumbent director of high-risk companies where we feel the company is not taking minimum steps toward managing climate risks. In 2022, we voted against the directors of 24 such companies.

#### CLIMATE RISK IN OUR OWN OPERATIONS

As introduced, we also believe that climate change poses risks to our operations and that our operational decisions can impact the climate, so we accordingly manage an operational climate-related strategy.

GMO has offices located in different parts of the world, and adverse climate events could have a direct impact on our business. GMO has business continuity plans for all its office locations in the event of severe business disruptions, including disruptions resulting from physical climate risks. The financial impact would be limited as most of the office facilities are leased. We also maintain insurance to mitigate any financial impact of extreme weather events.

We believe GMO should seek to reduce our own climate impact by reducing the environmental footprint of our day-to-day operations. Our employee-led Green Initiatives Working Group is dedicated to finding new ways to make our workplace more sustainable and to help educate our colleagues on how to reduce their environmental impact at work and at home. The Group is made up of GMO employees across various departments and geographies of the firm and draws support from senior management, the ESG Oversight Committee, ESG team, and our Facilities and Human Resources teams. In our global offices, GMO partners with office landlords that are active in mitigating the impacts of climate change and that demonstrate a commitment to highly sustainable buildings. Summary details of each of our global offices are below:

BOSTON LEED Gold and Energy Star certified

SAN FRANCISCO LED lighting with energy conserving window treatments

LONDON 100% Renewable Energy Guarantee of Origin (REGO), with backed renewable energy certificates

AMSTERDAM Netherlands Sustainability Certificate A+ energy efficiency label

#### SYDNEY 4.5 star NABERS\* Energy Rating

4.0 star NABERS Water Rating 5.0 star NABERS IEQ Rating

#### SINGAPORE

Certified Building and Construction Authority Green Mark Gold Development

\*National Australian Built Environment Rating System

In 2023, GMO moved our Boston headquarters to 53 State Street, several streets away from our prior, long-time office location at Rowes Wharf. In choosing our new "home," sustainability matters were an important consideration for us. 53 State Street is a LEED Gold building and is Fitwel certified, which is a rating of the health-affecting aspects of the building environment designed to improve occupant wellbeing. The building is also more efficient than 75% of similar buildings nationwide, according to its rating by the Energy Star Certification Program.

Additionally, we have been migrating applications, infrastructure, and services from proprietary data centers to Microsoft Azure, which allows GMO to scale dynamically while reducing the overall energy requirements. The energy efficiency we have been able to achieve from this move has significantly reduced GMO's scope 2 carbon emissions. Microsoft has also purchased carbon offsets that offset the energy use of the Azure data centers. Combined, this move effectively offsets nearly all the emissions associated with GMO's data technology footprint.

We have calculated all the material components of our operational carbon footprint across our offices and remain committed to identifying ways to reduce our footprint first and purchase high-quality offsets for what remains.

In 2023 we purchased more than 6,000 tons of gold standard certified carbon offsets from a wind farm in India to offset our estimated total operational carbon footprint. Combined with previous offset purchases, we have now completely offset GMO's scope 1, scope 2, and material scope 3 emissions from 2019 through 2022.



#### **Metrics and Targets**

#### GMO'S NET ZERO PORTFOLIO CARBON FOOTPRINT

GMO is on track toward our 2030 target of a 65% reduction in portfolio carbon footprint intensity (versus our 2019 baseline), with an observed 34% reduction in PCFI from 2019-2022.

In absolute terms, we have reduced emissions by 47% while the weighted average carbon intensity of our portfolio companies has declined by 40%.

	2019 baseline	2022	Change
Financed Scope 1 and Scope 2 Emissions (tCO2e)	6,296,516	3,308,916	-47%
Portfolio Carbon Footprint (tCO2e/Million\$ AUM)	202.6	133.4	-34%
Weighted Average Carbon Intensity of Portfolio Company Revenues (tCO2e/Million\$ Revenue)	295.9	177.0	-40%

Sources: S&P Trucost Limited, MSCI

Meanwhile, 35.5% of our portfolio emissions are covered by a net zero target, an increase of 5.8% from our 2019 baseline.

	2019	2022
Proportion of emissions covered by a net zero target	29.7%	35.5%
Proportion of emissions covered by an SBTi certified target	12.3%	20.8%

Sources: MSCI, Science-based Targets

Since 2019, we have also observed an increase in assets invested in climate solutions. The amount of assets under management invested in climate opportunities has grown from \$20.2 million to \$2,100 million as of the end of 2022.

# GMO'S OPERATIONAL CARBON FOOTPRINT

As shown in the table below, our operational carbon footprint has declined by 35% between 2019 and 2022.

Scope	Source	2022	2021	2020	2019	
Scope 1	Stationary Combustion	<1	<1	<1	<1	
Scope 2 Purchased Electricity (location-based)		943.0	1,106.8	1,172.3	1,278.8	
Scope 3	Business Travel	1,246.7	108.4	324.4	2,276.8	
	Data Center	140.8	53.2	48.7	20.0	
	Total Scope 3	1,387.5	164.1	373.1	2,296.3	
GMO's Operational Carbon Footprint (tCO2e)		2,330.9	1,271.5	1,546.3	3,576.3	
Carbon Intensity (tCO2e/employee*)		4.8	2.7	3.3	7.6	

\*Includes full-time employees including those that are partly or 100% remote.