



2023

# TCFD Report



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## A) CEO Letter

2Xideas is dedicated to addressing the impacts of climate change and is committed to playing its part in supporting the transition to a low-carbon economy. As an investment firm, we acknowledge the responsibility to incorporate sustainability at all levels we operate in and hence embrace our fiduciary duty and stewardship. We have therefore decided to publish this report in accordance with the recommendations made by the Task Force on Climate-Related Financial Disclosures ("TCFD") both from an investment and an operational perspective.

By the end of 2023, 195 Parties (194 States plus the European Union) have joined the Paris Agreement, having established over 800 policies relating to sustainable consumption and production. Climate change science has proven that there is no time to lose.

At 2Xideas we classify climate risk as financial risk and have thus embedded it in both our strategy and our risk management. As part of 2Xideas' sustainability policy, we have decided to direct close attention towards carbon intensity and energy efficiency. We are of the opinion that these are highly objective, can be monitored effectively and are aligned with long-term shareholder interests. We believe that climate change must be a matter of concern for investors as it increases both transition and physical risks for companies. Therefore, the energy and resource efficiency of our portfolio companies is an integral consideration in our investment process, as we view it as one of the drivers of long-term success. Naturally, this consideration demands monitoring and measuring progress, which we conduct using the metrics highlighted in this report.

The continual improvement of available data, analytical capabilities, and best practices will be integral to the transparency needed to measure and monitor progress and document adherence to regulations. We mark our accountability not merely in pledges and goals, but in milestones for our operations and investment targets which are embedded in our fund prospectuses.

As long-term global investors, we depend on sustainable development, well-functioning markets and good corporate governance. The objective of this report is to highlight what we are doing today, what we expect from our investee companies, and how we plan to engage with them to meet those expectations.

Sincerely,



**Roger Meister**  
CEO



**Raffaella Semedo**  
Head of Sustainability

## B) Introduction

The risks associated with climate change are manifold but can broadly be divided into physical risks and transition risks. Physical risks can be acute or chronic and pertain to the economic ramifications of damage to business operations, infrastructure and supply chains. On the other hand, transition risks relate to the risks tied to the process of shifting toward a low-carbon economy. These include legal risks, such as emission-linked taxation and broader reputational risks. Besides the risks, climate-related opportunities can relate to resource efficiency, improved energy sourcing, and overall climate resilience.

In 2015, the Basel-based Financial Stability Board (“FSB”), hosted by the Bank for International Settlements (“BIS”), formed the Task Force on Climate-Related Financial Disclosures, a group of roughly 30 professionals from the banking, asset management, insurance and non-financial industry, initially mandated to tackle some of the incoherencies of the 2015 Paris Agreement.

By 2017, the TCFD launched its recommendations, promoting internationally consistent and comparable reporting on climate-related risks and opportunities among companies around the globe. In total, there are 11 recommended disclosures that are structured within four content pillars. These encompass: Governance, Strategy, Risk Management and Metrics & Targets.

The rationale for launching a set of recommendations was perfectly described by Michael R. Bloomberg, Chairman of the TCFD: “Investors, asset managers, corporations, governments and financial institutions have an important role to play. Reporting along a consistent set of recommendations is crucial in driving the transition.” In other words, by following a general set of principles, companies have the ability to shed light on their efforts in transitioning to a low-carbon economy while simultaneously understanding what adoptions to make in accelerating so.

Moreover, Hoesung Lee, Chairman of the Intergovernmental Panel on Climate Change (“IPCC”) remarked on the TCFD: “Transformational changes are more likely to succeed where there is trust, where everyone works together to prioritize risk reduction, where benefits and burdens are shared equitably. It all starts with transparent and consistent reporting.”

### TCFD’S FOUR PILLARS.<sup>1</sup>



<sup>1</sup> Source: TCFD.



## C) Governance

### TCFD Recommended Disclosures

Describe the board's oversight of climate-related risks and opportunities

Describe management's role in assessing and managing climate-related risks and opportunities

The way in which 2Xideas is overseen and managed strongly coincides with our investment practices. It underpins the expectations we have of our investee companies in terms of governing and managing climate-related risks and opportunities. We believe that through sound stewardship we can play our part and contribute to sustainable development.

We believe that good governance drives environmental and social developments. This holds true for all companies regardless of sector or industry. Therefore, continuous review of governance policies and practices is crucial, including how companies manage climate-related risks and opportunities. We are convinced that if these are managed effectively, they will positively contribute to long-term shareholder value.

### i) Board Oversight

2Xideas' ownership and governance structure is aligned with its long-term objectives. The Firm is owned by its partners, who actively participate in daily operations. This structure underpins a deep-rooted commitment to the sustained growth of the business.

At the end of 2023, we employed 60 full-time employees across six office locations and their respective entities:

- 2Xideas AG in Pfäffikon, SZ, Switzerland
- 2Xideas Switzerland AG in Küsnacht, ZH, Switzerland
- 2Xideas US Inc. in New York, NY, US
- 2Xideas Europe Ltd. in Dublin, Ireland
- 2Xideas Europa AG in Vaduz, Liechtenstein
- 2Xideas Asia Limited, Hong Kong

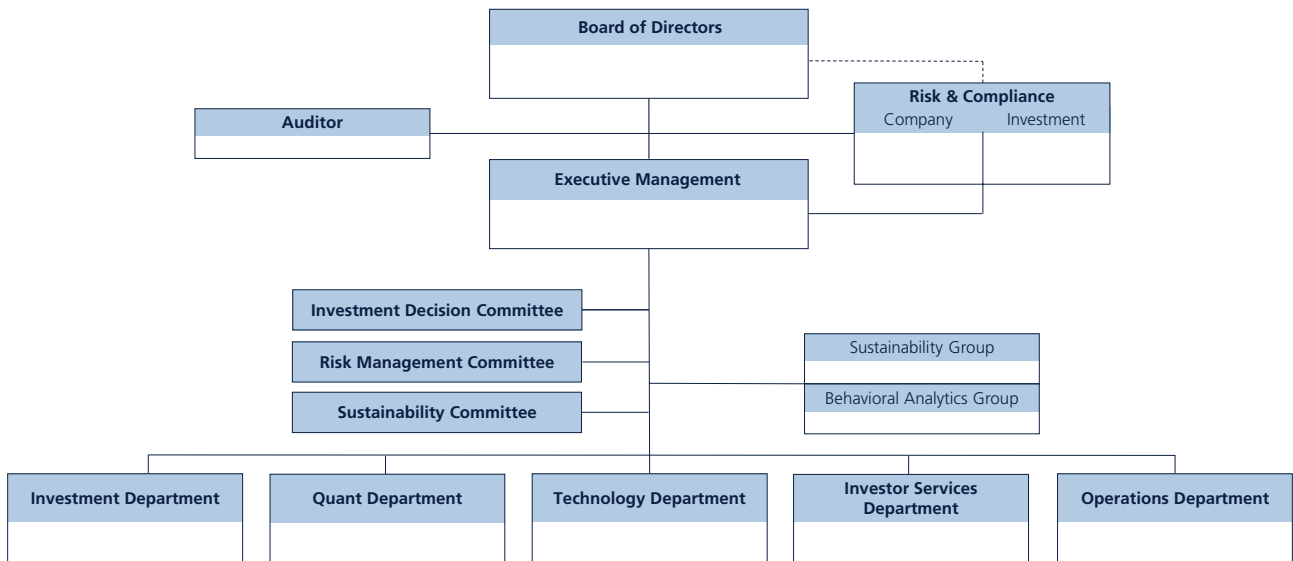
Our approach to sustainability originates with the Board of Directors. The Board is tasked with defining the sustainability strategy for 2Xideas both on a company level and throughout investment activities. The Executive Management, together with the Sustainability Committee and the Sustainability Group, is responsible for implementing our stated sustainability strategy.



OUR OFFICE LOCATIONS



ORGANIZATIONAL CHART



The 2Xideas Board meets on a quarterly basis. If necessary, it holds extraordinary meetings. Such extraordinary meetings are called through trigger events by either the Executive Management or by Risk & Compliance. Further details on these processes are highlighted under the “Risk Management” section of this report.

Environmental, Social & Governance (“ESG”) including climate change related topics are on the agenda of every Board meeting. This includes discussing the current risk profile, evaluating latest developments, and ultimately revising the sustainability strategy if necessary.

## ii) Sustainability Committee & Sustainability Group

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The Executive Management implements the decisions and strategies set out and defined by the Board. As per the sustainability governance structure below, the Board established the Sustainability Committee, in March 2021. It comprises two members of the Executive Committee (i.e. CEO and CIO), the Deputy-CIO, the Head of Sustainability as well as one equity analyst. The equity analyst joins the Sustainability Committee on a one-year basis. The role is rotated among the equity analysts from the different sector groups with the intention of ensuring engagement from the equity analysts and creating ownership for the topic.

The overall sustainability strategy originates at Board level. The Sustainability Committee has been set up by the Board to ensure the implementation. All members of the investment department are expected to be knowledgeable in sustainability topics and to stay up to date with current developments in terms of ESG and its risks and opportunities. For this purpose, various internal and external trainings are conducted on a regular basis.

The Sustainability Committee has been approved by the Swiss Financial Market Supervisory Authority ("FINMA") as an official committee of 2Xideas. It provides the structure, guidance, and control for the implementation of the corporate sustainability strategy. This includes the integration of our sustainability criteria into the research and investment process. The Sustainability Committee ensures that all employees of 2Xideas are continuously informed and where applicable adequately trained to implement the sustainability strategy at all levels.

Furthermore, the Sustainability Committee acts as the decision-making committee on active ownership decisions for the holdings in the investment funds and mandates. It meets at least on a quarterly basis for strategic sustainability-related developments and implementations, and ad-hoc for active ownership decisions or any material ESG topics.

SUSTAINABILITY GOVERNANCE

### Board of Directors

- Oversight of sustainability & ESG matters on both Firm and investment level
- Responsible for defining sustainability strategy
- Guiding and monitoring integration






**Jürg Schaeppi**  
*Chairman*

**Marco Frei**  
*Vice-Chairman*

**David Loggia**  
*Member*

**Marianne Fassbind**  
*Member*

### Executive Management (ext.)

- Implementation of the sustainability strategy defined by the Board of Directors
- Defining ESG for investment practices and overseeing Sustainability Committee and Sustainability Group






**Roger Meister**  
*CEO*

**Michael Stutz**  
*CIO*

**Stephan Welti**  
*COO*

**Philipp Wesner**  
*CTO*





**Peter von Moos**  
*Head of IS*

**Raffaella Semedo**  
*Head of Sustainability*

**Stephanie Scherrer**  
*Head of BA*

### Investment Decision Committee

- Executing defined ESG policies
- ESG consideration in investing and divesting voting rounds


16 FTEs

### Investment Department

- Incorporating ESG factors into fundamental research
- Executing ESG due diligence, active ownership and engagements together with the Sustainability Group


18 FTEs

### Sustainability Committee

- Implementing corporate sustainability strategy
- In charge of ESG inclusion in research and investment process
- Governing active ownership
- Managing ESG controversies and incidents






**Raffaella Semedo**  
*Head of Sustainability*

**Henrik Munk-Nielsen**  
*Deputy CIO*

**Roger Meister**  
*CEO*

**Michael Stutz**  
*CIO*



**Grégoire Serre**  
*Equity Analyst*

### Sustainability Group

- Providing ESG assessments to the Investment Department
- Executing proxy voting

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3 FTEs



The dedicated Head of Sustainability is a Certified ESG Analyst (CESGA®). She is specifically tasked with ensuring the integration of sustainability criteria into our research and investment process and works with members of all departments to this end. She chairs the Sustainability Committee and leads the Sustainability Group. The Sustainability Group is tasked with day-to-day sustainability matters. It sits very closely to the Investment Department in that it provides ESG-related assessments on companies, contributing to executing sustainability components in the overall investment decision-making process. Besides the Head of Sustainability, the Sustainability Group consists of two more analysts with backgrounds in Finance and Sustainability. One has extensive knowledge in climate change data, while the other holds the CFA® Institute Certificate in ESG Investing.

Furthermore, our greater team includes a group of highly skilled professionals dedicated to sustainability, each bringing their expertise and extensive training to the table. Notably, our Deputy-CIO possesses a wealth of knowledge in corporate governance, gained through years of experience. Additionally, two of our equity analysts have successfully co-managed global sustainable equity funds at renowned investment firms, contributing invaluable insights and comprehensive expertise to our deliberations and decision-making processes regarding sustainability concerns.

### iii) Active Ownership

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The way in which 2Xideas governs climate-related risks and opportunities as a firm is very similar to how it manages them on a portfolio and single security level. We act as stewards and therefore seek active ownership with our investee companies.

At 2Xideas, we actively exercise our rights and responsibilities as shareholders to promote good governance, transparency, and accountability among our investee companies. This includes voting on shareholder resolutions, participating in annual general meetings, and engaging with corporate leaders on matters potentially affecting shareholder value.

Our approach to exercising voting rights and responsibilities is based on our commitment to responsible ownership and long-term value creation. Thorough analysis and due diligence inform our voting decisions, taking into account corporate governance practices, executive compensation, and ESG performance, among many other factors. By exercising our rights critically, we seek to influence corporate behavior positively, drive improvements in corporate governance, and protect the interests of our clients.

We implement our active ownership strategy by executing the voting rights of all investee companies through the proxy advisory firm ISS. We use the ISS Sustainability Benchmark research as the starting point for our proprietary research on the presented voting items. Our analysts review upcoming items at AGMs and EGMs to form an independent opinion. The analysts participate, where feasible, at pre-AGM meetings or calls organized by the investee companies.

Should an analyst see a need to deviate from the ISS Sustainability Benchmark recommendation, the analyst recommends this to the Sustainability Committee, providing a detailed rationale. The Sustainability Committee votes on these proposals with a simple majority requirement to deviate from the ISS recommendation. The Sustainability Group then executes the casting of votes via ISS.

In 2023, we participated at all votable meetings. In total, there were 87 votable meetings. Approximately 3% of votes were on environmental issues and 10% on social issues. As is typical, around half of the votes related to governance-related topics such as the election of directors.

Thus far it has been uncommon to see voting items solely pertaining to climate-related matters in our investee companies. However, ESG developments, especially the ones overseen by the Board, continue to increase. Therefore, although climate-related topics per se might not yet directly be addressed via voting, the way a company is governing all sustainability matters usually results in a positive change management. In the case of uncertainty, we address the company directly as described further in the section below.

#### **iv) Dialogue & Escalation**

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In our view, advocating sustainable development requires active dialogue on top of exercising our voting right. Our daily business involves close contact with our investee companies, so integrating climate-related topics has become part of our ongoing engagement with management. Inquiring how a company actively assesses and manages climate-related risks and opportunities is a standard topic for dialogue. With respect to GHG-emissions, this concretely concerns a company setting credible targets with the Science Based Targets initiative ("SBTi") and responding to the Climate Disclosure Project ("CDP") questionnaire.

Moreover, we strive to understand what a company is doing to reduce its Scope 1 and 2 emissions, as well as its Scope 3 emissions, both up- and downstream. This entails understanding how it seeks to measure progress and what methodologies it applies. Even after careful evaluation of a company's sustainability report, some topics may remain unclear, so active dialogue is helpful in that respect. Generally, we encourage firms to report along the TCFD recommendations if they haven't done so already.

We address any uncertainties or developments conflicting with our 4M Analysis and the initial investment case with the respective investee company. We seek clarification if an investee company has a weak or opaque climate strategy and/or overall sustainability approach. In cases of controversy, noncooperation and generally bad development, divestiture may be considered.

To retain oversight, analysts log every interaction in our proprietary data platform ACE, which simplifies aggregation and maintains an overview of progress for every company.

Throughout 2023 we have engaged with 15 companies on sustainability related topics, of which 10 included climate or emissions related topics.

Below you will find three examples of 2Xideas’ ESG-related engagements in 2023:

**Example 1**  
**Strategies:** Global Mid Cap Library, US Mid Cap Library, Global Mid Cap Select  
**Asset class:** Equity  
**Company:** Fortinet (FTNT US)  
**GICS:** Information Technology  
**Theme:** Environmental & Social Progress

**Background:** Fortinet is the no. 1 firewall hardware vendor and a leading provider of broader cybersecurity solutions to businesses of all sizes. The Company operates in a fast-growing end market that is currently bottlenecked by labor shortages and has an increasingly sizable environmental footprint. We discussed these issues directly with CFO Keith Jensen.

**Objective:** According to the World Economic Forum, the cybersecurity sector needs 3.4 million people to fill its workforce gap. Fortinet pledged to train 200,000 people annually over five years to help close the gap. We learned that the Company actually benefited from opening up its learning resources and certification program for free during the COVID-19 pandemic, and in the end produced many newly trained advocates for Fortinet’s products.

We look forward to seeing improved disclosures from Fortinet on the total net environmental impact of the Company’s product innovations. Firewall units in operation currently constitute some 1.5bps of global energy consumption, on our estimates, and are poised to grow significantly owing to insatiable need for more datacenters and cybersecurity checks. From 2019–21, Fortinet improved its products’ power efficiency by 61%, on average. Upon replacing its older firewalls, we calculated that the Company can drive a positive environmental impact that is 50–100 times the environmental footprint of its operations.

**Action:** We expressed our recognition of the Company’s training program efforts. Moreover, we encouraged CFO Keith Jensen to calculate its products’ power efficiency more precisely for both investor and marketing communications, to demonstrate Fortinet’s net positive impact to the global environmental agenda. CFO Jensen appreciated this feedback, telling us that such messaging resonates among the C-level executives of Fortinet’s customers.

**Outcome:** We anticipate continued progress from Fortinet’s training programs and improved disclosures on the total net environmental impact of its product innovations.

**Example 2**  
**Strategies:** Global Mid Cap Library  
**Asset class:** Equity  
**Company:** Sonova (SOON SW)  
**GICS:** Health Care  
**Theme:** Diversity, Equity & Inclusion

**Background:** Sonova is the global leader in hearing aids. Based in Switzerland, the Company holds a 30% share in hearing aid manufacturing, and top-3 positions in both hearing aid retailing and cochlear implants. At an event hosted by Women in Sustainable Finance in Zurich, Switzerland in March 2023, we met Navleen Kaur, Senior Manager of Diversity and Inclusion at Sonova.

**Objective:** Ms. Kaur told us what Sonova is doing internally and externally to promote diversity, equity, and inclusion. Internally, Sonova has three employee networks for people with hearing loss, for women, and for the LGBTQI+ community, all to ensure that internal policies and workplaces are inclusive of all communities.

**Action:** The Company has established regional and global councils to ensure gender balance in leadership and senior management teams, as well as equal opportunity regardless of gender, culture, age, sexual orientation, or health status. The Company believes that each employee can bring their unique personality to the workplace, which is a competitive advantage. Externally, the Company established the non-profit Hear the Work Foundation in 2006 to ensure the accessibility of hearing aids in developing countries. In addition, hearing aids are available in a variety of colors, from very light to black or bright colors for children, to ensure full inclusion. Adapting hearing aids for wide user populations helps to eliminate the stigma associated with wearing hearing aids.

**Outcome:** We anticipate witnessing ongoing advancements in Sonova’s diversity and inclusion initiatives. Since the event, we have maintained close communication with Ms. Kaur and will continue to monitor further social developments at Sonova.

**Example 3**  
**Strategies:** Global Mid Cap Library, US Mid Cap Library, Global Mid Cap Select  
**Asset class:** Equity  
**Company:** PTC (PTC US)  
**GICS:** Information Technology  
**Theme:** Helping Customers Measure Impact

**Background:** PTC provides software products and services that help engineering and manufacturing organizations to design, manufacture, operate, and service their products. PTC software enables engineers to drive more efficient product design, material selection, sourcing, and manufacturing. This also drives a smaller environmental footprint across product life cycles.

**Objective:** PTC recently announced a comprehensive sustainability initiative, whereby the Company is aligning with 87% of its top 100 customers that they have sustainability targets.

**Action:** PTC’s software suite is already aiding clients like Cummins (CMI US), Rolls-Royce Vestas (RR LN), and 3D Systems (DDD US) in making substantial environmental improvements. That includes a 10–15% reduction of materials use via better engineering design and energy conservation in manufacturing, as well as around 60% emission reduction in service operations via better spare parts management.

Recent announcements go beyond PTC’s current offerings. PTC intends to integrate Ansys Granta and aPriori, enabling clients to measure Scope 3 emissions and simulate manufacturability and cost profiles. This incorporation could greatly influence early design decisions that “determine 80% of a product’s environmental footprint,” according to CEO Jim Heppelmann.

**Outcome:** We appreciate PTC’s explicit intent to drive its strategy with sustainability in mind. Given the Company’s extensive reach in the industry, we expect PTC to have significant force for good. We will monitor the Company’s initiative to observe tangible product or customer examples that validate its reception.



## D) Strategy

### TCFD Recommended Disclosures

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

At 2Xideas, our climate strategy is built on the premise of both the risks and opportunities arising from climate change. As an investment firm, we are of the opinion that we can be a positive force in the decarbonization of the economy and promote net-zero targets. The transition to a carbon neutral economy requires efforts across different sectors, regions, technologies, and communities. Due to an ever-changing regulatory and reporting landscape it is important to monitor short-, medium-, and long-term changes and adopt our strategy accordingly.

We are not naïve and recognize that climate-related actions will not happen overnight. But even as minority shareholders, we strive to work closely with our investee companies strategically in guiding them in the desired direction.

### i) 2Xideas' Operations

As an asset manager, our climate resilience is strongly reliant on the different, potential climate-related scenarios of our investee companies. As our own business is very carbon-light, we have very low Scope 1 & 2 emissions. Our emissions level is highly dependent on the number of employees and their location.

We have very low emissions arising from our day-to-day operations compared to other companies in other industries. Nevertheless, we take climate change earnestly and thereby combine Direct Air Capture ("DAC") technology and offsetting measures. More details about our net-zero efforts specifically are covered in the Metrics & Targets section of this report.

Since the COVID-19 pandemic, global corporate business practices including business-related travel have changed. Although business travel has resumed to pre-pandemic levels, most businesses have become more conscious of their traveling as many have accustomed to virtual meetings and the associated cost savings of traveling less. Our operations are no different. Digitalization has continued to make our operations and daily business a lot more efficient. Some of these include remote working capabilities, as we have a two-day home office policy, more virtual meetings allow for less travel and more efficient work management. Nevertheless, we are of the opinion that human interaction is vital in forming well-based opinions of management teams, and therefore still prioritize face-to-face meetings with our investee companies and research targets. We optimize our travel itineraries by visiting as many companies as possible on any overseas trip that we undertake. When traveling between cities on intercontinental trips, we therefore aim to limit flying and instead opt for less carbon intensive modes of transportation such as rail, if feasible.

Our office guidelines prescribe minimizing energy consumption, material consumption, promote sustainable heating and cooling, and diligent waste management. This includes low-energy motion sensitive lamps, efficient heating and cooling, and recycling of paper and plastic.

Moreover, we have thoroughly evaluated the energy sources of our offices. Both of our offices in Switzerland, which includes our main office, as well as the office in Liechtenstein rely 100% on renewable electricity, derived primarily by hydropower. These locations accommodate more than 50% of our current workforce. Today, 2Xideas is proud to be a carbon-neutral

company, compensating for our emissions through a combination of DAC and offsetting, as we continue on our journey towards achieving net-zero.

## ii) Initiatives & Progress

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Our operational business strategy incorporates appropriate processes for prioritizing, mitigating, monitoring, and reporting climate risks.

We have been signatories to the United Nations Principles of Responsible Investment (“UNPRI”) since 2019 and to the Net Zero Asset Managers initiative (“NZAMi”) since August 2022.

We see the set of TCFD recommendations as a useful framework to build awareness about climate resilience in our business and incorporate it within our corporate strategy. We are applying these to identify and manage climate risks & opportunities to ultimately build them into our strategy and to help us measure our progress.

We have continued to make good progress on climate-related actions in 2023. We have built out specialist data provided by third-party data providers to collect both physical and transition climate risks and opportunities data across our investable universe. Continuous collection of this data helps us understand the impacts of climate risks and opportunities and to implement associated mitigation actions.

We have also further built out our internal teach-ins on the latest ESG developments, to enable all our employees to enhance their knowledge base about sustainability and climate-related issues. 2Xideas covers the costs for external education related to our operations and grants its employees additional vacation days for studying. This includes but is not limited to curriculums within the CFA programs including the Certificate in ESG Investing.

## iii) Investment Strategy

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We are a global equities manager with a focus on quality growth and with a long-term investment approach. Our investment horizon is 5–7 years, ideally even longer. Our average holding period over the past 9 years is around 4 years.

As an equity research and asset management firm, we currently manage three long-only equity funds and one active extension equity fund, as well as several managed accounts. Each covers a single asset class, public equities, with a focus on global mid cap companies. Deep-dive fundamental equity research is the backbone of 2Xideas and the basis for our investment strategies.

We believe it is essential for a target investee company to have a clear long-term strategy covering all aspects of ESG, including their emissions profile and a thorough climate-change risk and opportunity assessment. We expect companies to exhibit a robust framework of monitoring, managing, and reporting on ESG matters. Therefore, these topics are actively discussed and engaged with in our conversations with management teams.

ESG plays a vital role in all our investment strategies. We consider short-, medium, and long-term material climate risks and opportunities as described in the Risk Management section.

Selecting the right companies and profiting from their long-term value creation is our key performance driver, as the share price of a company follows earnings per share growth over the long term.

We focus on business quality, growth prospects, and sustainability to identify the few companies that qualify as “2X” ideas. Our goal is to combine the art of stock selection with the science of risk management, with the end being the generation of sustainable long-term out-performance for our investors.

**ESG IS INTEGRATED INTO EVERY STEP OF THE INVESTMENT PROCESS:**

<b>Investment Process</b>	<b>ESG Integration</b>
<p><b>Idea Generation</b></p> <p>We employ advanced quantitative models in combination with qualitative input from our sector analysts to constantly screen our Investment Universe of some 2,100 listed mid and large cap companies.</p>	<p><b>ESG Exclusions</b></p> <p>The norms- and values-based exclusions, as highlighted in our Sustainability Policy, exclude around 10% of the companies in our investable universe.</p>
<p><b>Idea Verification</b></p> <p>We combine information gathered through financial analysis, management meetings, expert interviews, forensic studies, and alternative data sets into a holistic 4M (Macro, Market, Moat, Management) Analysis that enables us to compare companies across industries and countries.</p>	<p><b>ESG Integration into our 4M Analysis</b></p> <p>The 4M Analysis provides a comprehensive evaluation by examining four areas: Macro, Market, Moat, and Management, each encompassing various subcategories. Environmental and climate considerations are integrated into the Macro-M analysis, while social and governance factors are embedded within the Management-M assessment.</p>
<p><b>Idea Implementation</b></p> <p>We collect unbiased input from each of our specialist investment professionals and combine it with data from our proprietary risk factor model. This systematic fusion of qualitative and quantitative information enables us to construct risk-optimized portfolios that are reducing the risk of behavioral biases.</p>	<p><b>ESG know-how transfer &amp; data analysis</b></p> <p>We provide adequate resources, both in terms of staff and access to external research providers and data sources for the equity analysts to be able to perform the ESG analysis of potential investee companies.</p> <p>ESG data is also incorporated into our proprietary risk factor model, which is used as part of our quantitative information in the portfolio construction process.</p>
<p><b>Idea Engagement</b></p> <p>Investing with a long-term horizon makes us a strong partner for our investee companies.</p>	<p><b>ESG Engagement</b></p> <p>We constructively engage with boards and management teams and execute our voting rights in accordance with our long-term vision for each company. Working with industry and sustainability experts, we provide input to management teams on strengthening corporate governance and improving financial and non-financial disclosure.</p>
<p><b>Idea Transparency</b></p> <p>The detailed information that our proprietary systems gather at each step of our investment process drives a rigorous feedback loop that enables us to constantly improve as a firm.</p> <p>We offer our investors transparency through our deep-dive Investment Cases, our comprehensive Industry Insights, and by sharing detailed information on all our investment decisions.</p>	<p><b>ESG Reporting</b></p> <p>We transparently communicate our ESG strategy, implementation, metrics, and actions to our investors and stakeholders. This includes ESG assessments within our Investment Cases, as well as sustainability reporting in our quarterly reviews, covering key metrics such as the Implied Temperature Rise (“ITR”), the percentage of companies with SBTi-approved targets, and a full range of emissions data.</p>

**4M Analysis**

Given our focus on quality and sustainability, we have implicitly considered many relevant ESG topics in our fundamental analysis from the very beginning. We have always invested in companies with a strong innovation culture, operating in markets with a long runway for growth, led by ethical management teams with a long-term mindset and strong capital allocation track record. In our view, it is critical to combine an ESG framework with the fundamentals of the business. A long-term investment can only be sustainable and attractive if factors such as carbon footprint, use of water, labor relations, etc. are seen in combination with a profitable and growing business. The 4M Analysis lies at the heart of our fundamental research process and allows us to verify business quality, growth prospects, and sustainability in a standardized way across sectors and countries. Our 4M Analysis framework enables us to understand how value will be created, and risks mitigated using ESG considerations among other financial and non-financial factors.



**Macro** – Resilience to external forces

- Potential to outgrow GDP
- Dependence on economic cycle
- Exposure to external factors
- Environmental



**Market** – Attractive market and positioning

- Runway for growth
- Visibility of demand
- Market share
- Competitive dynamics
- Switching costs



**Moat** – Defending the market position

- Economies of scale or scope
- Sustainable lead in asset, process or technology
- Patents, licenses, certifications & approvals
- Network effects
- Culture
- Brand



**Management** – Competence & Integrity

- Leadership
- Execution
- Resource allocation
- Social
- Governance



As mentioned above, the assessment on exposures to environmental risks and opportunities is part of the Macro-M. In specific, we consider the following aspects:

- What is the environmental footprint of the industry? (Consumption of raw materials, energy and water, waste disposal & pollution, carbon dioxide emissions)
- What is the environmental footprint of the supply chain, both upstream and downstream?
- Does the Company care about environmental risks across its supply chain?
- What is the Company’s exposure to climate change, and what are the risks and opportunities deriving therefrom? (including clean tech)

We analyze to what extent climate change risk could affect a company and its business model. We do this by conducting profound fundamental research as well as monitoring a metric called Climate Value at Risk ("CVaR").

Both analysis bear different time horizons:

- Our fundamental research develops financial models projecting up to 6 years into the future, while also evaluating the business model across different time horizons: near-term (up to 3 years), medium-term (5 to 7 years), and long-term (up to 10 years).
- The CVaR metric is a quantitative model with output metrics for the years 2030, 2040, 2050, 2070 and 2100.

#### iv) Product Offering

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We follow a single, unified research process from which we derive a selection of investment products and mandates, all of which focus on global and US mid-cap equities. ESG considerations are fully integrated into this process at every step, wherever it is meaningful and relevant.

At the end of 2023, 80% of all our assets under management ("AUM") were managed according to the EU Sustainable Finance Disclosure Regulation ("SFDR") article 8 requirements. For investment vehicles and mandates that are not in scope of SFDR, we apply the same diligence of ESG research but do not report on SFDR related requirements. The analysis of Principal Adverse Impacts ("PAIs") is fully integrated into our investment process, and we report them accordingly on product and entity level.

The integration of PAIs into the investment process is thoroughly defined and described in the SFDR Art. 4 statement available on our website. PAIs 1–7 relate to GHG emissions, carbon footprint, carbon reduction initiatives, fossil fuel exposure, and energy consumption.

Our flagship, and simultaneously largest product by AUM, the 2Xideas UCITS – Global Mid Cap Library Fund is a long-only, global, quality growth equity fund. It is comprised of 70–100 constituents. Since January 2023, the fund is classified as an SFDR Art. 8 fund.

For the 2Xideas SICAV-SIF – Global Mid Cap Select Fund, which consists of a sub-set of the Global Library Fund, the ESG process is applied in the exact same manner as for the Global Library Fund.

#### v) Climate Resilience

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As an asset manager, our exposure to physical and transition-related climate risks depends on the sectors, geographies, and climate risk management practices of the companies we invest in.

We use the Implied Temperature Rise ("ITR") metric to track the climate alignment of our investments, and Climate Value at Risk (CVaR) to assess potential financial impacts from climate risks, helping us manage and optimize portfolio performance while meeting regulatory requirements. Further details are provided in the Risk Management and Metrics & Targets section of this report.



## E) Risk Management

### TCFD Recommended Disclosures

Describe the organization's process for identifying and assessing climate-related risks.

Describe the organization's processes for managing climate-related risks.

Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.

### i) Risk Management Processes

Risk management is integral for all of our business activities. In order to understand where climate-related risks are incorporated within our overall risk management, it is imperative to understand its composition and positioning.

Our risk management is led by Risk & Compliance. However, the Board of Directors oversees, and the Executive Management carries out certain responsibilities that are clearly defined. Our internal control system ("ICS") comprises a number of processes. The Board conducts an overarching risk analysis. In addition, the Executive Management conducts various topic-specific risk analyses. Based on these analyses, an ICS with risk mitigation factors and corresponding controls is established. Both the risk analysis and the ICS form the basis for the internal framework with directives & policies. The entire framework must be maintained internally; it is confirmed at least monthly, audited externally, and reported at least annually.

We also conduct risk analyses on our commercial entity, on our collective capital investments and our investment mandates. After carefully describing the risks in their entirety, we define the materiality, how likely they are to occur, our risk capacity, and most importantly our risk-mitigating measures. Climate-related topics and ESG factors are included across these risk processes and assessments.

A direct example from our operational ICS framework that pertains to ESG is "The disregard of regulatory ESG requirements and customer interests because the investment (decision) process is not defined and/or not designed appropriately."

The risk mitigating action is to "Clearly define the investment process and comprehensive internal set of rules (including ESG-relevant provisions as well as exclusion criteria/limits regarding investable sectors/companies and norms- and values-based screenings") as outlined in the SFDR framework. This includes the Sustainability Committee, which among other things is involved in pre- and post-trade checks for the defined sustainability factors.

Two examples of how we use ESG data are our ESG KPI tracking tool and the ESG alert function, The KPI tracking tool tracks controversies, the Implied Temperature Rise, ESG ratings as well as Climate Value at Risk developments. Companies under active coverage are tracked via an ESG alert function. These alerts are triggered by a new or changing controversy, change in ITR or CVaR. This information is instantly fed to our analysts who can perform further evaluation and, if warranted, engage with the company directly.

The Sustainability Group regularly reviews ESG data of our portfolio holdings. This is done to ensure that the information provided is accurate and consistent. If we are in doubt about a specific value for an ESG indicator, we approach the data provider and engage with their research department until we have a solid understanding of the raw data and the methodology. Recently, there was a case where we detected a false business involvement classification which was then, upon our engagement with the data provider, changed.

## ii) CLIMATE RISK

### RISK OVERVIEW

Potential Risks		General Risks
Physical Risks	Acute	Wildfires Storms Floods Droughts
	Chronic	Heat waves Rising sea levels Loss of biodiversity
Transition Risks	Political/Legal	GHG and/or waste taxation New decarbonization laws Litigation, fines, and sanctions
	Technology	Disruption of certain industries and/or business models through technological advancement such as AI
	Markets	General pressure for CO2 intensive industries
	Reputation	Stranded assets

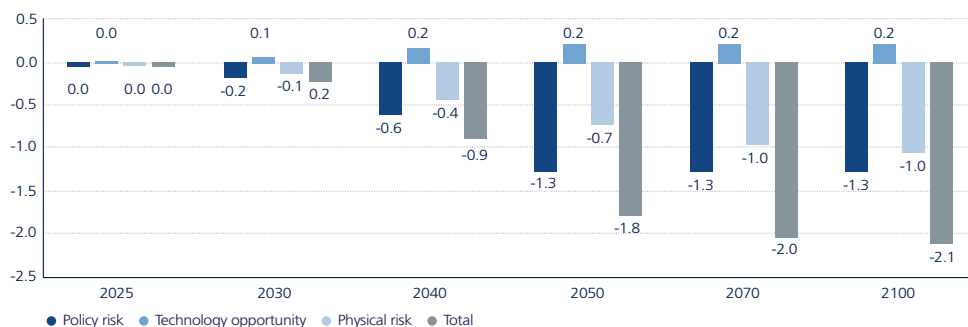
### OPPORTUNITY OVERVIEW

Potential Opportunities	Type of Opportunity
Resource efficiency	Recycling, new supply chain solutions
Energy sources	Solar
	Wind
	Hydrogen
Products	Smart grids
	Building insulation
	electric mobility
Markets	Sustainable commodities
	Circular economy
Reputation	Risk management systems

CVaR specifically covers most of these. On the physical risk side it covers coastal flooding, extreme cold, extreme heat, precipitation, heavy snowfall, extreme wind, fluvial flooding, river low flow, tropical cyclones, wildfires. On the transition risk & opportunity side there is technological opportunities and policy risks which is broken down as a company's scope 1, 2 & 3 emissions and future policy risk exposures such as carbon taxation.

The chart below highlights that until 2025 there are no immediate risks nor opportunities currently visible across our portfolio. If there were no changes in exposures across our current AUM, the potential loss starts as of 2030. Our investments have a larger exposure to potential policy risk, hence transition risk, than physical risk.

### AUM LEVEL CLIMATE VAR AT DIFFERENT TIME HORIZONS

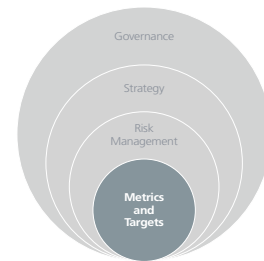


For the assets held during 2023 and our investable universe, we have identified the following climate-related risks and opportunities:

**RISKS**

Identified Risk	Mitigation Measure
Stranded assets	We apply an ESG screening where specific industries (e.g. coal extraction) are excluded. For each company in the remaining investment universe we consider to invest in, we conduct our proprietary fundamental 4M Analysis which includes Macro, Market, Moat and Management. Companies which operate in specific sectors or hold assets that are at risk of being stranded, do not pass our analysis and hence are excluded.
Direct physical climate risk	Through our fundamental research we do not invest in companies that are exposed to a direct physical climate risk within our investment horizon of 5-7 years. For example in insurance we actively question risks around companies that have home owners and/or catastrophe insurance with respect to secular environmental and climate related issues that could have an adverse impact on our investment.
Indirect physical climate risk	As long-term investors we analyze indirect physical climate risk on a continuous basis and the potential business impact on our investee companies. We have currently no exposure to commodities or energy companies. When researching industrial companies we put a high emphasis on analyzing indirect physical climate risk and their surrounding ecosystem.

Identified Opportunity	Mitigation Measure
Resource efficiency	Through our fundamental research approach and active equity investing, we like companies that create new or leverage on existing efficiencies through technological advantages. For example in the industrial and technology sector, we favor companies that are direct beneficiary of trends towards more sustainable consumption or usage.



## F) Metrics & Targets

### TCFD Recommended Disclosures

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Disclose scope 1, 2 and if appropriate 3 GHG emissions, and the related risks.

Describe the targets used by the organization to manage climate-related risk and opportunities and performance against targets.

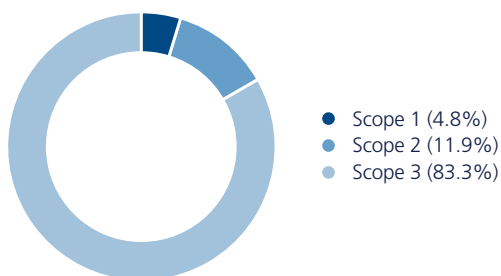
Metrics and targets play a crucial role in assessing climate-related risks and opportunities. They are essential for measuring progress, both for us as a company and as an asset manager. These metrics are key to shaping our strategy and managing risks effectively. The quantitative data we rely on serves as the foundation for setting and monitoring targets and is derived from direct measurements as well as analytical tools provided by third-party data providers.

As previously mentioned, transparency is a prerequisite for reliable and accurate data. We ensure that company disclosures are accessible to our investors and research subscribers. As a carbon-neutral company, we are committed to improving our DAC to offset ratio over the next few years. By 2040, our goal is to capture the entire carbon footprint of our company across all three scopes. We plan to achieve this by advancing carbon capture technologies and increasing their accessibility in the market. For this to be achievable, such market offerings must improve technologically and thus, offerings must become more readily available through an increase in supply and a decrease in cost.

### i) 2Xideas Carbon Footprint

In 2023, we calculated the carbon footprint for 2Xideas’ operations across Scopes 1, 2, and 3 for the third time in accordance with the GHG Protocol<sup>2</sup> and the ISO 14064 Standard.<sup>3</sup> 2Xideas’ GHG emissions from operations amounted to 85.4 metric tons of CO<sub>2</sub>-equivalent<sup>4</sup> (“CO<sub>2</sub>-eq”) for the fiscal year 2023. Around 4.8% of 2Xideas’ carbon footprint is direct emissions (Scope 1), while 11.9% is indirect emissions (Scope 2). Scope 2 emissions are mostly generated by electricity consumption and are calculated using a market-based approach. Scope 3 emissions include commuting, employee travel, electronic hardware purchases, and waste, and represent 83.3% of 2Xideas’ total GHG emissions. Financial services companies’ Scope 3 emissions typically account for a high proportion of overall emissions.

GHG EMISSIONS BY SCOPE, EXPRESSED AS PERCENTAGE



Source: 2Xideas

<sup>2</sup> Global Standardized Framework for Measuring GHG.

<sup>3</sup> The carbon footprint was defined based on the rules and principles of the International Organization for Standardization’s (ISO) 14064-1 Standard: “Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals” (2006).

<sup>4</sup> CO<sub>2</sub>-eq is a metric measure by which the emissions of various GHGs are compared on the basis of their global-warming potential (“GWP”) by converting other gases to the equivalent amount of CO<sub>2</sub> with the same GWP.



The following table presents a more detailed overview of 2Xideas’ GHG emissions, broken down by category. The categories are: heating production; electricity; business travel/transport; commuting; paper, printing, and mailing; water consumption; waste; other consumables; and out-sourcing. Units of measurement include kWh, pkm,<sup>5</sup> km, m3, kg, piece, and FTE. The respective units are then converted to CO<sub>2</sub>-eq for the purpose of calculation.

GHG EMISSIONS BY CATEGORY

Categories	Indicators	Unit	Amount	tCO <sub>2</sub>	% tCO <sub>2</sub>	Scope
<b>Heating production</b>	Natural gas (NYC-IRL-PF)	kWh	20,500	4.10	4.8%	1
	Heat pumps (KU-LI)	kWh	24,000	0.00	0.0%	2
	Cooling production (KU-LI)	kWh	15,000	0.00	0.0%	2
<b>Electricity</b>	Electricity mix (KU-LI-PF)	kWh	33,500	0.05	0.1%	2
	Electricity mix (IRL)	kWh	1,500	0.56	0.7%	2
	Electricity mix (HK)	kWh	5,000	2.97	3.5%	2
	Electricity mix (NYC)	kWh	17,000	6.55	7.7%	2
<b>Business travel/transport</b>	Flights (offset)	pkm	125,000	0.00	0.0%	3
	Flights	pkm	310,000	27.87	32.6%	3
	Train/metro/bus/private car	km	24,000	2.98	3.5%	3
<b>Accommodations</b>	Hotels	nights	297	3.56	4.2%	3
<b>Commuting</b>	Private car – internal combustion	km	97,600	20.87	24.4%	3
	Private car – electric	km	20,500	0.57	0.7%	3
	Train	km	92,400	0.01	0.0%	3
	Bus	km	10,250	0.81	0.9%	3
	Trolley/tram/metro	km	6,200	0.00	0.0%	3
	Electric bike	km	2,050	0.28	0.3%	3
	Motorbike/scooter	km	6,200	0.80	0.9%	3
<b>Paper, printing, and mailing</b>	Paper			0.30	0.4%	3
	Printing			2.40	2.8%	3
	Mailing			0.14	0.2%	3
<b>Water consumption</b>		m <sup>3</sup>	100	0.04	0.1%	3
<b>Waste</b>	Urban waste incinerated	kg	500	0.26	0.3%	3
	Recycled waste	kg	680	0.18	0.2%	3
	Coffee capsules	kg	212	2.44	2.9%	3
<b>Other consumables</b>	Electronic devices	piece	113	5.82	6.8%	3
	Furniture	piece	15	1.50	1.8%	3
	T-shirts	piece	0	0.00	0.0%	3
<b>Outsourcing</b>	Cleaning service	FTE	0.1	0.35	0.4%	3
<b>Total</b>				<b>85.4</b>	<b>100%</b>	

Source: 2Xideas

The two largest GHG emission contributors are business flights and commuting, representing 32.6% and 24.4% respectively of the 2Xideas carbon footprint. In 2023, around 29% of the kilometers traveled by air were compensated via airlines’ offset services.

The table also breaks down electricity and heating emissions at 2Xideas’ various office locations. Both 2Xideas offices in Switzerland and our Liechtenstein office consume 100% renewable electricity. The Swiss and Liechtenstein offices also source carbon neutral-labelled products from local energy suppliers.

<sup>5</sup> Passenger kilometers

Our main and most populated office is in Küsnacht, Switzerland. Although this office has the highest energy consumption of all our offices, heat and cooling production for the location is carbon-neutral as it is derived by the local energy supplier from Lake Zürich.

2Xideas' total carbon footprint increased by 54% between 2021 and 2022, due to the rising number of FTEs, as evident in the chart below. Between 2022 and 2023, there was a notable decrease in carbon emissions per full-time equivalent (tCO<sub>2</sub>/FTE), dropping from 1.4 to 1.17. This reduction can be primarily attributed to decreased air travel and a lower purchase rate of electronic devices.

**BREAKDOWN OF GHG EMISSIONS BY YEAR**

Scope	2021 tCO <sub>2</sub>	%	2022 tCO <sub>2</sub>	%	2023 tCO <sub>2</sub>	%
Scope 1	1.8	2.7%	4.1	4.1%	4.1	4.1%
Scope 2	6.4	9.8%	10.3	10.3%	10.1	11.9%
Scope 3	57.5	87.5%	85.8	85.6%	71.2	83.3%
<b>Total</b>	<b>65.7</b>		<b>100.2</b>		<b>85.4</b>	
FTE	48		71.4		73.3	
tCO <sub>2</sub> /FTE	1.37		1.40		1.17	

Source: 2Xideas

Even though 2Xideas has a relatively small carbon footprint, we are still striving to reduce our GHG emissions per FTE. We aim to achieve this mostly by addressing our two largest sources of emissions, i.e., commuting and business flights. We do this by making our employees more aware of the carbon impact of their commuting and by encouraging them to use the least carbon-emitting transport options. Meeting companies' executives in person is standard practice in the asset management industry and inevitable for our business model, and it is therefore difficult to avoid flying entirely. Nevertheless, 2Xideas tries to schedule business meetings as efficiently as possible, i.e., by planning the trips well in advance and optimizing the routes and schedules as much as possible. We have also implemented office guidelines across locations to encourage coworkers to adopt habits that minimize the carbon impact.

Year after year, we continuously evaluate the potential of new technology implementation to reduce our carbon footprint. In 2023, 2Xideas engaged Climeworks to capture Scope 1 emissions on our behalf through direct air capture and storage technology. We have followed the same approach since 2021, when we calculated our carbon footprint for the first time. Similarly, 2Xideas has offset our Scopes 2 and 3 emissions through myclimate, a Zürich-based nonprofit organization. Since 2021, our FTE base grew by almost 50%, resulting in a larger carbon footprint in absolute terms. Nevertheless, 2Xideas remains a carbon-neutral company that is on its way to becoming a net-zero company by 2040.

**ii) Asset Management Metrics**

Investors can contribute to the transition to net-zero by aligning their investment strategy with a decarbonization pathway. To measure progress on the decarbonization pathway elected by a company, we have chosen the Implied Temperature Rise metric provided by MSCI ESG Research LLC. ITR is an intuitive, forward-looking metric, expressed in degrees Celsius (°C), designed to measure the temperature alignment of companies with global temperature goals. ITR also considers Scope 3 emissions and hence encompasses the full scope of emissions a company creates with its activities. The ITR measure is also designed to support reporting along the recommendations of the TCFD.

True net-zero alignment is achieved if a company reaches an ITR of or below 1.5°C. An ITR of 2.0°C equals an alignment with the minimum goals of the Paris Agreement that aims to

limit global warming. As of 31 December 2023, our overall AUM has 76.3% of its investee companies in alignment with the Paris Agreement. This is substantially better compared to our benchmark, the MSCI ACWI, which lies at 58.6%. Of our total AUM base, 23.9% of the company's carbon emissions reductions target of 2.0°C or below have been approved by the SBTi. The firm's AUM ITR lies at 1.9°C. The ITR of the investments might vary slightly over time and is mainly influenced by two factors: the companies setting and reaching new reduction targets, and whether the sector exposure changes (e.g. more industrials companies lead to a higher ITR).

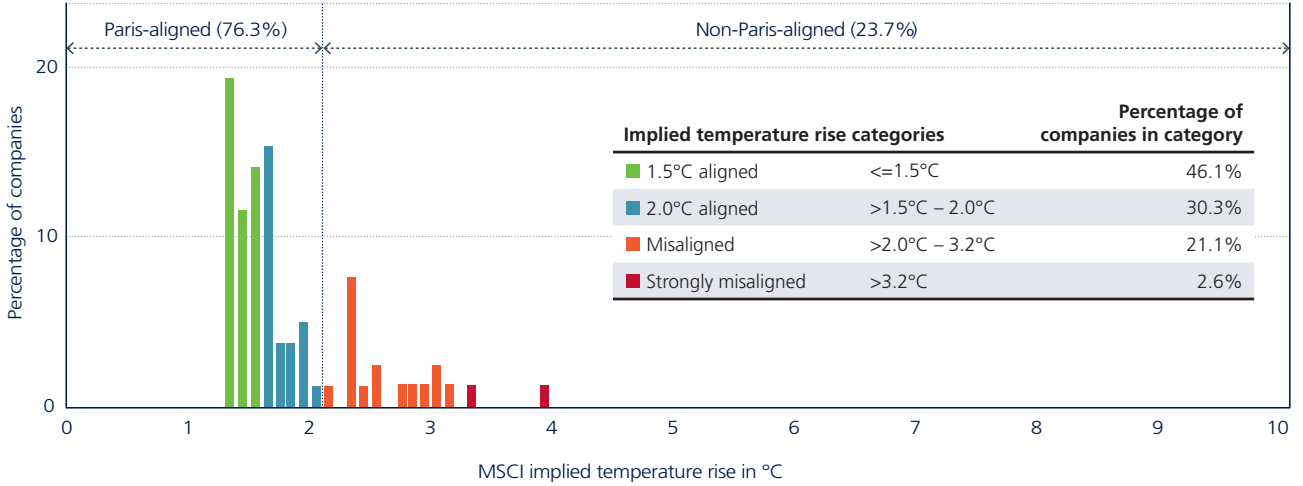
Our total AUM exhibits an ITR of below 2°C while our investment universe of approximately 2'100 companies has an ITR of 2.3°C. In other words, the aggregation of our investments are Paris-aligned. Our mid-term goal is to keep the ITR below 2.5°C until the year 2030, and we strive for all of our investment funds and mandates to exhibit an ITR of 1.5°C or below by the year 2050.

The graph below offers an overview of companies broken down in the ITR categories and the percentage make up. We hold climate-related engagements with companies that have an ITR higher than 2°C and encourage them to collaborate with SBTi to implement a carbon emission reduction strategy. We are always keen to also engage with companies that are below that threshold to hear how they are monitoring their progress toward their set climate reduction targets.

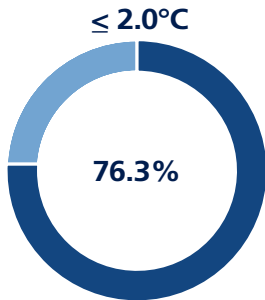
It is worth mentioning that MSCI continually updates its methodologies on best practices and improved data availability. The ITR Methodology has been reviewed during 2023, and certain assumptions and emissions budget allocations will be changed at the beginning of 2024. Certain investee companies will have a significantly higher ITR with the launch of the new methodology and we expect our overall ITR to be higher in the coming year. Once fully deployed and available, we will evaluate the differences on a single stock basis and intensify our engagements with the companies that are no longer aligned with the Paris Agreement under the revised ITR methodology.

**MSCI IMPLIED TEMPERATURE RISE DISTRIBUTION**

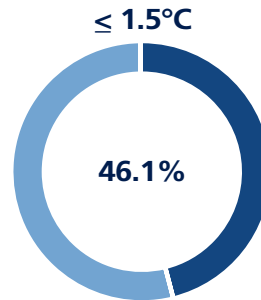
The issuers in the portfolio are distributed according to their implied temperature rise showing the number who are aligned with the paris agreement and the more ambitious 1.5°C temperature goal.



**SHARE OF COMPANIES ALIGNING WITH GLOBAL TEMPERATURE GOALS**



76.3% of companies within the portfolio (vs. %) for the benchmark align with the goal of limiting temperature increases to below 2°C.



46.1% of companies within the portfolio (vs. 0% for the benchmark) align with the goal of limiting temperature increase to below 1.5°C.

● Portfolio

**COMMITMENTS TO NET ZERO AND TRANSITION MONITORING**

	2Xideas AUM	MSCI ACWI
Company's carbon emission reduction initiatives aimed at aligning with the Paris Agreement (ITR is at 2°C or below)	67.8%	44.2%
Company's carbon emissions reductions target of 2°C or below has been approved by the Science Based Targets initiative (SBTi)	19.5%	19.1%

Source: MSCI ESG Research LLC, 2Xideas

Carbon emission metrics

The indicator “Financed Carbon Emissions” is sensitive to changes in the relative market value of the total AUM positions, and measures the carbon footprint for which an investor is responsible, per million USD invested. Carbon emissions are apportioned based on equity ownership.

The indicator “Financed Carbon Intensity” represents the carbon efficiency in terms of carbon emissions per unit of output and is adjusted to company size. The indicator is defined as the ratio of carbon emissions for which the aggregation of AUM is responsible to the sales for which our investments have a claim by its equity ownership. Emissions and sales are apportioned based on equity ownership.

The indicator “Weighted Average Carbon Intensity” (WACI) measures exposure to carbon intensive companies and serves as a proxy to potential climate change-related risks relative to the MSCI ACWI. It is defined as the portfolio weighted average of the companies’ carbon intensity.

The fourth indicator, “Total Financed Carbon Emissions,” does not allow for a direct comparison with other benchmarks or portfolios due to dependency on AUM, but shows in absolute numbers the total carbon footprint of the aggregated AUM. It measures the total carbon emissions for which the investments are responsible by its equity ownership.

FINANCED CARBON EMISSIONS

Tons CO <sub>2</sub> e/USD mn invested	2Xideas Total AUM	MSCI ACWI	% Var. vs. ACWI
Scope 1 & 2	4.7	54.3	-91.3%
Scope 3 upstream	50.9	99.9	-49.0%
Scope 3 downstream	48.2	248.2	-80.6%
<b>Total</b>	<b>103.8</b>	<b>402.4</b>	<b>-74.2%</b>

FINANCED CARBON INTENSITY

Tons CO <sub>2</sub> e/USD mn sales	2Xideas Total AUM	MSCI ACWI	% Var. vs. ACWI
Scope 1 & 2	19.2	144.6	-86.7%
Scope 3 upstream	209.1	265.9	-21.4%
Scope 3 downstream	198.3	660.2	-70.0%
<b>Total</b>	<b>426.6</b>	<b>1070.7</b>	<b>-60.16%</b>

WEIGHTED AVERAGE CARBON INTENSITY (WACI)

Tons CO <sub>2</sub> e/USD mn sales	2Xideas Total AUM	MSCI ACWI	% Var. vs. ACWI
Scope 1 & 2	19.0	129.8	-85.5%
Scope 3 upstream	206.4	254.6	-18.9%
Scope 3 downstream	159.3	478.1	-66.7%
<b>Total</b>	<b>384.7</b>	<b>862.5</b>	<b>-55.5%</b>

TOTAL FINANCED CARBON EMISSIONS/CARBON FOOTPRINT

Tons CO <sub>2</sub> e	2Xideas Total AUM
Scope 1 & 2	6,076.7
Scope 3 upstream	66,150.5
Scope 3 downstream	62,722.9
<b>Total</b>	<b>134,950.1</b>

To calculate these indicators, we consider all sources of greenhouse gas emission created by the activities of our investee companies, including relevant emissions of their suppliers and users of their products. Both the upstream and downstream scope 3 emissions are still mostly based on estimates, although data are becoming more accurate as disclosure standards improve. All indicators are using CO<sub>2</sub> equivalent (CO<sub>2</sub>e) as a unit of measurement as we consider not only CO<sub>2</sub> emissions but also all other greenhouse gases that play a role in global warming, such as methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), etc.

FOSSIL FUEL EXPOSURES

	2Xideas Total AUM	MSCI ACWI
Potential emissions from fossil fuel reserves (tCO <sub>2</sub> e/USD mn invested)	0.0	1,343.0
Fossil fuel-based revenue exposure	0.0%	3.7%
Thermal coal exposure (any tie)	0.0%	3.8%
Oil and gas exposure (any tie)	0.0%	11.5%
Exposure to power generation		
Thermal coal (apportioned fuel mix, % of generation)	0.0%	25.7%
Green and fossil fuel-based revenue coverage	99.1%	98.8%

## G) Outlook

In terms of climate change and sustainability we believe that we can make positive contributions by playing our part in actively embedding ESG and climate change metrics within our operations and within our investment process.

We are aware that many of the pledges companies have made are ambitious and that many targets may not (yet) be realistically achievable. Nevertheless, we are fundamentally convinced that we can contribute by continuously prompting companies to report transparently, set targets, embed oversight in their corporate governance structures and mitigate risks. Furthermore, we believe that companies that manage their sustainability and climate change risks thoughtfully and develop their business in a way to mitigate those risks will be better prepared to grow and create long-term shareholder value.

As a technology and quant affine company, we strongly believe in the future of data and technology as a catalyst to transitioning to a low-carbon economy. We continue our efforts to integrate climate-related data and analytics to our processes that will help us complement our fundamental research and decision making with non-financial metrics.



## H) Annex

### References to methodologies

#### ITR

<https://www.msci.com/documents/1296102/31997292/Implied-Temperature-Rise-Methodology-Summary.pdf>

#### CVaR

[https://www.msci.com/documents/1296102/17413431/ClimateVaR\\_Brochure.pdf](https://www.msci.com/documents/1296102/17413431/ClimateVaR_Brochure.pdf)

### Source of Carbon emissions data

This disclosure was developed using information from MSCI ESG Research LLC or its affiliates or information providers. Although 2Xideas AG information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the “ESG Parties”), obtain information (the “Information”) from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Furthermore, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

CALCULATIONS FOR CARBON EMISSIONS DATA

<p><b>EVIC: Enterprise Value Including Cash</b></p>	<p>Enterprise Value Including Cash (EVIC) is an alternate measure to Enterprise Value (EV) to estimate the value of a company by adding back cash and cash equivalents to EV.</p> <p><math>EVIC = Market\ capitalization\ at\ fiscal\ year\ end\ date + Preferred\ stock + Minority\ Interest + Total\ Debt</math></p> <p>The underlying data used to EVIC calculation is sourced from a company's accounting year-end annual filings. EVIC is updated and reflected once a year as the data is sourced annually.</p>
<p><b>Financial Carbon Emissions</b> tons CO<sub>2</sub>e / \$M invested</p>	<p>Allocated emissions to all financiers (EVIC) normalized by \$m invested. Measures the carbon emissions, for which an investor is responsible, per USD million invested, by their equity ownership. Emissions are apportioned based on equity ownership (% market capitalization).</p> $\frac{\sum_n^i \left( \frac{current\ value\ of\ investment_i}{issuer's\ EVIC_i} \times issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions_i \right)}{current\ portfolio\ value\ (\$M)}$
<p><b>Total Financed Carbon Emission</b> tons CO<sub>2</sub>e</p>	<p>Allocated emissions to all financiers (EVIC). Measures the total carbon emissions for which an investor is responsible by their equity ownership. Emissions are apportioned based on equity ownership (% market capitalization).</p> $\sum_n^i \left( \frac{current\ value\ of\ investment_i}{issuer's\ EVIC_i} \times issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions_i \right)$
<p><b>Financed Carbon Intensity</b> tons CO<sub>2</sub>e / \$M sales</p>	<p>Allocated emissions per allocated sales. Measures the carbon efficiency of a portfolio, defined as the ratio of carbon emissions for which an investor is responsible to the sales for which an investor has a claim by their equity ownership. Emissions and sales are apportioned based on equity ownership (% market capitalization).</p> $\frac{\sum_n^i \left( \frac{current\ value\ of\ investment_i}{issuer's\ EVIC_i} \times issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions_i \right)}{\sum_n^i \left( \frac{current\ value\ of\ investment_i}{issuer's\ EVIC_i} \times issuer's\ \$M\ revenue_i \right)}$

WEIGHTED AVERAGE CARBON INTENSITY DEFINITIONS

<p><b>Corporate constituents</b> tons CO<sub>2</sub>e / \$M sales</p>	<p>Measures a portfolio's exposure to carbon-intensive companies, defined as the portfolio weighted average of companies' Carbon Intensity (emissions/sales).</p> $\sum_n^i \left( \frac{current\ value\ of\ investment_i}{current\ portfolio\ value} \times \frac{issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions_i}{issuer's\ \$M\ revenue_i} \right)$
<p><b>Sovereign constituents</b> tons CO<sub>2</sub>e / \$M GDP nominal</p>	<p>Measures a portfolio's exposure to carbon-intensive economies, defined as the portfolio weighted average of Sovereigns' GHG Intensity (emissions/GDP).</p> $\sum_n^i \left( \frac{current\ value\ of\ investment_i}{current\ portfolio\ value} \times \frac{sovereign\ issuer's\ GHG\ emissions_i}{sovereign\ issuer's\ \$M\ GDP_i} \right)$

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