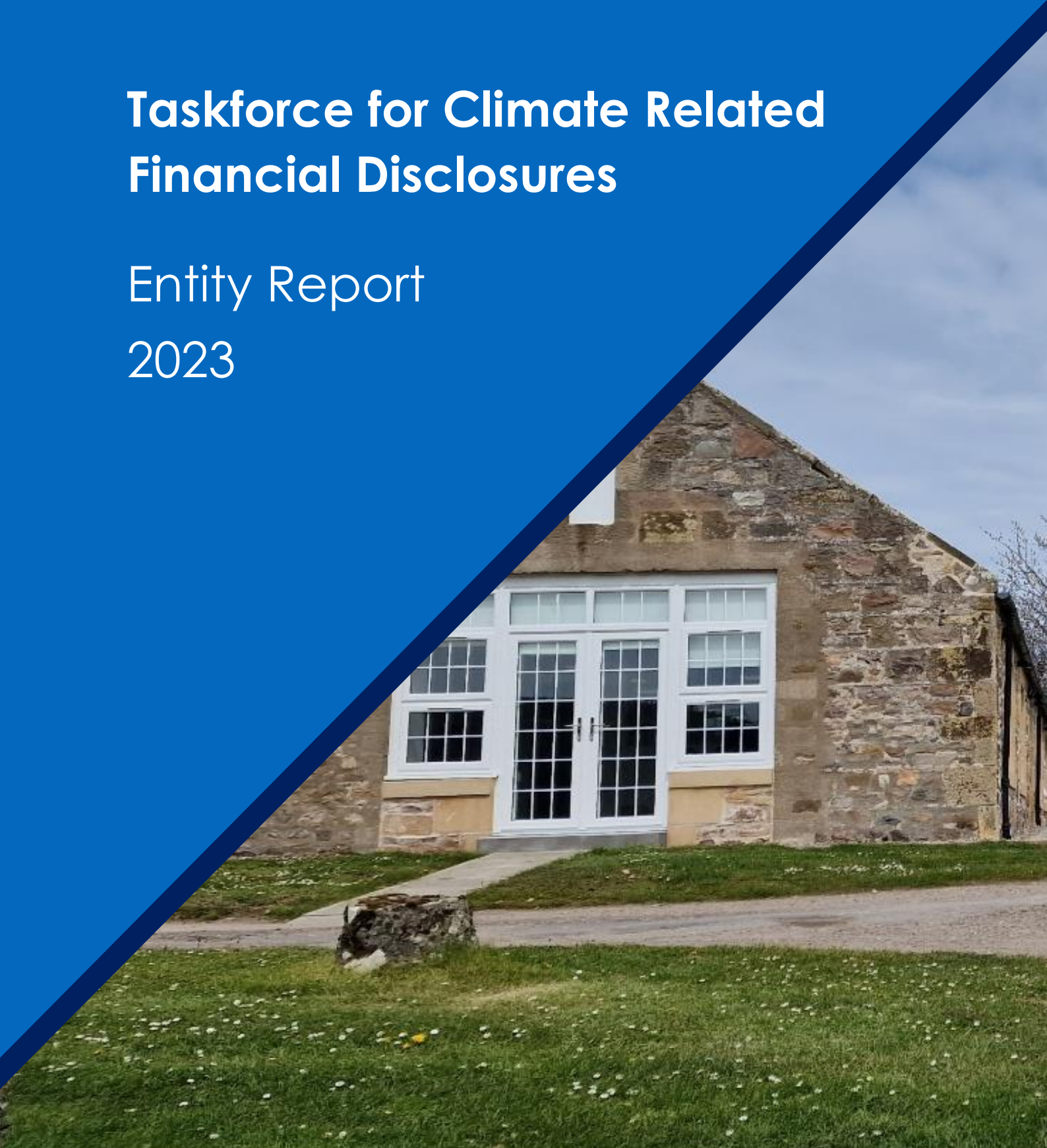




Valu-Trac Investment  
Management  
Limited

# Taskforce for Climate Related Financial Disclosures

Entity Report  
2023



## Purpose of this Report

This report is the first annual Task Force on Climate-related Financial Disclosures ("TCFD") report prepared by Valu-Trac Investment Management Limited ("VIML").

Climate change is a matter of significant risk to the global, UK and local financial system due to the physical and transitional uncertainties caused by it. To address this risk, VIML's management believes it is very important to disclose our assessment of climate risk and opportunities as openly and honestly as possible.

This document fulfils the regulatory requirement under chapters 2.1 and 2.2 of the FCA's Environmental, Social and Governance ('ESG') sourcebook.

Chapters 2.1 and 2.2 detail the requirement for firms to prepare and publish a 'TCFD entity report' containing climate-related disclosures consistent with the Task Force on Climate-Related Financial Disclosures ('TCFD') Recommendations and Recommended Disclosures.

This TCFD entity report sets out how the firm considers climate-related matters when managing assets on behalf of clients, encompassing disclosure of Governance, Strategy and Risk Management arrangements, as well as relevant climate related Metrics and Targets.

This report contains entity-level disclosures; whilst some of the disclosures contained in this report may be relevant for product-level reporting, this should not be considered a product-level report.

## VT Structure & Business Activities

VIML is regulated by the Financial Conduct Authority ("FCA") as a UK CPMI firm with MiFID top up permissions. We have been operating for 34 years and primarily provide the following key investment services: Independent Authorised Fund Manager ("AFM"), investment management, fund administration and transfer agency services.

As at 30 April 2024 the company manages 146 investment schemes with approximately £15bn Assets under Management (AuM), including UK UCITS, NURS, and QIS Funds.

VIML delegate portfolio management to third-party investment managers for 93% of current AUM. Appointed third-party investment managers are responsible for managing the assets and liabilities within a fund portfolio in accordance with each scheme's prospectus, which is the document constituting each scheme and describes to all stakeholders the scheme's objective, investment policies and permitted strategies in addition to applicable regulations.

All UK registered investment schemes must publish a TCFD product report. As the strategies and ESG metrics and targets are individually tailored to the scheme and underlying sub-funds, they are not aligned with the strategy and purpose of VIML and the results of those TCFD product reports have not been incorporated into this entity report.

Due to the nature of its role as AFM, VIML does not typically overlay its corporate ESG objectives on the investment strategy or portfolio requirements for individual funds. Such considerations are determined for each fund individually. When a fund does contain explicit ESG related targets, VIML will monitor and report on the actual performance of the fund against the set targets in its role AFM.

As an AFM and a company offering and operating in financial services, VIML is a comparably low carbon emission organisation. VIML's services are in the management of unitised collective investment schemes, which are themselves intangible: units are intangible property having monetary value, rather than physical property (such as housing, machinery, vehicles).

As such, VIML is primarily an indirect consumer of carbon. Usage is principally from energy required to support the operational activities and business travel of its employees.

### Basis of Preparation

VIML is not a member of a group in the UK and, therefore, this TCFD Entity report has been prepared on a solo basis.

This report covers the period from 1<sup>st</sup> January to 31<sup>st</sup> December 2023, in accordance with the requirements of chapter 2.1 of the ESG sourcebook, issued by the FCA. This is the first year these regulations apply to VIML and the TCFD entity report will be updated annually from now on and made publicly available on VIML's website ([Valu-Trac Investment Management Limited](#)).

It is anticipated that VIML's approach to emerging ESG matters, including TCFD entity reporting, will continue to evolve, particularly as climate-related data and quantification methodologies develop further. Presently, VIML remains in the transitional period of gathering reliable and accurate data for the purposes of establishing all ESG related reporting, metrics, and targets.

There is also an important distinction between this TCFD entity report and the TCFD product reports, the latter of which are reports for each investment scheme under the management of VIML meeting the requirements of ESG 2.3. The product level reports for these schemes are available separately at [valu-trac.com](#). They *do not* form part of this entity report.

### Compliance Statement

In respect of the VIML TCFD entity report, this compliance statement is underpinned by VIML's internal control and governance procedures. This provides assurance that the disclosures contained in this report comply with the FCA ESG sourcebook and the TCFD entity reporting requirements. This compliance statement should be read in conjunction with section 1.3 of the FCA ESG Handbook, which details the basis on which this report has been prepared and includes an expectation that the matters disclosed in this entity report will continue to evolve in line with market practice and the ongoing development of quantification methodologies.

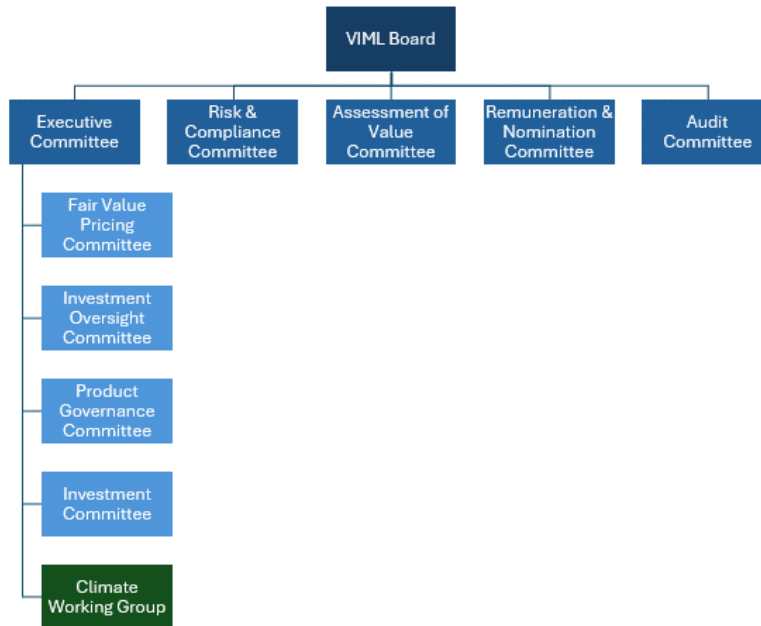
**Jeremy Brettell**

Chair, Independent Non-Executive Director

June 2024

## Governance

The governance structure of VIML is shown below:



The governing body of VIML is the Board of Directors ("the Board"), which is currently composed of three executive directors and four non-executive directors.

The Board is accountable for the supervision of the management of the business and the affairs of VIML, including the setting of the firm's strategy, financial objectives and risk appetite and provides direction to management generally through the Chief Executive Officer.

The Board is ultimately responsible for the oversight of risk management within VIML and has appointed the Risk & Compliance Committee to provide dedicated oversight and assurance in this area.

The Board has established four sub-committees, including the Risk & Compliance Committee, Audit Committee, Remuneration & Nomination Committee and Value Assessment Committee which are each chaired by an independent non-executive director.

The primary sub-committee responsible for the oversight of the risk management framework, including the review of VIML's risk appetite, is the Risk & Compliance Committee.

The Executive Committee ("ExCo") is responsible for the day-to-day management of the business, developing and executing VIML strategy and objectives as agreed with the Board, and ensuring that VIML culture and values are cascaded into the organisation's behaviours, actions and outcomes.

The Climate Working Group ("CWG") was formed in 2024 with the purpose of identifying and managing climate risks, opportunities, reporting requirements and objectives. The CWG reports to the Executive Committee.

## Governance of Climate Risks and Opportunities

The VIML Board has responsibility for the approval of the overall long-term strategy, objectives, and risk appetite along with oversight of the leadership of the business, including reviewing performance. Business sustainability, including climate change and its impacts to VIML, is a key matter of focus for the Board.

For that reason, the Board approved the creation of the employee led CWG. The CWG is a diverse body, composed of Valu-Trac employees across a range of seniority, experience and departmental disciplines, who have been given the responsibility of leading the company's climate agenda, identifying risks and opportunities, informing the business and arranging training, advising on all climate related reporting (including TCFD and SDR requirements) and understanding the latest developments resulting from governmental, legal and societal shifts as the global, national and local communities respond to climate change.

The CWG is in the early stages of assessing the risks and opportunities created by climate change on VIML. General (Enterprise) Risk assessments take place across several functional teams within VIML, owned and overseen by the Risk and Compliance Department. The CWG affords VIML a dedicated team to establish and monitor KRIs, new risks and opportunities and all regulatory and legal requirements faced by the firm in relation to climate change, supported by the Risk and Compliance Team.

The CWG is answerable to the Executive Committee firstly, then to the Board. Regular interaction with both governance bodies will allow the CWG's effectiveness to be monitored.

The CWG will commence reporting in 2024, including climate KPIs, metrics and targets. These will be key components of the TCFD entity reports produced after January 2025.

As an independent AFM, VIML also has oversight responsibilities of third-party investment managers. Where a scheme's prospectus discloses ESG related targets, VIML's investment management oversight team will review the investment manager's effectiveness and performance against stated ESG targets.

## Climate Strategy

VIML's current view of climate risks and opportunities follows three pillars of assessment:

- 1 – The impact of climate risks to business operations.
- 2 – ESG targets of investment schemes under VIML's management.
- 3 – Scenario analysis

### **Strategy in relation to the impact of climate risks to business operations and strategy**

The offices of VIML are located on a managed estate in the Moray region of Scotland. Employees have dedicated desk space and are also technologically enabled to work remotely as necessary. Employees are provided with appropriate equipment and facilities required to fulfil their role. Employees personally arrange any travel to the office. There is no public transport within sufficient proximity for employees to travel to and from the office. There is, therefore, a specific carbon footprint to VIML's business operations, related to the office location which is disclosed in more detail in the Metrics and Targets section below.

The above being considered, VIML's daily business operations are mostly exposed to the risk of cost increases to employees and operations that may result from efforts to address climate change. At this stage, management has determined there is insufficient information available to reasonably forecast the actual impact. Indicatively, these costs together represent ~ 5% of the VIML cost base and, even in the most severe scenario, the likelihood is any cost increases will moderately impact the company's financial performance. A material impact to financial performance is unlikely. Further analysis will be undertaken by the CWG on this area for the future reporting.

The principal strategic climate related risks to VIML have been identified as:

- **Changing demands for investment schemes** – investment schemes managed by VIML are beneficially owned by members of the public, financial institutions and a wide range of other stakeholders, whose views of climate change and the causes of it may impact their demand for investment products in the long-term. This gives rise to product risk and potentially opportunity, as the market for investment schemes may evolve to meet the requirements of changing customer demands.
- **Business continuity risk**, should an event occur denying staff or suppliers the ability to work from either the office or an alternative location due to, including but not limited to, a lack of feasible transport or the loss of energy supply to staff work locations.
- Increased costs to the business arising from **increases to insurance premiums** should climate events result in increased natural disaster payouts by insurance companies, **increased energy costs** as the UK continues to transition to green energy sources, which could decrease the supply of electricity to the national grid and increase costs if demand is unchanged or increases as the demand for renewably generated electrical energy (such as windfarms, solar and tidal power) lowers the demand for fossil fuel generated electricity.
- **Increased levies on travel costs**, should the Scottish and/or UK governments increase fuel and passenger surcharges as a mechanism to reduce emissions from higher carbon emission travel methods.

It is management's view that it is reasonable to anticipate an overall increase to costs and correlated reduction in profits, although of a limited scale.

## **Strategy in relation to ESG targets of investment schemes under VIML's management**

As an independent AFM, VIML's business purpose is the management of UK collective investment schemes. Collective investment schemes are pooled investment vehicles, with investors receiving scheme units in exchange for amounts invested. These units can then be redeemed at the investor's discretion.

Investment schemes appoint an investment manager to manage the portfolio of investments held by the scheme. VIML has appointed third-party investment managers for 93% of assets under management. VIML is the investment manager to the remaining 7%.

The decision as to whether an investment scheme should have ESG targets is determined on a case-by-case basis, considering its intended target investor base and the universe of investments and/or markets it is intending to focus on. Investment manager performance reviews are regularly performed by VIML and will include the oversight and challenge of ESG targets (where they exist), investment performance and the risk of greenwashing, which is the risk of falsely claiming an investment scheme is environmentally friendly or sustainable.

TCFD product reports are prepared by VIML for each investment scheme and are available on the Valu-Trac [website](#).

### **Scenario Analysis**

VIML, through the CWG, will use scenario analysis to inform assessments of the resilience of the organisation and its strategy to minimise disruptions and maximise VIML's ability to adapt to changes or uncertainties that might affect its performance. In the case of climate change, scenario analysis will allow VIML to develop insight into how the physical and transitional risks and opportunities arising from climate change might impact its business over time.

A firmwide climate-related scenario analysis exercise is presently being conducted by the CWG to understand the potential implications of climate-related transition and physical risk under a variety of emission scenarios to VIML's business strategy over the short-, medium-, and long-term.

This scenario analysis is based on three scenarios developed by the Network for Greening the Financial System ('NGFS'). These scenarios are:

- Orderly – Net Zero 2050,
- Disorderly – Delayed Transition, and
- Hot House World – Current Policies.

As the CWG is in the early stages of preparing a reliable, relevant, and comprehensively assessed scenario analysis, there are no results or conclusions to disclose in this report. VIML management expects to provide in-depth scenario analysis in the 2024 TCFD report.

## Risk Management

Climate change represents a strategic risk to Valu-Trac's business, as both the physical and transitional impacts of climate change could negatively affect the business. These impacts could arise from changing investor demand in relation to the funds managed by the business, physical effects of climate change affecting how our staff, suppliers and customers work and changes to laws and regulations caused by governmental actions taken to address climate change.

The Risk Management Framework is owned by the Board and maintained by VIML's Risk & Compliance team. The CWG will provide input where aspects of climate change can be incorporated into the VIML risk management framework. This framework is used to manage and monitor the exposure of the business to all known or unexpected risk events.

The CWG is constituted by a diverse range of individuals to identify, quantify, and understand climate risks, and provide insight and regular reporting to the Executive Committee and the Board.

The firm's enterprise risk management function operates using clearly documented policies and procedures. These are as follows:

- 1) Enterprise Risk Management (ERM) Framework
- 2) Risk Appetite Statement (RAS)

VIML has established a Risk & Compliance function which acts as the 2<sup>nd</sup> line of assurance and oversight over the business operations. The firm's risk management approach is developed and facilitated by the Risk team led by the Chief Risk and Compliance Officer ("CRCO"). The CRCO has a dual reporting line to the CEO and Chair of the Governing Body and reports to the Board (of which they are also a Director) and Risk & Compliance Committee outlining independent assessment of the firms' risk exposures against the Board's stated risk appetite.

The purpose of the Risk & Compliance Committee is to oversee and advise the governing body on the firm's overall current and anticipated risk profile including its position with respect to the Board's stated risk appetite and strategy and to assist the Firm's governing body in overseeing the implementation of that strategy by senior management. Members of the Risk & Compliance Committee have the appropriate knowledge, skills, and expertise to fully understand, manage and monitor the risk strategy and risk appetite of the Firm.



## Statement of risk appetite and risk register

### Statement of risk appetite

As an investment management sector participant, risk-taking is an inherent characteristic of the Firm's business activities and certain risk features are present in every transaction undertaken. As such, the Firm's approach to risk taking and how it considers and assesses risk relative to reward directly impacts its success. Therefore, the Firm has established limits on the level and nature of the risks that it is willing and able to be exposed to, whilst achieving its strategic objectives and business plans.

A key risk the firm faces is causing harm to its investors (consumers). Additionally, strategic risk may arise from the failure to remain relevant and competitive, and some indirect credit and market risk may arise from exposure to foreign exchange or interest rates. The governing body also recognises that reputational risk could arise from shortcomings in the performance of its duties as AFM to the funds.

VIML is committed to ensuring all business activities are conducted with a clear understanding of the risks, to maintaining a robust risk management framework, ensuring transparent disclosure, treating its customers fairly, and meeting the expectations of major stakeholders, including commercial partners, fund counterparts, employees and regulators and the interest of its shareholders.

### Risk Register

The Risk Register, within the Enterprise Risk Management (ERM) Framework, is designed to capture the material risks to which the Firm is exposed. This Risk Register sets out the individual risks together with the controls to mitigate the impact or likelihood of the risk occurring, and the residual risk assuming the proper implementation of the controls and any capital or liquid assets required to mitigate any residual risks.

The residual risk is assigned a "risk rating" which aids identification of any material residual risks which need to be considered further. The Risk Register is reviewed at least annually or where there is a material change in the Firm's business model and is considered to be a 'live' document.

### Consideration of Valu-Trac Risk Exposure & Impacts

As part of the formulation and maintenance of the Risk Register, the risk assessment explores the actual and potential risk scenarios using the below structure as its base. Each perspective is considered to ensure the firm is not only considering the direct risk of financial or other types of loss to the firm but also where an outcome may affect investors or the market.

## Material Risks

VIML's material risks are maintained in a risk register, reviewed, and updated by 1<sup>st</sup> and 2<sup>nd</sup> line of Defence on an ongoing basis and more formally via the Risk and Compliance Committee. The Risk & Compliance Committee receives extracts of Risk Register via standard reporting to the Committee within the CRCO's Risk Report. The risk register has been considered further when assessing the material harms that VIML can pose to itself, the market, and its clients as part of the assessment of its financial resilience required under its authorisation by the FCA. In addition to the individual entries in the risk register, KRIs are maintained, monitored, and overseen as an integral part of the firm's governance, with actions directed by the Committee where required.

## Metrics & Targets

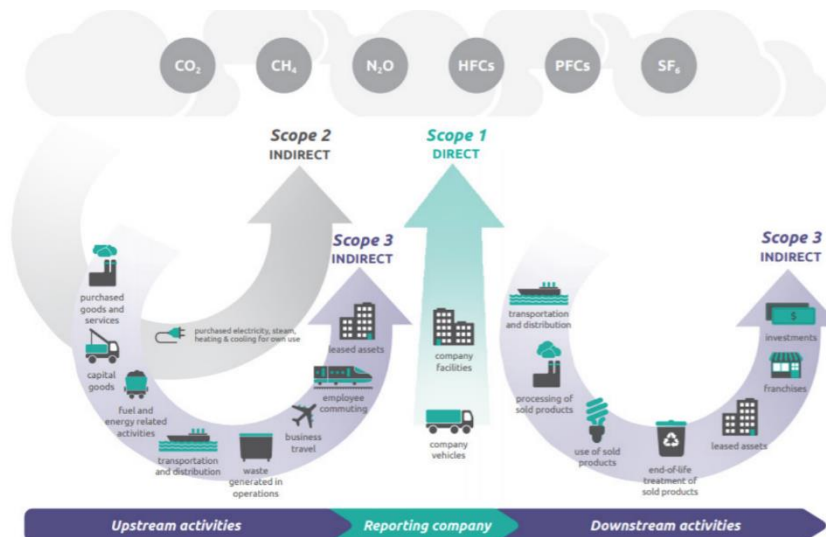
The assessment of climate related risks and opportunities remains under consideration by the VIML board, executive management and the CWG. ESG factors relating to financial service firms have already exhibited considerable change since becoming an important consideration for corporations worldwide. For this reason, VIML has elected to observe these developments further before it concludes on a full suite of appropriate and achievable targets.

VIML is in the process of accurately establishing its scope 1, scope 2 and scope 3 emissions. The TCFD guidance on Implementing the Recommendations, as well as the Guidance on Metrics, Targets, and Transition Plans, are also being considered.

**Scope 1 emissions** are the direct emissions from resources owned and controlled by VIML.

**Scope 2 emissions** are indirect emissions from the use of purchased energy.

**Scope 3 emissions** are all other indirect emissions that result from upstream activities (being emissions generated by suppliers in providing their services to VIML) and downstream activities (being emissions generated by VIML's products and services after their delivery to customers).



Owned emissions for VIML's total assets under care, being the GHG emissions associated with all the funds VIML manages, expressed in tons of CO<sub>2</sub>e at 29 December 2023 were **867,112 tCO<sub>2</sub>e** (Scope 1 + Scope 2). The weighted average carbon intensity of VIML funds was **141 tCO<sub>2</sub>e/\$m** on the given date. Please see [appendix 1](#) for more detail.

This compares to the owned emissions for 7% of the portfolio of assets under VIML direct investment management, which was **113,419 tCO<sub>2</sub>e** (Scope 1 + Scope 2). The weighted average carbon intensity of VIML funds was **151 tCO<sub>2</sub>e/\$m** on the given date. Please see [appendix 2](#) for more detail.

Due to funds having individualised and exclusive positions on the inclusion or exclusion of ESG related targets and objectives, the firm's ability to impact volume and intensity of emissions owned across the entire range of funds is limited. Nonetheless these metrics do provide insight into the consolidated positions of all funds combined.

The supply of energy to all buildings within the Orton estate, in which VIML is based, is through estate managed infrastructure.

In 2023, VIML used 110,959 kWh of energy. 70% is supplied to the VIML office by Scottish Power, which now generates all its electricity from renewable sources, being onshore and offshore windfarms.

The remaining 30% of energy is supplied from a biomass plant owned and operated by the Orton Estate. VIML management is confident that the carbon footprint is as low as possible, given its location, current technology, and available energy sources.

Scope 2 and scope 3 metrics are currently being assessed by the CWG and, if applicable, metrics and targets in relation to these measures will be disclosed in the 2024 report.



# Fund Summary Carbon Metrics

## Appendix 1

Item	Data type
<b>General characteristics</b>	
Reporting Period	15/12/2023
Name of the Fund	Aggregated Funds TCFD
Issuer Coverage % of Market Value	86.69
<b>Coverage of the Fund</b>	
Number of Instruments Covered	1.816
Number of Instruments Not Covered	342
<b>Main indicators of the Fund</b>	
Absolute Scope 1 GHG emissions (tCO2e)	3.643.554
Absolute Scope 2 GHG emissions (tCO2e)	1.089.489
Absolute Scope 3 GHG emissions (tCO2e)	65,371,794
Total Absolute GHG emissions (tCO2e)	70,104,837
<b>Owned Emissions</b>	<b>What is this?</b>
$\sum_{(sum\ of)} \left( \frac{current\ value\ of\ investment}{issuer's\ market\ capitalisation} * issuer's\ Scope\ (1,2\ or\ 3\ as\ appropriate)\ GHG\ emissions \right)$	<p>These are the GHG emissions associated with the portfolio expressed in tons of CO2e calculated by considering underlying company's emissions proportional to the investor's ownership stake in that that company. Simply put this can be considered the volume of GHGs an investor could be considered responsible for based on their investments. This metric can be used to track changes in GHG emissions in a fund.</p>
Scope 1 GHG emissions (tCO2e)	713,360
Scope 2 GHG emissions (tCO2e)	153,752
Scope 3 GHG emissions (tCO2e)	11,411,955
<b>Weighted Average Carbon Intensity (tCO2e per USD million revenue)</b>	<b>What is this?</b>
$\sum_{(sum\ of)} \left( \frac{current\ value\ of\ investment}{current\ portfolio\ value} * \frac{issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions}{issuer's\ \$M\ revenue} \right)$	<p>This is the fund's exposure to carbon-intensive industries as measured by tons of GHG emissions per \$m of revenue. Rather than summing the emissions per unit of revenue by the ownership percentage of an investment, emissions per unit of revenue are added together based on the percentage that each asset makes up of the fund. This gives an indication of the fund's overall carbon efficiency, with a lower WACI indicating less GHG emissions per unit of revenue. This metric allows for the best comparison between portfolios. The downside is that it is sensitive to outliers and will favour fund's holding companies that have pricing power (leading to higher profit margins) such as technology firms.</p>
<b>Weighted Average Carbon Intensity (WACI) (tCO2e/\$m)</b>	<b>141</b>



# Fund Summary Carbon Metrics

## Appendix 1 (continued)

Item	Data type
<b>Footprint and Intensity</b>	
	<p><b>Carbon footprint (tCO2e per USD million invested)</b></p> <p><b>What is this?</b></p> <p>This is the total carbon emissions for a fund divided by (normalised by) the market value of the fund to give the GHG emissions per \$ invested. This metric is fairly intuitive and can be used to compare portfolios to one another or to a chosen benchmark comparator. Potential downsides are this metric does not consider the carbon efficiency of investments and changes in the market capitalisation of underlying investments can be misinterpreted.</p> $\frac{\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{issuer's market capitalisation}} * \text{issuer's Scope (1,2 or 3 as appropriate) GHG emissions} \right)}{\text{current portfolio value (\$M)}}$
	<p><b>Carbon Footprint Scope 1 (tCO2e/\$M)</b> <b>44</b></p> <p><b>Carbon Footprint Scope 2 (tCO2e/\$M)</b> <b>9</b></p> <p><b>Carbon Footprint Scope 3 (tCO2e/\$M)</b> <b>705</b></p>
	<p><b>Carbon intensity (tCO2e per USD million revenue)</b></p> <p><b>What is this?</b></p> <p>This is a measure of the carbon efficiency of a fund. Owned Emissions are scaled by the owned revenues of the underlying investments with this figure expressed in tons CO2e per \$m of revenue. This metric can be used to compare portfolios to one another or to a chosen benchmark and importantly takes into account the carbon efficiency of the underlying investments i.e. how much GHG is emitted per unit of revenue generated.</p> $\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{current portfolio value}} * \frac{\text{issuer's Scope (1, 2 or 3 as appropriate) GHG emissions}}{\text{issuer's \$M revenue}} \right)$
	<p><b>Carbon Intensity Scope 1 (tCO2e/\$M)</b> <b>111</b></p> <p><b>Carbon Intensity Scope 2 (tCO2e/\$M)</b> <b>30</b></p> <p><b>Carbon Intensity Scope 3 (tCO2e/\$M)</b> <b>1,270</b></p>
<b>Implied Temperature Rise</b>	
	<p><b>Net Temperature Overall</b> <b>2-3°C</b></p> <p><b>Alignment Gap Well Below 2°C (tCO2e)</b> <b>15,842,059</b></p> <p><b>Alignment Gap 2°C (tCO2e)</b> <b>4,629,061</b></p> <p><b>Alignment Gap 3°C (tCO2e)</b> <b>-2,333,185</b></p> <p><b>What is this?</b></p> <p>An implied temperature rise indicates the expected increase in global temperature (in degrees Celsius) by 2100 that would occur if the projected GHG emissions associated with this fund were representative of the whole economy. The three alignment gaps (the excess amount of GHG emissions produced by the fund over the amount needed to limit temperature rise to the indicated level) are shown which correspond to globally recognised scenarios. Whilst the implied temperature rise provide an easily translatable measurement of a fund's alignment to global warming potential it must be noted that there are various approaches used and as such figures may not be comparable across providers.</p>



# Fund Summary Carbon Metrics

## Appendix 2

Item	Data type
<b>General characteristics</b>	
Reporting Period	29/12/2023
Name of the Fund	Aggregated Funds VT IM
Issuer Coverage % of Market Value	45.37
<b>Coverage of the Fund</b>	
Number of Instruments Covered	348
Number of Instruments Not Covered	72
<b>Main indicators of the Fund</b>	
Absolute Scope 1 GHG emissions (tCO2e)	2,063,024
Absolute Scope 2 GHG emissions (tCO2e)	368,558
Absolute Scope 3 GHG emissions (tCO2e)	12,928,153
Total Absolute GHG emissions (tCO2e)	15,359,735
<b>Owned Emissions</b>	<b>What is this?</b>
$\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{issuer's market capitalisation}} * \text{issuer's Scope (1,2 or 3 as appropriate) GHG emissions} \right)$	<p>These are the GHG emissions associated with the portfolio expressed in tons of CO2e calculated by considering underlying company's emissions proportional to the investor's ownership stake in that that company. Simply put this can be considered the volume of GHGs an investor could be considered responsible for based on their investments. This metric can be used to track changes in GHG emissions in a fund.</p>
Scope 1 GHG emissions (tCO2e)	105,785
Scope 2 GHG emissions (tCO2e)	7,634
Scope 3 GHG emissions (tCO2e)	212,988
<b>Weighted Average Carbon Intensity (tCO2e per USD million revenue)</b>	<b>What is this?</b>
$\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{current portfolio value}} * \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}}{\text{issuer's \$M revenue}} \right)$	<p>This is the fund's exposure to carbon-intensive industries as measured by tons of GHG emissions per \$m of revenue. Rather than summing the emissions per unit of revenue by the ownership percentage of an investment, emissions per unit of revenue are added together based on the percentage that each asset makes up of the fund. This gives an indication of the fund's overall carbon efficiency, with a lower WACI indicating less GHG emissions per unit of revenue. This metric allows for the best comparison between portfolios. The downside is that it is sensitive to outliers and will favour fund's holding companies that have pricing power (leading to higher profit margins) such as technology firms.</p>
<b>Weighted Average Carbon Intensity (WACI) (tCO2e/\$m)</b>	<b>151</b>



## Appendix 2 (continued)

Item	Data type
<b>Footprint and Intensity</b>	
<b>Carbon footprint (tCO2e per USD million invested)</b>	<b>What is this?</b>
$\frac{\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{issuer's market capitalisation}} * \text{issuer's Scope (1,2 or 3 as appropriate) GHG emissions} \right)}{\text{current portfolio value (\$M)}}$	<p>This is the total carbon emissions for a fund divided by (normalised by) the market value of the fund to give the GHG emissions per \$ invested. This metric is fairly intuitive and can be used to compare portfolios to one another or to a chosen benchmark comparator. Potential downsides are this metric does not consider the carbon efficiency of investments and changes in the market capitalisation of underlying investments can be misinterpreted.</p>
<b>Carbon Footprint Scope 1 (tCO2e/\$M)</b>	<b>59</b>
<b>Carbon Footprint Scope 2 (tCO2e/\$M)</b>	<b>4</b>
<b>Carbon Footprint Scope 3 (tCO2e/\$M)</b>	<b>119</b>
<b>Carbon intensity (tCO2e per USD million revenue)</b>	<b>What is this?</b>
$\sum_{(sum\ of)} \left( \frac{\text{current value of investment}}{\text{current portfolio value}} * \frac{\text{issuer's Scope (1, 2 or 3 as appropriate) GHG emissions}}{\text{issuer's \$M revenue}} \right)$	<p>This is a measure of the carbon efficiency of a fund. Owned Emissions are scaled by the owned revenues of the underlying investments with this figure expressed in tons CO2e per \$m of revenue. This metric can be used to compare portfolios to one another or to a chosen benchmark and importantly takes into account the carbon efficiency of the underlying investments i.e. how much GHG is emitted per unit of revenue generated.</p>
<b>Carbon Intensity Scope 1 (tCO2e/\$M)</b>	<b>117</b>
<b>Carbon Intensity Scope 2 (tCO2e/\$M)</b>	<b>34</b>
<b>Carbon Intensity Scope 3 (tCO2e/\$M)</b>	<b>466</b>
<b>Implied Temperature Rise</b>	
<b>Net Temperature Overall</b>	<b>3-4°C</b>
<b>Alignment Gap Well Below 2°C (tCO2e)</b>	<b>10,467,688</b>
<b>Alignment Gap 2°C (tCO2e)</b>	<b>2,133,940</b>
<b>Alignment Gap 3°C (tCO2e)</b>	<b>-2,758,733</b>
	<b>What is this?</b>
<p>An implied temperature rise indicates the expected increase in global temperature (in degrees Celsius) by 2100 that would occur if the projected GHG emissions associated with this fund were representative of the whole economy. The three alignment gaps (the excess amount of GHG emissions produced by the fund over the amount needed to limit temperature rise to the indicated level) are shown which correspond to globally recognised scenarios. Whilst the implied temperature rise provide an easily translatable measurement of a fund's alignment to global warming potential it must be noted that there are various approaches used and as such figures may not be comparable across providers.</p>	