ENVIRONMENTAL RISK MANAGEMENT POLICY

APPLICABLE TO	Invesco Hong Kong Limited ("**IHKL**") and Invesco Asset Management Singapore Limited ("**IAMSL**") (Collectively "**Invesco**")
DEPARTMENTS IMPACTED	Investment Teams in HK, Singapore and other jurisdiction who manages the applicable accounts under IHKL / IAMSL, Hong Kong Investment Risk and Quantitative Research Team, ESG Team, HK and Singapore Compliance
RISK ADDRESSED BY POLICY	This Policy addresses the risks associated with environmental issues which includes Climate change, Loss of biodiversity, Pollution and Changes in land use as adopted by the respective Investment Teams.
RELEVANT LAW & RELATED RESOURCES	• Fund Manager Code of Conduct and corresponding circular issued by the Securities and Futures Commission in Hong Kong • Guidelines on Environmental Risk Management issued by the Monetary Authority of Singapore ('MAS')
APPROVED BY	• Greater China Risk Management Committee
EFFECTIVE DATE	June 2022

GLOSSARY

A. Environmental risk management governance structure

1. This Policy addresses environmental issues that include Climate change, Loss of biodiversity, Pollution and Changes in land use. Invesco defines climate risk as both physical and transitional risks.

a. Physical risk stems from the direct impact of extreme weather events and progressive, longer-term shifts in the environmental pattern. For instance, rising frequency and severity of extreme weather events could impair the value of assets held by companies or indirectly impact supply chains, thus affecting companies' operations and profitability, and potentially their viability.

b. Transition risk arises from the process of adjustment to an environmentally sustainable economy, including changes in public policies, disruptive technological developments, and shifts in consumer and investor preferences. For instance, the transition to a low-carbon economy can impair the profitability of companies in carbon-intensive businesses. Punitive actions taken against companies that pollute the environment (e.g., revocation of operational permits for companies involved in open burning practices) could have a material impact on the valuation of companies in these sectors and result in stranded assets.

This Policy is applicable to (i) mutual funds / unit trusts managed by IHKL with discretionary authority and/or (ii) mutual funds / unit trust and mandates managed by IAMSL with discretionary authority and/or passive strategy (Collectively "**Applicable Accounts**").

Due to the varying regulatory requirements for this topic by the respective HK and Singapore Regulators, Invesco has adopted a master risk oversight approach which will be applied to the Applicable Accounts. For avoidance of doubt, for IHKL's managed mutual funds / unit trusts, adherence will be towards the relevant HK SFC's requirements which focus on the Climate-related risks. Similarly, for IAMSL managed mutual funds/mandates, adherence will be towards the relevant MAS's requirements which stipulate a broader scope of environmental risk.

2. The Board of IHKL and IAMSL (the 'Board') maintains overall oversight responsibility of environmental risk issues for the purpose of setting the direction from the top. The Board is responsible:

a. approving the environmental risk management framework and policies to assess and manage the environmental risk of the assets managed

b. setting clear roles and responsibilities of the Board and senior management, including personnel and functions responsible for oversight of environmental risk of the assets managed; and

c. ensuring that directors have adequate understanding of environmental risk, and senior management is equipped with appropriate expertise for managing environmental risk.

3. The Board delegates the environmental risk management oversight responsibility to the delegated Committee covering both IHKL and IAMSL, which is required to supervise and monitor the integration of environmental-related considerations into the investment and risk management processes. The delegated Committee is responsible for:

a. ensuring the development and implementation of an environmental risk management framework and policies, as well as tools and metrics to monitor exposures to the risk, including integration of environmental risk considerations in its investment research, portfolio construction, risk management and stewardship practices across different asset classes and investment strategies;

b. regularly reviewing the effectiveness of the framework, policies, tools and metrics and making appropriate revisions;

c. establishing an internal escalation process for managing environmental risk, and that appropriate and timely actions are taken to address the risk;

d. allocating adequate resources with appropriate expertise to manage the environmental risk of the assets managed; and

e. updating the Board on material environmental risk issues in a timely manner.

4. Invesco has put a three lines of defence model in place to oversee environmental risk. Business line should take into consideration environmental risk when establishing and managing funds, particularly if they invest in sectors with higher environmental risk. The risk management function would monitor the business line's implementation of environmental risk policy, including challenging practices and decisions where appropriate, while Compliance would ascertain the established policies and procedures adherence to applicable rules and regulations. The Internal Audit function would consider as part of its independent review, the robustness of the asset manager's risk management framework in managing environmental risks.

5. Hong Kong Investment Risk and Quantitative Research team ("the Risk Team") working together with other risk teams across the group to integrate environmental risk into the investment risk oversight process through assessing, monitoring and escalating material and relevant environmental related risks to the fund managers, senior leaders of investment function, the Greater China Risk Management Committee (or such other appropriate internal committee as may be designated from time to time) and the Board on a regular basis. The material and relevant environmental related risks will be discussed in the portfolio review meeting facilitated by the Risk Team with the key participants including senior leaders of investment team and fund managers.

6. The ESG Team in HK works with various departments to ensure proper environmental risk disclosure is met on both entity and fund level according to the requirements stipulated by the regulator and internal policy. The disclosure includes both the entity level environmental risk policy and fund level environmental risk metrics. If a fund deviates from the environmental risk policy, it shall be subject to the regular assessment with rationale being disclosed.

B. Investment management process

1. Investment teams are required to properly manage environmental risk according to the investment objective and the environmental risk policy. Due to the rapidly evolving nature of environmental-related risk management methodologies, it is difficult to provide a single set of practices which are universally applicable across the investment teams. Therefore, each investment team is required to integrate the environmental risk into their investment process by properly identifying material and relevant environmental related risk, such as physical and transitional environmental risks, for each investment strategy and fund they manage, factoring the material environmental related risks into the investment management process and taking reasonable steps to assess the impact of these risks on the performance of underlying investments. The investment teams shall apply their professional expertise to define what is deemed as material and relevant from an environmental risk perspective.

2. In considering the materiality of environmental risk with respect to the different asset classes, asset managers can take reference to international best practice. For instance, fund manager should consider environmental related risk including but not limited to the level of Greenhouse Gas ("GHG") emissions, vulnerability to extreme weather events, and linkages to unsustainable energy practices, deforestation and pollution. For portfolio construction, fund manager should consider measurement and management of the various environmental risk metrics that are present in a portfolio on an aggregate basis, when it is material. For example, fund manager can monitor the total GHG emissions of a portfolio against the benchmark.

3. Should there be developments that could materially affect the operations and financials of an investee company, fund manager should re-assess the risk and return profile of the investment or portfolio. This would allow the fund manager to make an informed decision on whether to continue with the investment, make adjustments to the composition of the portfolio, or put in place other mitigating measures to better manage the environmental risk in the investment or portfolio.

4. Fund manager should consider environmental scenario analysis of portfolios for risk management purposes. The analysis includes an assessment of physical and transition risks across a range of climate-related scenarios, including increases in global temperature, and whether the transition to a low-carbon economy occurs in an orderly or disorderly fashion. For example, on physical risk, an asset manager could assess the impact on revenue and profitability of investee companies that are more exposed to sea level rise (such as companies owning seafront properties) or extreme weather events (such as agricultural companies). On transition risk, asset managers could assess the level of sensitivity of an investee company's cost of doing business to higher carbon price.

5. Engagement with company management and proxy voting play a fundamental role in helping manage environmental risks and enhance the value of investments. Proxy voting decisions lies with each investment team in accordance with Invesco's global firmwide proxy policies. While for engagement, there is a global process to ensure that the environmental and environment targeted engagements are a collaboration between the Global ESG Research team and the investment teams across the firm who may have interest in the issuer. Investment teams should consider the result of engagement in their investment decision.

C. Environmental risk management framework

1. The Risk Team has implemented an environmental risk management framework that entails the following key aspects. The Risk Team is responsible for:

a. evaluating the material and relevant environmental related risk against benchmark (whenever there is a proper benchmark) for the investment strategy managed. The team looks at multiple environmental risk metrics to assess the risks from a holistic perspective taking into consideration the availability of the data and international best practice.

b. monitoring the environmental risk exposure of the portfolio against benchmark on a regular basis. If there are any material and relevant environmental related risks, the team will report to the fund managers for their consideration. Further, the risks will be discussed in the portfolio review meeting, facilitated by the Risk Team, with participants including the senior leaders of investment team and the fund managers.

c. using third-party data providers, such as ISS for carbon footprint data and Planetrics for temperature alignment and scenario analysis data on each security/issuer. Also, Invesco has implemented a proprietary ESG platform called ESGintel covering both equity and fixed income universe that assigns environmental, social and governance risk rating on individual security/issuer. The team uses a bottom-up approach to compute the overall environmental score of portfolio/benchmark by using the individual security's environmental risk rating from ESGintel.

d. conducting scenario analysis for the portfolios against the benchmarks on a regular basis based on the third-party data provider. The team selects 6 scenarios following the recommendation of The Network of Central Banks and Supervisors for Greening the Financial System ("NGFS") and simulates portfolio's physical, transitional and combined impact to the environmental risks under different pathways.

e. where it is assessed that environmental risks are irrelevant to certain types of investment strategies or funds under management, maintaining appropriate records to explain why environmental risks are irrelevant in those cases.

2. <u>Risk monitoring</u>

After defining a set of environmental risk metrics, the team uses Invesco's internal risks system, i.e., Multi Analytics Platform ("MAP"), to compute the metrics against the benchmark. Thresholds on the selected metrics are set in MAP for regular monitoring. If an exposure exceeds the threshold, MAP will automatically send email alert to the fund manager and Risk Team for further investigation and follow up. If the risk is considered to be material and relevant, the fund manager should provide explanation and consider this in its investment decision.

3. <u>Portfolio review and escalation process</u>

The climate and environmental risk report is included as part of the portfolio review materials to be circulated before the regular portfolio review meeting which is a forum for discussion of investment and performance related issues including the environmental risk and ESG issues. During the review meeting, both the Risk Team and ESG specialist will highlight the material and relevant environmental risk for the fund manager to comment. Fund manager should take reasonable steps to assess the impact of the risks on the performance of underlying investments and determine if remediation is required.

4. The Risk Team reviews the environmental risk management policy, framework, and calculation methodology regularly, and no less than annually. Any amendments of the policy will be reported to the Board for approval.

D. Climate and environmental risk oversight report

1. For the environmental risk assessment, Invesco adopts several metrics to assess and monitor the environmental risk of the portfolio against the benchmark (if applicable). These metrics include:

    a. Carbon footprint
    b. Temperature alignment
    c. Environment risk rating
    d. Scenario analysis

2. The Risk Team produces the customised environmental risk report by using the internal Multi-Analytics Platform "MAP" which is hosted in HK. The report is made available to various internal users including the Investment Team, Product Team, ESG Team and Sales Team via MAP. Thresholds on environmental risk exposures are set in the MAP for regular monitoring and reporting. If the threshold is exceeded, MAP will send email alert to fund manager and Risk Team for investigation. The different environmental risk statistics will be discussed in the following sections.

3. Carbon footprint

The Risk Team calculates the portfolio and benchmark level carbon footprint on a regular basis according to the regulatory requirement. The formula of the carbon footprint is shown as below.

$$\sum_{N}^{i} \frac{\left(\frac{Current\ value\ of\ investment_i}{Investee\ company's\ enterprise\ value_i} \times Investee\ company's\ Scope\ 1, 2\ and\ 3\ Greenhouse\ gas\ emissions\ _i\right)}{\text{Current Portfolio Value (\$ million)}}$$

Scope 1, 2 and 3 greenhouse gas emission data from ISS is presented in the report. The current portfolio and benchmark level carbon footprint is calculated against their historical range for comparison. The report also includes the top 5 contributors to the carbon footprint of the portfolio for the fund manager to consider.

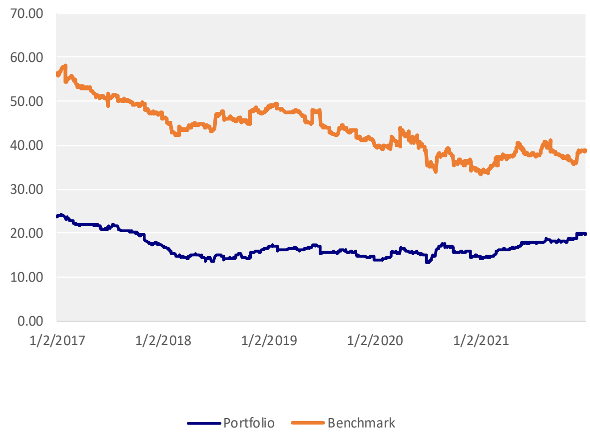
Invesco

(3) Carbon Footprints

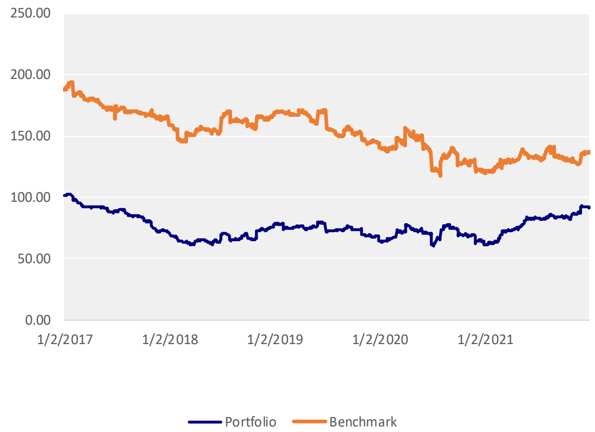
Emissions

	Portfolio	Benchmark	Relative
Scope 1 Emissions	7.82	25.31	-17.49
Scope 2 Emissions	11.97	13.59	-1.61
Scope 3 Emissions	71.94	97.83	-25.90
Scope 1+2 Emissions	19.79	38.90	-19.10
Scope 1+2+3 Emissions	91.73	136.73	-45.00
Carbon Intensity			
Covered % of AUM	99.74%		

5-Year Historical Scope 1+2 Emissions



5-Year Historical Scope 1+2+3 Emissions



Top 5 Carbon Emissions Contributors

No.	Sedol	Name	MSCI Sector	Port %	Bmk %	Active	Scope 1	Scope 2	Scope 1+2	Scope 3	Scope 1+2+3
1		Company A	Consumer Disc	2.30	0.52	1.78	1.5	1.7	3.2	17.7	20.9
2		Company B	Consumer Disc	2.47	0.14	2.32	0.6	2.2	2.8	15.7	18.6
3		Company C	Industrials	3.18	0.99	2.19	2.1	0.7	2.8	7.5	10.3
4		Company D	Materials	2.71	0.20	2.51	1.3	1.5	2.8	3.8	6.6
5		Company E	Industrials	4.41	1.10	3.32	0.8	1.5	2.2	6.0	8.2

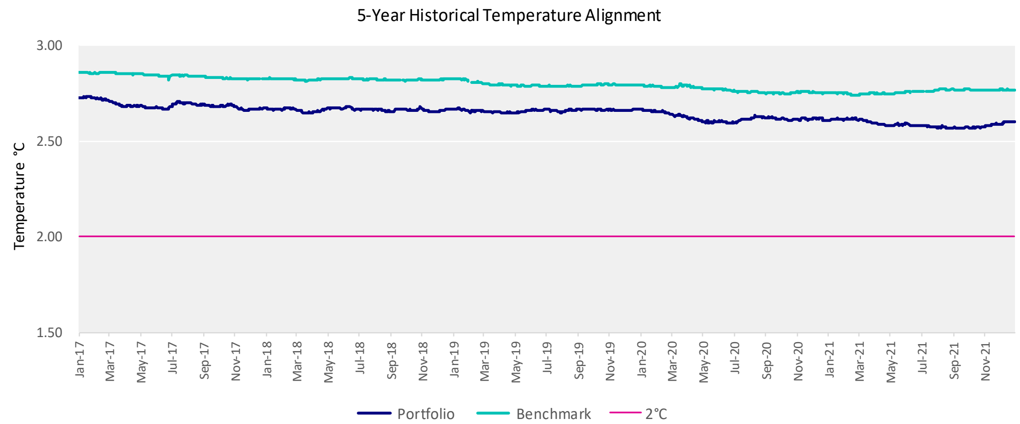
4. Temperature alignment

The temperature alignment is a forward-looking metric that attempts to convey the future trajectory of greenhouse gas emissions of a given entity or portfolio in terms of its estimated global temperature rise from pre-industrial levels. The report also shows the trend of temperature alignment of the portfolio against the benchmark level over the past 5 years for comparison. The temperature alignment is calculated from a bottom-up approach taking into consideration the security weight (excluding uncovered assets and rebase to 100%). The report also compares the percentage of the time the portfolio's temperature alignment is above/below the benchmark over the past 5 years. This will help the fund manager to understand the trend of temperate alignment of the portfolio against the benchmark, and assess if there is any material and relevant environmental related risk.

The report includes the percentage of the AUM of the portfolio and benchmark with temperature alignment below 2°C and the top 10 contributors to the temperature alignment in the portfolio.

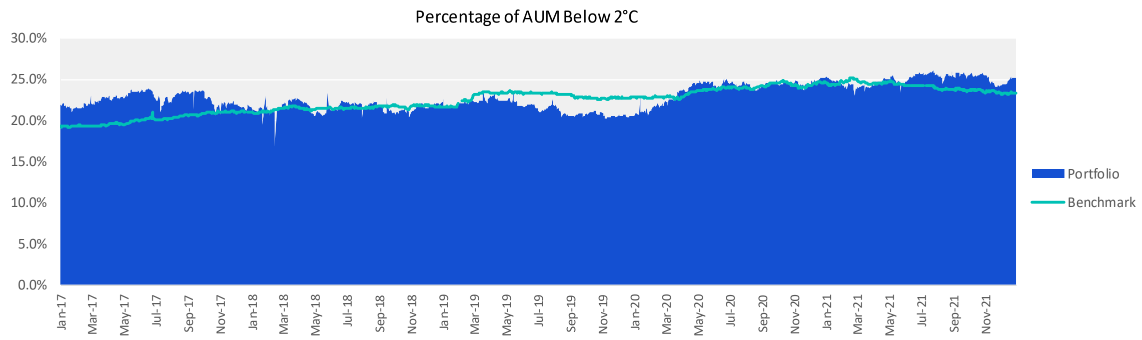
(2) Temperature Alignment

Historical Temperature Alignment



Current Temperature °C	
Portfolio	2.60
Benchmark	2.77

% of Time Above/Below Bmk	
Below Bmk	100%
Above Bmk	0%



Top 10 Temperature Contributors

No.	Sedol	Name	MSCI Sector	Port %	Bmk %	Active	P Adj%	B Adj%	°C	%Contrib to temp
1		Company A	Industrials	4.41	1.10	3.32	4.43	1.10	3.71	6.31
2		Company B	Financials	4.13	0.52	3.62	4.15	0.52	3.21	5.12
3		Company C	Consumer Discretionar	4.22	0.13	4.09	4.23	0.13	2.72	4.42
4		Company D	Materials	2.71	0.20	2.51	2.72	0.20	3.68	3.85
5		Company E	Consumer Discretionar	2.56	3.91	-1.35	2.57	3.92	3.52	3.47
6		Company F	Industrials	3.62	1.22	2.40	3.63	1.22	2.42	3.37
7		Company G	Consumer Discretionar	2.47	0.14	2.32	2.47	0.14	3.53	3.35
8		Company H	Information Technolog	3.08	0.65	2.43	3.09	0.65	2.70	3.20
9		Company I	Financials	3.36	0.29	3.08	3.37	0.29	2.38	3.09
10		Company J	Communication Servic	2.54	0.08	2.46	2.55	0.08	3.13	3.06
		Top 10 Total		**33.12**	**8.24**	**24.88**	**33.21**	**8.25**		**39.25**

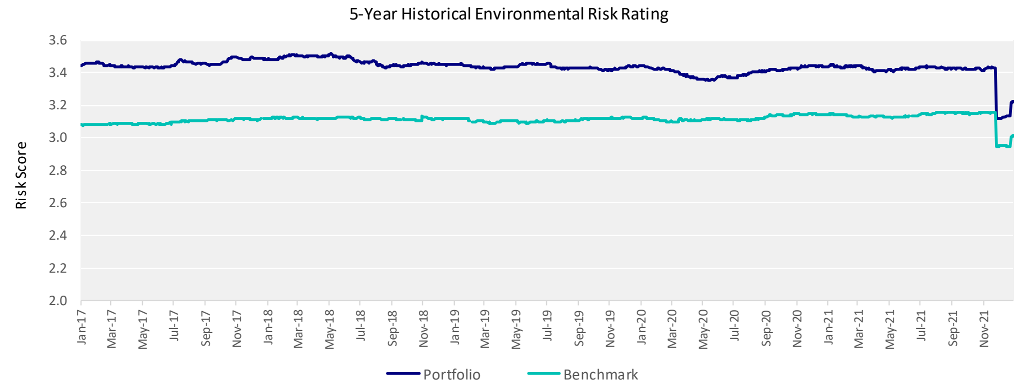
5. Environment risk rating

The report shows the environmental score from the ESGintel (Invesco internal proprietary ESG platform). The environmental risk rating has five-scale points, which are:

- Negligible (Score 1)
- Low (Score 2)
- Medium (Score 3)
- High (Score 4)
- Severe (Score 5)

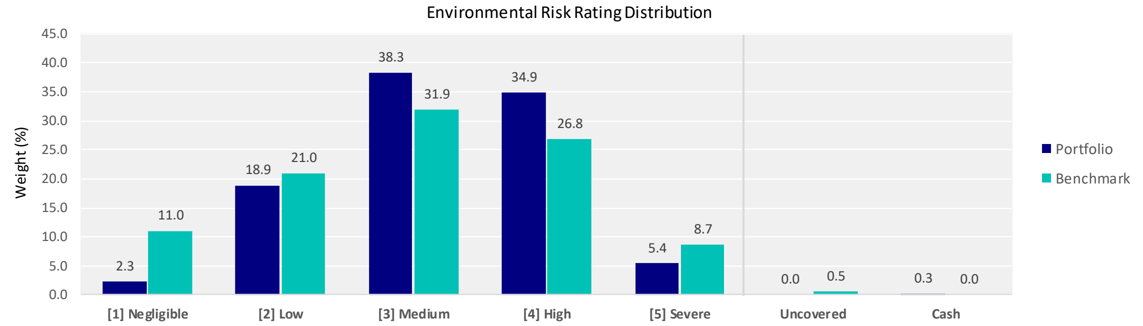
(1) Environmental Risk Score (Lower the better)

Historical Environmental Risk Score



Current Enviro. Risk Rating	
Portfolio	3.22
Benchmark	3.01

% of Time Above/Below Bmk	
Below Bmk	0%
Above Bmk	100%



Top 10 Environmental Risk Score

No.	Sedol	Name	MSCI Sector	Port %	Bmk %	Active	P Adj%	B Adj%	Rating	%Contrib to total score
1		Company A	Consumer Discretionar	1.88	0.03	1.85	1.89	0.03	5	2.9
2		Company B	Consumer Discretionar	1.31	0.02	1.28	1.31	0.02	5	2.0
3		Company C	Industrials	1.30	0.01	1.29	1.30	0.01	5	2.0
4		Company D	Health Care	0.89	0.50	0.39	0.89	0.51	5	1.4
5		Company E	Industrials	4.41	1.10	3.32	4.43	1.11	4	5.5
6		Company F	Financials	4.13	0.52	3.62	4.15	0.52	4	5.1
7		Company G	Industrials	3.62	1.22	2.40	3.63	1.23	4	4.5
8		Company H	Information Technolog	3.08	0.65	2.43	3.09	0.65	4	3.8
9		Company I	Consumer Discretionar	2.67	0.04	2.63	2.68	0.04	4	3.3
10		Company J	Communication Servic	2.54	0.08	2.46	2.55	0.08	4	3.2
		Top 10 Total		**25.84**	**4.18**	**21.67**	**25.91**	**4.20**		**33.83**

The environmental risk rating is calculated from a bottom-up approach based on the security weight (excluding uncovered assets and rebase to 100%). The lower the environment risk rating, the better it is. The Risk Team calculates the 5-year historical environment risk rating for the portfolio and benchmark (if applicable) based on the historical holdings to see how the trend evolves over time.

Further, the report shows the distribution of the assets under different environmental risk rating against the benchmark to assess if the portfolio has any high exposures to the high or severe categories as well as the top 10 contributors to the portfolio environmental risk rating. This helps fund manager to understand the overall risk profile against the benchmark and assess the environmental risk for those stocks with high environmental risk rating.

6. Scenario analysis

The report compares the scenario analysis on the portfolio against the benchmark. The scenario analysis helps fund manager to understand the resilience of the investment strategy to the environmental risk under different pathways based on the portfolio holdings. 6 scenarios recommended by NGFS is chosen for the portfolios scenario analysis as shown in the table below.

#	Scenario	Description
1	Net Zero 2050	Global CO2 emissions are at net-zero in 2050.
2	Divergent Net Zero	Optimal carbon prices in line with long-term targets are implemented after 2020 to bring the median temperature below 1.5°C in 2100.
3	Below 2°C	Optimal carbon prices in line with long-term targets are implemented after 2020 and keeps 67-percentile of warming <2°C throughout the 21st century.
4	Delayed Transition	The next 10 years see a "fossil recovery" and thus follow the trajectory of the current policies scenario until 2030.
5	NDCs (“National Defined Commitment”)	Currently pledged unconditional NDCs are implemented fully, and respective targets on energy and emissions in 2025 and 2030 are reached in all countries.
6	Hot House World	Existing environmental policies remain in place, and there is no strengthening of ambition level of these policies.

The scenario analysis simulates the impact of environmental related physical, transitional risk and the combined on the portfolio against the benchmark, from a bottom-up approach based on the security weight (excluding uncovered assets and rebase to 100%) under different environmental pathways. Also, the environmental risk report highlights the top 5 valuation detractors in the portfolio.

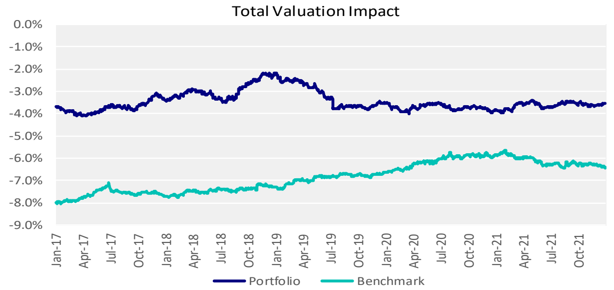
(4) Scenario Analysis

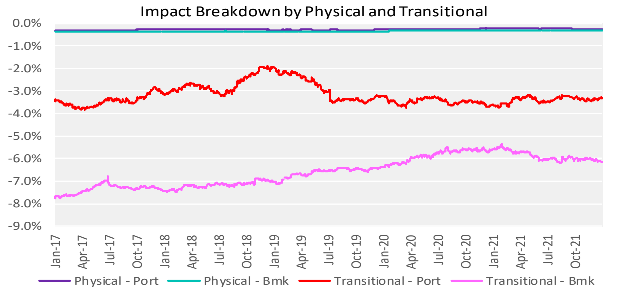
Net Zero 2050 - Global CO2 emissions are at net-zero in 2050

	Physical	Transitional	Combined	Covered %
Impact on Portfolio	-0.25%	-3.30%	-3.54%	99.7%
Impact on Benchmark	-0.32%	-6.17%	-6.42%	100.0%
Relative Valuation Impact	0.07%	2.87%	2.89%	

Physical risk: The direct shocks due to climate change come in the form of both chronic and acute hazards.

Transitional risk: The primary direct shock to assets from transition risk is carbon pricing.





Top 5 Valuation Impact Contributors

No.	Sedol	Name	MSCI Sector	Port %	Bmk %	Active	P Adj%	B Adj%	Total Impact	%Contrib to total impact
1		Company A	Consumer Discretionar	2.56	3.91	-1.35	2.57	3.92	-39.7%	15.34
2		Company B	Consumer Discretionar	2.11	0.37	1.74	2.12	0.37	-45.5%	14.48
3		Company C	Materials	1.67	0.20	1.47	1.67	0.20	-30.0%	7.54
4		Company D	Industrials	2.28	1.29	1.00	2.29	1.29	-20.0%	6.89
5		Company E	Industrials	3.18	0.99	2.19	3.19	0.99	-13.2%	6.32
		Top 5 Total								50.58

Revision History:

- June 2022 – Initial Adoption of policy