#### OUR APPROACH TO CLIMATE-RELATED RISK MANAGEMENT

## Goal

Haitong International Securities Group Limited and its subsidiaries (collectively, the "**Group**") adhere to the philosophy of green and sustainable development and advocates responsible investment. The Group attaches high importance to issues relating to climate change, including how climate change brings about business risks and opportunities, as well as how the Group's operations, investments and financing activities have impact on climate change. The Group aims to align its activities with the environmental, social, and governance ("**ESG**") goal of the Group.

We have taken a number of initiatives for climate-related risk management and responsible investment. In 2021, we partnered with China-UK Climate and Environmental Information Disclosure Pilot Working Group and jointly published "Chinese Financial Institutions' Route to Achieving Carbon Neutrality" Report, and jointly published "Hong Kong: the International Financial Center for the Future" with the One Country Two Systems Research Institute, advocating the development of Hong Kong as a sustainable financial centre and ESG investment hub in the world. We also signed a Memorandum of Understanding (MoU) with the Hong Kong Quality Assurance Agency to jointly promote the development of green and sustainable finance.

In line with the Group's ESG goal, Haitong International Asset Management Limited ("**HTIAM**"), Haitong International Asset Management (HK) Limited ("**HTIAMHK**") and Haitong International Investment Managers Limited ("**HTIIM**") (collectively, the "**Entities**") will:

- 1. develop internal capability to assess climate-related risks and opportunities during investment processes:
- 2. analyse and mitigate climate-related risks to protect investor interests;
- 3. advocate more responsible and sustainable behaviour regarding climate change through stewardship activities;
- 4. implement a scrutiny model in active portfolios for managing securities which pose significant climate risks;
- 5. help clients benefit from opportunities created by energy transition;
- 6. launch investment products with explicit temperature alignment goals; and
- 7. collaborate with the investment community to tackle climate-related risks.

## **Governance**

The responsibility for implementing our approach to climate-related risks resides with all personnel in our business. We have an established governance framework enabling us to identify and review climate-related risks, with clear accountabilities.

Our boards of the Entities have delegated oversight of the management of the climate risks to the Entities' ESG Committee ("ESGC") at the board level. The ESGC provides oversight of the climate risk strategy, reviews and monitors the implementation of the policies and practices by the Entities, and ensures compliance with relevant legal and regulatory requirements issued by the SFC with reference to international standards. The ESGC monitors and responds to emerging ESG issues, makes recommendations to the Entities where appropriate to improve their ESG performance, and oversees the progress against goals in addressing climate-related issues.

The ESGC has two management level sub-committees: AAM ESG Committee (reporting to the board of HTIAM) and ASM ESG Committee (reporting to the board of HTIAMHK and HTIIM) (collectively, the "**Sub-committees**"). The Sub-committees are responsible for:

- guiding and reviewing the formulation of climate-related risk policies and strategies to ensure that they are in line with the needs of the Entities and comply with applicable legal and regulatory requirements;
- 2. overseeing the process used to identify, evaluate and manage material climate-related issues:
- 3. reviewing climate-related disclosures and providing suggestions to the ESGC for approval;
- 4. reviewing the Entities' climate risk management progress and reporting impact against climate-related goals under the Entities' climate strategy;
- 5. providing climate risk advisory and guidance on major deals and projects belonging to Entities' asset management business; and
- 6. leading Entities' business segments to conduct concrete analysis on climate risks and opportunities.

Our boards of the Entities are informed regularly about climate-related issues. The members of the ESGC and Sub-committees shall meet at least annually, or on an ad hoc basis as necessary, to review the risk management framework and deal with climate related matters. The minutes of the ESGC and Sub-committee meetings shall be recorded and circulated within a reasonable time.

Each of the Sub-committees forms its own working group, which is responsible for identifying relevant and material physical and transition climate risks for the underlying investments of the funds managed by the Entities. The working groups will also assess the impact of climate risks on the performance of underlying investment and the relevance and utility of scenario analysis in evaluating the resilience of the fund's investments, and report to the Sub-committees on a regular basis.

#### **Investment Management**

The Entities' investment management process covers the phases from the origination of new investment to the post-investment monitoring, which includes the following steps:

- 1. **Origination:** the investment teams of the Entities (the "**Investment Teams**") will conduct climate-related risk screening for potential projects;
- 2. **Due Diligence:** the Investment Teams will perform due diligence with climate-related risks consideration on the target companies:
- 3. **Review and Approval:** the Investment Teams will take into account climate-related risks in decision making processes;
- 4. Funding: the Investment Teams will request relevant information from the investee companies, or where applicable, (for investments in fund of funds) funds and/or (for investments in fixed income instruments) issuers of fixed income products (each a "Subject Company", and collectively, the "Subject Companies") and perform research on the impact of climate-related risks on the investments; and
- 5. **Monitoring:** the Investment Teams and other working groups will continuously monitor climate-related data and make relevant disclosures to investors.

Assessing relevance and materiality

The Investment Teams identify the relevance and materiality of the climate-related risks, which include physical risk and transition risk, for each of the funds under management. The

following procedures will be carried out in assessing relevance and materiality in each phase of the investment decision-making process:

- 1. The Investment Teams will consider sectors, geographies and asset classes in determining the relevance of climate-related risks. Attention will be drawn upon whether the investment portfolios are unintentionally skewed towards the carbon-intensive sectors.
- 2. In assessing materiality, the Investment Teams will take into account qualitative and/or quantitative approaches, including meetings with management of the Subject Companies to analyse the exposure of their business models to climate risks, and the use of climate data from the public and third party data providers.
- 3. Subject to data availability, the Investment Teams may also identify the Subject Companies' carbon footprint and ESG ranking or news, assess the impact of carbon price changes or carbon tax (if any) on the value of investment portfolios, and/or perform benchmarking to evaluate the magnitude of portfolios' climate-related risk exposures.
- 4. If material climate risks are spotted for certain investments, the Investment Teams should try to engage a dialogue with the Subject Companies regarding plans to mitigate such risks, or even reduce exposure to such risks by divestment, for the transition to a low-carbon economy.

For those investments identified as irrelevant or immaterial to climate risks, simplified steps aforementioned will be applied. The relevance and materiality assessment should be conducted on an annual basis or more frequently as necessary. As at the date hereof, the Entities consider that climate-related risks are relevant to all funds managed by the Entities.

Approaches in factoring climate-related risks into the investment management process

We primarily adopt three approaches in factoring climate-related risks into our investment management process.

- The exclusion approach: we perform negative screening and deliberately exclude certain industries, sectors or companies from the investment portfolios. We define a set of criteria based on the assessment of relevance and materiality of climate-related risks, investors' values and the compliance with global climate related standards by the investee companies.
- 2. The best-in-class approach: we aim to invest primarily in companies that are best placed to tackle the major challenges of sustainable investment (and in particular, climate change) and manage the stakeholder interests from the climate risk perspective. The best-in-class approach is used to construct portfolios through the inclusion of best performing companies in each sector.
- 3. **The ESG integration approach:** we will include external climate-related data and financially material sustainability data in the traditional financial modelling, to select the appropriate equity and fixed income investments and incorporate the same in the investment portfolios.

# **Risk Management**

The Entities will seek to monitor and manage the climate-related risks on an ongoing basis and take the following steps for mitigating, transferring, accepting or controlling the climate-related risks.

Engagement activities with Subject Companies

## (a) Monitor Subject Companies

The Entities should understand and monitor how the Subject Companies deal with climaterelated change issues both before and during the period of the investments based on their own and market data, as well as researches from brokers and other independent research providers.

During the period of investments, where appropriate, the Entities will encourage them to develop policies for handling the climate-related risks inherent in their businesses through active engagement (e.g., climate mitigation or climate adaptation), rather than merely reducing the funds' exposure to climate-related risks through divestment.

# (b) Engagement process

#### (i) Communications

If material climate related risks are identified for certain investments, the Investment Teams should try to pro-actively engage and maintain ongoing dialogue with the Subject Companies regarding specific recommendations and plans to mitigate or reduce exposure for such risks.

Where considered appropriate, regular follow-up communications with the management and representatives of the Subject Companies, for example senior portfolio managers and representatives from their ESG team, should also be conducted to monitor the response and progress of the concerned risks until they have been satisfactorily addressed.

The Investment Teams may also communicate and associate with other investors in industry-level or stakeholders in a particular ESG area to utilise the collaborative influences in reaching the Group's ESG goals.

The Investment Teams may also engage in dialogue initiated by the Subject Companies.

#### (ii) Proxy voting

This section is not applicable to investments in fund of funds or fixed income products as for which the Entities do not have any voting right or direct control of underlying assets of other funds.

The Entities endeavour to participate in all voting for which they have voting authority. The Investment Teams will also express their specific ESG concerns by voting (or abstain from voting) on resolutions at general meetings. The Entities will vote in accordance with their voting policies after thorough consideration of all relevant factors.

The Investment Teams should conduct in-depth analysis regarding the resolution prior to voting and such analysis should be recorded. When the Investment Teams intend to vote against a resolution at a general meeting, they should try to engage with the investee companies regarding the rationale behind such decision beforehand if applicable.

#### (iii) Conflict of interests

The Investment Teams will consider any actual and potential conflicts of interests that may arise in engagement and/or voting and strict adherence to the Group's internal policies and guidelines in identifying and managing such conflicts is required. For example, conflict of interests may arise when receiving inside and/or price sensitive information from the Subject Companies and the Investment Team should act in accordance with the Group's internal policies and guidelines to safeguard the integrity of investment processes and portfolio management decisions, including protecting price sensitive information, preventing front-running of trading decisions, and safeguarding proprietary due diligence.

## (c) Engagement results

The Investment Teams should incorporate the engagement result into their investment decision-making process.

# (i) Elevated Communication

If no significant progress and/or persistent unresponsiveness to engagement is noted from the Subject Companies, elevated communications may be engaged to express the Investment Teams' concerns and possible implications, including but not limited to divestment.

#### (ii) Divestment

If the Investment Teams is of the view that the Subject Companies demonstrated no positive outcome in addressing climate-related risks inherent in their businesses despite constant engagement, the Investment Teams may choose to underweight or sell the relevant equities and/or fixed income products.

#### **Diversifications**

The Investment Teams should seek opportunities in new markets or types of assets in order to diversify their investments and accelerate the transition to a lower-carbon economy.

## Control and monitoring

All responsible teams should develop adaptive capacities to make timely responses to climate change issues and better manage the associated physical and transition risks. The control mechanism not only refers to the strong governance structure and appropriate disclosures, but also ongoing risk and investment management in daily operations.

#### **Tools and Metrics**

GHG emissions and portfolio carbon footprint Stress testing and scenario analysis

We will utilise stress testing and scenario analysis for evaluating the resilience of our investment strategies to climate-related risks under different pathways, and will keep an internal record of the assessment.

Scenarios of global temperature increase by 1.5°C, 3°C, 4°C are simulated to estimate the impact of climate risk on GDP, and further to our investee companies and holdings in our investment strategies.

We first consider three different scenarios. Under each scenario, where global temperature rises by certain degree, we calculate the impact caused by the temperature increase on various geographical economies. Finally, with the help of models provided third-party data vendors, we customize each temperature rising scenario and evaluate the impact of each scenario on our portfolios.

Scenarios <sup>1</sup>	Descriptions
~1.5°C	Subject to "Paris Agreement", effective climate risk management and good carbon emission control
~3°C	Business as intended following moderate climate risk control
~4°C	Business as usual

Portfolio carbon footprint is a representation of carbon emissions normalised by the portfolio's market value and expressed in tons of carbon dioxide equivalent emissions (CO2e) per million dollars invested.

To the extent possible and subject to data availability, we will estimate and monitor the GHG emissions financed by our investments (Scope 1 & 2 emissions of the investee companies) on a regular basis. The overview for applying portfolio carbon footprint with reference to the Partnership for Carbon Accounting Financials ("**PCAF**") Standard, including the formula, methodology and underlying assumptions, are presented below.

Formula	$\sum_{i=1}^{j} \left( \frac{\textit{Current value of investment}_i}{\textit{Investee company's Scope 1}} \times \frac{\textit{Investee company's Scope 1}}{\textit{and Scope 2 GHG emissions}_i} \right)$
	N Current portfolio value (\$ million)
Methodology	Scope 1 and Scope 2 GHG emissions (and Scope 3 GHG emissions if available) from investments and debts are allocated to the reporting institution based on the proportional share of investment or debt in the investee company. For example, if an institution's investment represents 5% of a company's enterprise value, then that institution accounts for 5% of the company's GHG emissions.  Enterprise value means the sum, at financial year end, of the market capitalisation of ordinary and preferred shares and the book value of total debt and non-controlling interests, without deducting cash or cash
	equivalents. For other asset classes, please make reference to the PCAF Standard in calculating the portfolio carbon footprint.
	The current portfolio value is used to normalise the data.
Underlying assumptions	HTIAM(HK) and HTIIM – The accuracy of the calculation result of the GHG emissions depends on the methodology adopted and the data inputted. The information provided by the Subject Companies will enable us to calculate their GHG emissions. Though many companies disclose their operation emissions, the quality and coverage of such disclosure is not guaranteed, hence we will calculate the GHG emissions of our overall portfolio using also the services of the third-party data vendor. However, the quality and credibility of such disclosures could be further improved. As a result, our

<sup>&</sup>lt;sup>1</sup> According to IPCC Policy Makers Summary, www.ipcc.ch

estimation may not be the actual GHG emissions of our portfolios.

We will review the quality of our calculation regularly and will continue to improve our calculation methodology and enhance the data quality.

Investment and Alternative Asset Management ("IAAM") – Most of the investment are in private companies and they have no published GHG emissions data available. For each private company, IAAM will select a company with similar business with regard to business sector and model which is listed in Hong Kong or the USA and have published GHG emissions data. We will then calculate the investee company's GHG emission using the formula set out above on the assumption that the GHG emission of the investee company will be similar to that of the chosen listed company.

Private Equity Investment ("**PEI**") – Most of the investment are in fund of funds and those funds do not have GHG emission data available for calculation. As such, PEI will classify the funds into several major sectors and in each sector select a benchmark company which has published GHG emission data. We will then calculate the fund's GHG emission using the formula set out above on the assumption that the GHG emission of the fund will be similar to that of the benchmark company.

# Key points

- + May be used to compare portfolios to one another or to a benchmark.
- + Uses portfolio market value to normalise data, which is fairly intuitive to investors.
- + Allows for portfolio decomposition and attribution analysis.
- Changes in the enterprise value of underlying companies can be misinterpreted.