



# **CARBON FOOTPRINT AND CLIMATE RISK ASSESSMENT REPORT OF VIETNAM HOLDING'S INVESTMENT PORTFOLIO, 2022**

**(Version: 2.0)**

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## EXECUTIVE SUMMARY

Energy and Environment Consultancy JSC (VNEEC) has been carried out annual independent carbon footprint reports for Vietnam Holding Limited (VNH) since 2016. From 2021, the service has been extended to include a comprehensive climate-related risk assessment. The climate risk assessment, covering both transition risks and physical risks of all investee companies in the portfolio, are expected to help the fund manager better understand potential climate risks and opportunities and support in investment decisions.

The 2022 report has been done in the context of dramatical changes in climate change policies at both local and international levels. The notable policies are the commitment to achieve “Net-zero emission” for Viet Nam by 2050 made by the Prime Minister in November 2021 and the issuance of the Government’s Decree on management of GHG emission in early 2022 that imposes for the first time the obligations on reporting and developing/implementing emission reduction plan on large GHG emission entities.

In 2022, VNH’s investment portfolio has a total of 20,539 tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e) emission from Scopes 1 & 2. The carbon footprint of the portfolio in 2022 is 5.6% higher as compared against the benchmark of an equivalent investment size in VNAllShare Index. The total carbon emissions of the 2022 VNH Portfolio is also higher than that of the 2021 VNH Portfolio (20,539 and 9,056 tCO<sub>2</sub>e, respectively). The difference in performance is the direct result of increasing investment in carbon-intensive companies.

Regarding transition risks, i.e., policy, legal, technology, market, and reputation risks that are embedded with the transition to low-carbon economy, most of VNH investment is allocated in sectors that are less susceptible to transition risks, except for two companies in the oil and gas industry which is highly vulnerable to transition risks. In terms of Weighted Average Carbon Intensity (WACI), which is the measure of GHG emissions/\$M of revenue, VNH performance is much better than the MSCI Emerging Market index and only marginally lower than the MSCI World index. This is the direct result of significant investment allocation in low carbon-intensive sectors, such as Financials and Real Estate. In terms of implied temperature rise, the 2022 VNH portfolio was not aligned with the 2°C effort-sharing or the domestic net-zero scenario. However, compared to the other MSCI indexes, VNH performance was on par with the developed markets and considerably outperformed the emerging markets.

On the other hand, VNH 2022 portfolio is exposed to acute physical risks from the increased severity and frequency of natural disasters in Vietnam. The potential financial impacts of physical risks on the portfolio were estimated based on RCP models and national data.

In total, the annual Climate VaR of VNH 2022 portfolio in the 2022-2050 is estimated at 844,273 USD (for the best-case scenario and 6,077,652 USD under the worst-case scenario which is equal to 0.87% and 6.28% of VNH 2022 portfolio’s Market Value, respectively).

This report provides a comprehensive ex-post assessment of the performance of VNH 2022 portfolio in terms of GHG emissions. It also provides insightful understandings of the potential impacts of climate-related risks on VNH 2022 portfolio. This study will support VNH in making climate risk-informed investment decisions and creating investment strategies that include suitable GHG emissions reduction targets that are aligned with the national context and targets, including visionary plans for achieving these targets.