

Independent Assurance Report

Mr. Kenji Asakura
Representative Director and President
NAGASE & CO., LTD.

We, SOCOTEC Certification Japan (hereafter "SOCOTEC"), have performed a limited assurance engagement, in response to the entrustment from NAGASE & CO., LTD. (hereafter "the Company") in order to provide an opinion as to whether the subject matter information ("FY2021 Environmental Performance Data Calculation Report" (period: 1 April 2021 to 31 March 2022)) of the Company meets the criteria in all material respects.

1 Subject Matter Information and Criteria

The subject matter information for our assurance is "a report on GHG Emissions and Environmental Performance Data (shown in APPENDIX)" covering the operations and activities of the Company and its consolidated companies in Japan and overseas (two domestic subsidiaries) described in "FY2021 Environmental Performance Data Calculation Report" (period: 1 April 2021 to 31 March 2022).

The criteria for preparing subject matter information is "Nagase & Co., Ltd. GHG Emission and Water Resources Utilization Calculation Regulations (Ver 2.0)" and "GHG emission (scope 3) calculation procedure (Ver 2.0)".

2 Management Responsibility

"FY2021 Environmental Performance Data Calculation Report" (period: 1 April 2021 to 31 March 2022) was prepared by the management of the Company, who is responsible for the integrity of the assertions, statements, and claims made therein (including the assertions over which we have been engaged to provide limited assurance), the collection, quantification and presentation of all data and information in the report, and applied criteria, analysis and publication.

The management of the Company is responsible for maintaining adequate records and internal controls that are designed to support the reporting process and ensure that "FY2021 Environmental Performance Data Calculation Report" (period: 1 April 2021 to 31 March 2022) is free from material misstatement whether due to fraud or error.

3 Assurance Practitioner's Responsibility

The responsibility of SOCOTEC is to express a limited assurance conclusion as to whether the subject matter information has been prepared in compliance with the criteria in all material respects.

SOCOTEC performed limited assurance engagement in accordance with the verification procedures stipulated by SOCOTEC and "ISO14064-3: Specification with guidance for the verification and validation of greenhouse gas statements" and the International Standard on Assurance Engagements (ISAE) 3000 (Revised), "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" of International Auditing and Assurance Standards Board (IAASB).

The procedures implemented in the limited assurance engagement are limited in their type, timing and scope as compared to the procedures implemented in the reasonable assurance engagement. As a result, our limited assurance engagement does not provide as high assurance as reasonable assurance engagement.

Our procedures performed depend on the assurance professional practitioner's judgement, including the risk of material misstatement, whether due to fraud or error. Our conclusion was not designed to provide assurance on internal controls.

We believe that we have obtained the evidence to provide a basis for the conclusion for limited assurance.

4 Assurance Procedures

The procedures that SOCOTEC has conducted are based on professional judgment and include, but are not limited to:

- Evaluation of policies and procedures created by the Company in relation to subject matter information
- Questions to the Company personnel to understand the above policies and procedures
- Verification that the target project meets eligibility requirements
- Matching with the basis data by trial calculation and recalculation
- Obtaining and collating material for important assumptions and other data
- We visited Tokyo Head Office and Osaka Head Office of the Company, HAYASHIBARA CO., LTD. Okayama Functional Saccharide Plant, Nagase ChemteX Corporation Sakai Plant in order to confirm the calculation structure and procedures, data collection and implementation status of record control.

5 Statement of Our Independence, Quality Control and Competence

SOCOTEC has introduced and maintained a comprehensive management system that conforms to the accreditation requirements of "ISO17021 Conformity assessment -- Requirements for bodies providing audit and certification of management systems". In addition, we have also established a management system according to "ISO14065 Greenhouse gases -- Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition". These meet the requirements of International Standard on Quality Control 1 by the International Auditing and Assurance Standards Board and Code of Ethics for Professional Accountants by International Ethics Standards Board for Accountants. We maintain a comprehensive quality control system that includes ethical rules, professional standards and documented policies and procedures for compliance with applicable laws and regulations.

The SOCOTEC Group is a comprehensive third-party organisation in inspection, testing and certification operations, and conducts management system certification services and training services related to quality, environment, labour and information security in countries around the world. Engaged in performance data and sustainability report assurance of environmental and social information, SOCOTEC affirms that it is independent of the organisation that has ordered the assurance engagement, its affiliated companies, and stakeholders, and that there is no possibility of impairing impartiality or conflict of interest.

We assure that the team engaged in the assurance is selected based on knowledge, experience in the relevant industry, and the competence requirements for this assurance engagement.

6 Use of Report

Our responsibility in performing our limited assurance activities is to the management of the company only in accordance with the terms for this engagement as agreed with the Company. We do not therefore assume any responsibility for any other purpose or to any other person or organisation.

7 Our Conclusion

On the basis of our procedures performed and evidence obtained nothing has come to our attention that causes us to believe that the subject matter information is not, in all material respects, prepared and reported in accordance with the stated criteria.

SOCOTEC Certification Japan



Seigo Futaba

Managing Director

27 December 2022

GHG Emissions and Environmental Performance Data

Table 1-1 GHG emissions (Scope1,2,3)

Item	Figure	Unit
Scope1	33,132	tCO ₂
Scope 2 (location based)	30,814	tCO ₂
Scope 2 (market based)	27,057	tCO ₂
Scope3	3,418,695	tCO ₂

Table 1-2 GHG emissions (Scope3 break down)

Category No.	Category	Unit (tCO ₂)
Category1	Purchased goods and services	3,328,785
Category2	Capital goods	17,489
Category3	Fuel-and-energy-related activities (not included in Scope 1 or 2)	13,766
Category4	Upstream transportation and distribution	46,606
Category5	Waste generated in operations	3,953
Category6	Business travel	257
Category7	Employee commuting	722
Category9	Downstream transportation and distribution	6,980
Category12	End of life treatment of sold products	75
Category13	Leased assets (downstream)	62
Total	—	3,418,695

Table 2 Energy consumption

Item	Figure	Unit
non-renewable-energy-derived energy consumption	251,627	MWh
renewable-energy-derived energy consumption	26	MWh
Total	251,653	MWh

Table 3 Water Resource Utilization

Item	Figure	Unit
Water Withdrawal	3,616	ML
Water Discharge	3,488	ML
Water Consumption	129	ML