

Independent Assurance Verification Report and Opinion Statement

Conformity Assessment: Validation of Book and Claim methodology and Module for Transport Chains

MBM REPORT DETAILS	
Name of Entity:	Pacemaker.ai
Type of Entity:	Software Provider / Registry
Reporting Period:	Pacemaker Book and Claim Module
The nature of the Book or Claim being made by the Reporter:	Book and Claim Module and Methodology (Direct book and claim)
Report Document Name/ Web Link:	Methodology-BookAndClaim_Version_1_1_Pacemaker_ai

VERIFICATION DETAILS	
Level of Assurance applied:	Reasonable
Locations physically visited during the course of verification:	No on-site visit was performed, as this engagement included validation of the methodology against the MBM Specification.
Virtual site visit carried out during verification:	Yes If Yes, give justification below:
Justification for why a virtual site visit is appropriate:	The verifier assessed the engagement as low risk and therefore conducted the audit off-site, given that all required documentation and systems were available remotely to support the verification process. The verifier performed audit session, which included presentation of the methodology and observation of the Book and Claim Module.
Dates of virtual site visits:	01.12.25
Name of Lead Verifier(s) undertaking site visits:	Nilay WARKHEDKAR

COMPLIANCE WITH REPORTING REQUIREMENTS	
Monitoring Plan title:	Pacemaker.ai Book & Claim Methodology – Version 1.1 (February 2026)
Clause 9 - Monitoring plan - appropriately documents application of the SFC MBM Specification and includes all required documents, and signposts to associated procedures and records that contain all required information, as relevant.	Yes If no, because: N/A

SFC MBM Specification requirements			
Clause 5 - Scope of Reporting			
Clause 5.3(b) - reporting of a LETS only: <i>information on the underlying LCA Emissions Factor has been checked, including (as relevant):</i>	i) If provided by a 3rd party, evidence to support the validity of the LCA EF used:	Yes	If no, because:
		N/A	
		If Yes, state the source of the LCA EF used:	
	ii) If calculated by the Reporter, evidence to support the calculation of the LCA EF used and confirm its accuracy:	N/A	If no, because:
Clause 6 - Quantification Approach			
Clause 6.1 - Sustainability Profile - <i>information provided on certification scheme or transparent track and transfer</i>	Yes	If no, because:	
	N/A		
Clause 6.2 - LETS characteristics parameters - <i>minimum requirements are tracked in chain of custody system</i>	Yes	If no, because:	
	N/A		
Clause 7 - Constraints			
Clause 7.1 - Modes - <i>mode(s) are clearly documented, no LETS claim made for an inappropriate mode</i>	Yes	If no, because:	
	N/A		
Clauses 7.2 and 7.3 - Vintages profile and dates - <i>constraints appropriately assessed and applied</i>	Yes	If no, because:	
	N/A		
Clause 7.4 - Transport Activity - <i>constraint appropriately assessed and applied. Where relevant ISO14083 clause 10 applied</i>	Yes	If no, because:	
	N/A		
Clauses 7.5 and 7.6 - Additionality - <i>appropriately assessed; and where relevant regulatory constraint applied properly</i>	Yes	If no, because:	
	N/A		
Clause 7.8 - Erronious double counting (DC) - <i>potential for double count checked adequately and documented</i>	Yes	If no, because:	
	N/A		
Clause 8 - Bundle/Unbundle			
Clause 8 - Bundling/ unbundling - <i>appropriately evaluated and documented. Errors identified documented adequately</i>	Yes	If no, because:	
	N/A		

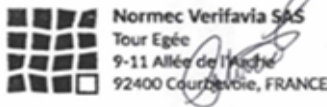
Clause 11 - Internal controls		
Clause 11.1 - Internal control system - in place and compliant with ISO14064-1 clause 8	Yes	If no, because:
	The internal data and information security procedures are certified according to ISO 27001 and TISAX; and the quality management structure is undergoing ISO 9001 certification process.	
Clause 11.2 - Internal control system - supporting information retained for specified period	Yes	
SFC CAS-MBM requirements		
<i>This refers to the Emissions Reporter Manual</i>		
ER 4.6 - Has SFC recognised guidance been applied? If not, what is the justification? <i>Please list any guidance applied by the Reporter in addition to SFC guidance</i>	Yes	If yes, state which guidance used: If no, because:
	The methodology has been developed using the MBM Specification by the Smart Freight Centre, supported by GLEC Framework.	
	N/A	
ER 7.3.2 - Evidence and data to support MBM data calculations reported are retained for at least 5 years from the date of report completion and verification	Yes	
Monitoring & Reporting Principles		
Relevance:	Yes	If no, because:
	N/A	
Transparency:	Yes	If no, because:
	N/A	
Completeness:	Yes	If no, because:
	N/A	
Accuracy:	Yes	If no, because:
	N/A	
Consistency:	Yes	If no, because:
	N/A	
Conservative:	Yes	If no, because:
	N/A	
Best available data:	Yes	If no, because:
	N/A	

COMPLIANCE WITH VERIFICATION REQUIREMENTS		
ISO14064-3 requirements		
Clause 5.4.2 - sufficient evidence has been obtained to support the conclusions reached?	Yes	If no, because:
	N/A	
Clause 6.1.1 - Strategic analysis completed	Yes	If no, because:
	N/A	

Clause 6.1.2 - Risk assessment fully completed & plans for sampling, evidence gathering and testing developed based on it?	Yes	If no, because:
	N/A	
Clause 6.2 - plans implemented (and adjusted as necessary)?	Yes	If no, because:
	N/A	
SFC CAS-MBM requirements	<i>This refers to the VVB Manual</i>	
VBB 7.1 and 7.2 - sub-clauses 7.1.2, 7.1.4, 7.2.3, and 7.2.5 to 7.2.8 have been applied	Yes	If no, because:
	N/A	
VBB 7.3.7 and all sub-clauses have been applied	Yes	If no, because:
	N/A	

VERIFICATION OPINION	
OPINION - verified as satisfactory	We have conducted a Reasonable Assurance verification of the Book and Claim Module and it's underlying methodology as declared above. On the basis of the verification work undertaken (see Annex 2) the information presented is fairly stated and aligned with the requirements of MBM Specification by the Smart Freight Centre.

VERIFICATION TEAM DETAILS	
Name of Lead Verifier:	Nilay Warkhedkar
Name of Independent Reviewer:	Patricia PINILLA

Signed on behalf of Normec Verifavia SAS:	
Authorised person approving the issue:	Patricia Pinilla <i>In signing this opinion here, I attest with Reasonable Assurance to the accuracy of the reported assertions, data (within the materiality threshold stated in Annex 2), and the status of compliance with all relevant requirements and principles laid out in the SFC MBM specification.</i>
Date of Opinion:	11.03.2026

Name of Verification Body:	Normec Verifavia SAS
Contact Address:	Tour EGEE, 9-11 Allée de l'Arche, 92400 Courbevoie, France contact@normecgroup.com
Date of Verification Contract:	06.11.2025
Year of validation	2025

Independent Assurance Verification Report and Opinion Statement

Conformity Assessment: Validation of Book and Claim methodology and Module for Transport Chains

Pacemaker.ai - Book and Claim Module and Methodology (Direct book and claim)

Annex 1 - Mis-statements, Non-conformities, Non-compliances and Recommendations for Improvement

A		Mis-statements that were not corrected before the verification report was issued		Material?
A1	N/A			
B		Uncorrected Non-conformities with the Reporter's MBM Monitoring Plan		Material?
B1	N/A			
C		Uncorrected Non-compliances with the SFC MBM Specification identified during the verification		Material?
C1	N/A			
D		Uncorrected Non-compliances with SFC CAS-MBM requirements identified during the verification		Material?
D1	N/A			
E Recommended improvements, if any				
E1	N/A			
F Were there any data gaps?				
	Yes	If Yes, please respond to the following questions:		
	Was the methodology(ies) used to close the data gap(s) reasonable and result in a conservative estimation of the required data?		N/A	
	Was the methodology(ies) used to close the data gap(s) already included in the Monitoring Plan at the start of the verification?		N/A	
	Were all data gaps closed before the completion of verification?		Yes	
	Were any of the data gaps individually material?		No	

Independent Assurance Verification Report and Opinion Statement

Conformity Assessment:

Validation of Book and Claim methodology and Module for Transport Chains

Pacemaker.ai - Book and Claim Module and Methodology (Direct book and claim)

Annex 2 - The basis of the work undertaken providing further information of relevance to the verification report and opinion

Objectives & Scope of Verification:	To verify to a Reasonable level of assurance that the Book ad Claim Methodology and Module as stated above (and as summarised in the attached Opinion Statement) has been developed in accordance with the relevant requirements of the SFC MBM Framework Specification ; to confirm conformance with the monitoring requirements recorded in the Emissions Reporter's Monitoring Plan for the stated Transport Chain. This Opinion Statement does NOT apply to reported emissions data determined in accordance with, but not limited to ISO14083.
Responsibilities:	The Entity is solely responsible for the preparation and reporting of their MBM data for the stated purpose and user in accordance with the requirements of the SFC MBM Specification as documented in their MBM Monitoring Methodology; for determining their objectives and purpose in relation to MBM information and reporting; for any information, assessments, judgements and selection of data sources that support the reported data; and for establishing and maintaining appropriate procedures, processes, performance management and internal control systems from which the reported information and data is derived. The Verification Body (as named on the attached Opinion Statement) is responsible for - in accordance with their verification contract, the requirements of the SFC MBM Specification, carrying out the verification of the MBM Report in the public interest, independent of the Entity and SFC. It is the responsibility of the Verification Body to form an independent opinion, based on the examination of information and data presented in the MBM Report, and to report that opinion to the Entity. The Verification Body also reports if, in its opinion: • the MBM Report is, or may be, associated with mis-statements (omissions, mis-representations, mis-reporting, or errors), non-conformities or non-compliances; or • the Entity is not complying with the SFC MBM Specification; or • the verification team has not received all the information and explanations that they require to conduct their examination with a Reasonable level of assurance; or • improvements can be made to the Entity's performance in monitoring and reporting of MBM data and/or conformance with their MBM Monitoring Plan, and/or compliance with the SFC MBM Specification requirements.

Work performed and basis of the opinion:	We conducted our examination having regard to the verification criteria reference documents outlined below. This involved examining, based on our risk analysis, evidence to give us reasonable assurance that the information in the methodology and functionality of the module as stated above have been properly prepared in relating to the monitoring and reporting criteria documents referenced below. This also involved assessing, where necessary, estimates, assumptions and judgements made by the Entity in preparing the data and considering the overall adequacy of the presentation of the data in the methodology and the potential for that data (all or in part) to be materially mis-stated. Our work also included: - Live observation and testing of the system (MBM Module) used for transportation emissions accounting. - Review of supporting documentation sent by transport partners (carriers) such as: fuel statements, biofuel reports, supplier certificates, assurance statements, others. - Interviews with person responsible of MBM reporting. Where an emissions 'calculation tool or programme or model' used by the Entity is widely recognised within the sector, we have not conducted further validation activities of the tool or programme itself, our justification for this is given below. Our work also excluded the following activities for the justifiable reasons given below: The reported transport emissions for the reporting period are calculated using a separate module, designed for compliance with ISO 14083. Accordingly, our work excluded the verification of emissions reported in the reporter's emissions report (reports). The scope of our verification was limited to the low-emission solutions and transport services that are supported by transport partner documentation.		
Materiality threshold applied:	As a basis for reaching our verification conclusion, we applied a threshold for determining the impact of any mis-statements on the final declared LETS GHG emissions intensity value (as stated on the attached Opinion Statement). The threshold applied for this verification was: <table border="1" data-bbox="446 846 1570 884"> <tr> <td>±</td> <td>5 % of final total declared individual MBM value</td> </tr> </table> A materiality threshold of 5% was agreed with the Emissions Reporter in accordance with the requirements of the MBM under a reasonable assurance engagement. This threshold is considered appropriate given the nature of assurance, which focuses on identifying material misstatements rather than providing an exhaustive verification of all data.	±	5 % of final total declared individual MBM value
±	5 % of final total declared individual MBM value		
Inherent uncertainty of GHG emissions:	Quantification of GHG emissions and MBM data is subject to inherent uncertainty due to the designed capability of measurement instrumentation, testing methodologies, limitations associated with the data available for the development of default calculation factors and models; and the incomplete scientific knowledge used in the determination of emissions factors and global warming potentials. In assessing any mis-statements in the data against the Materiality Threshold defined above, the verifier has not taken into account inherent uncertainty that is accepted by the SFC MBM in accordance with its rules.		

Reference documents cited:	CONDUCT OF THE VERIFICATION: 1) ISO 17029:2019 Conformity assessment — General principles and requirements for validation and verification bodies 2) ISO 14065:2020 General principles and requirements for bodies validating and verifying environmental information 3) EN ISO 14064-3:2019 Specification with guidance for the validation and verification of GHG assertions 4) IAF MD 6:2014 International Accreditation Forum (IAF) Mandatory Document for the Application of ISO 14065:2020 (Issue 3, June 2024) 5) SFC CAS Validation and Verification Body Manual - MBM Specification Edition 1 (30/9/24) MONITORING AND REPORTING REQUIREMENTS: A) SFC-SPEC-001: MBM Specification v01 (14/10/24) B) SFC CAS Emissions Reporter Manual - MBM Specification Edition 1 (30/9/24) C) MBM Monitoring Plan: Pacemaker.ai Book & Claim Methodology – Version 1.1 (February 2026) D) ISO 14083:2023 Greenhouse gases — Quantification and reporting of greenhouse gas emissions arising from transport chain operations E) Voluntary Market Based Measures Framework for Logistics Emissions Accounting and reporting V3 (September 2023) F) Guidance provided by the GLEC Framework for Logistics Emissions Accounting and Reporting V3.1 (2024) G) Normec Verifavia Assurance Management System Manual (AMSM) Version 10 (November 2025)
-----------------------------------	---