EMBODIED CARBON COMPANY ASSURED VERIFICATION SCHEME

TSD-015 Version 1.1 March 2026

TM65.2
EMBODIED CARBON
THE LIA

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1 OBJECT

The main object of the scheme is to provide an assurance of the validity of the TM65.2 values produced by manufacturers when describing the embodied carbon of their lighting products when using the scoring method CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator and TSD-016.

This scheme is not intended to cover applicants for the “Basic” TM65.2 assessment(s). Only “Mid-level” assessment(s) by applicants are covered under the scope of this scheme document.

A manufacturer participating in this scheme will be required to undergo a thorough inspection & audit of their laboratory(ies)/test sites in order to verify the adequacy of the measurement equipment, documentation and the technical competence of the staff.

A manufacturer who meets the requirements will be permitted to record and report results from the scoring method of CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator to the LIA Laboratory Ltd in lieu of report preparation for submission to LIA Laboratories Ltd TM65.2 Assured Product Verification Scheme.

The LIA Laboratory Ltd will ensure, by regular inspection, that the integrity of the assessments made by a ‘manufacturer’ is maintained at an appropriately high standard. An up-to-date list of ‘Registered Manufacturers’ will be held by The LIA Laboratory Ltd and will be available on The LIA Laboratory Ltd certification database.

2 SCOPE

(a) This scheme is not one for the approval of a product. It is confined to manufacturers capabilities to conduct evaluation against the specification in document CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator and TSD-016 and in no way will be concerned with the factory production.

(b) The verification of the assessment capability of the manufacturer will apply to the assessment of all the types of products (lighting) as defined in “CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator and TSD-016.

(c) The sole purpose of the scheme is that under a formal agreement, a manufacturer may be given permission to make assessment of TM65.2 values in accordance with CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator and TSD-016. Such assessment data will then form a submission for generation of a TM65.2 Assured Product certificate by the LIA Laboratory Ltd for addition to the LIA Certification website in accordance with the requirements set out in TSD-016 - TM65.2 Assured Product Verification Scheme. It is not intended to be a form of certification of individual pieces of data and/or products which are the responsibility of the manufacturer, nor is it intended to give a manufacturer accreditation to carry out testing and reporting to ISO/IEC 17025 or ISO/IEC 17065.

(d) The scheme will be available to all lighting equipment manufacturers, but only in regard to the use of their assessment capabilities for the products produced by the owner of the ‘Registered Laboratory’.

(e) Subcontracting of TM65.2 assessment for the purpose of this scheme is not permitted.

(f) This scheme does not cover applicants for the “Basic” TM65.2 assessment(s). Only “Mid-level” assessment(s) by applicants are covered under the scope of this scheme document.

3 OPERATION OF SCHEME

(a) On receipt of an application form from a manufacturer, the scope of the ‘Registration’ will be established in terms of the ranges and types of products for which registration of test facilities is required. On the basis of this information, the manufacturer’s laboratory will be visited and examined in detail in respect of equipment, instruments, operating staff, methods of documentation etc.

On the basis that the manufacturer’s laboratory is satisfactory and that the manufacturer’s assessment data on the products assessed is verified by The LIA Laboratory Ltd, formal permission will be given to the manufacturer to make TM65.2 assessments in accordance with CIBSE TM65.2:2023 and CIBSE document DT65 Embodied Carbon Calculator for submission to The LIA Laboratory Ltd, conditional to them accepting the continuing surveillance requirements.

(b) During the validity of the agreement, The LIA Laboratory Ltd will make a maximum of two routine visits per annum (in normal circumstances) and reserve the right to make unannounced visits to the ‘Registered Laboratory’ for the purpose of verifying that the laboratory and its process are unchanged since the initial inspection. At the time of such visits, LIA Laboratory Ltd will have the right to request for original assessment data and to compare said data of the assessment with results of an assessment by The LIA Laboratory Ltd.

Where the manufacturer’s laboratory is found not to be maintaining the required standard of competence or data, additional visits and assessment may be necessary and will involve extra charge to the manufacturer concerned.

If the manufacturer’s laboratory is found to be unable to maintain the required standard of competence, the laboratory will be removed from the register and permission to supply assessment data to The LIA Laboratory Ltd for certificate preparation will be withdrawn.

(c) The LIA Laboratory has drawn up objective levels for the apparatus, staffing and competence considered necessary for the commercial assessment of products in accordance with CIBSE TM65.2:2023 (state of art) and CIBSE document DT65 Embodied Carbon Calculator. The criteria thus arrived at shall be the basis of the ‘Registration’ of a laboratory but it is emphasised that the ultimate authority for the operation of the Scheme shall belong to The LIA Laboratory Ltd.

(d) A manufacturer entering the scheme is required to send to The LIA Laboratory Ltd a copy of the assessment data using the template supplied.

(e) All matters connected with the ‘Registration’ of an individual manufacturer’s laboratory(ies) remain confidential between that manufacturer and The LIA Laboratory Ltd.

4 CERTIFICATIONS AND PROCEDURES SUPPORTING THIS SCHEME.

This certification scheme has been developed in accordance with the LIA Laboratory Ltds Product Certification System, which is detailed in their Product Certification System Document. The scheme is operated in accordance with the LIA Laboratory Ltds Quality and Operations Manual. This certification scheme is classified as type 6 certification scheme (ISO/IEC 17067). The certification service is accessible to all The LIA Member applicants who fall under the certification scope (see section 2).

The purpose of this scheme is to certify that any one TM65.2 value is justified by the product's manufacturing, materials, design and each decision is based upon reliable evidence and is in line with TM65.2 requirements, it therefore enables more accurate comparisons between those values. This scheme is intended to review the competency and capability of applicants to accurately report TM65.2 values in accordance with the requirements set out in CIBSE TM65.2:2023 (state of art) and CIBSE document DT65 Embodied Carbon Calculator and TSD-016.

It covers Luminaires and associated accessories, applicable under the TM65 methodology as defined within TM65.2:2023 with the essential requirements of CIBSE TM65.2:2023 (state of art) and CIBSE document DT65 Embodied Carbon Calculator.

All product's (or product family's) assessments that have been reviewed under this scheme and meet all requirements of the scheme are granted certification.

4.1 Introduction

The TM65.2 Assured Company Verification Scheme addresses the huge industry interest in the need to deliver sustainable lighting, building on the methodology in CIBSE TM65.2 "Embodied Carbon in Building Services: Lighting", specifically its Embodied Carbon Calculator (DT65). It provides robust third party assessment of claims made using the TM65.2 methodology and tools, increasing confidence that products are compliant with TM65.2 guidelines for embodied carbon estimation.

TM65.2's Embodied Carbon Calculator (DT65) is a self-certification metric that allows a manufacturer or interested party to evaluate and quantify the embodied carbon of a luminaire to enable comparison between products fulfilling the same function.

Embodied carbon calculation methodologies can have a problem of interpretation, different evaluators using different interpretations of the same question, or the answer to a question will yield different results making comparisons between products difficult. The TM65.2 Assured Company Verification Scheme is a programme of trained, independent, 3rd party assessment that reviews both the embodied carbon claims and the evidence given to support those claims and the methods used to record and report the claims. The result is a greater level of confidence in any one DT65 embodied carbon value and therefore comparisons between those values.

5 DEFINITIONS & ABBREVIATIONS

The following definitions and abbreviations are used throughout the document. Other definitions are as given in the relevant standards.

BOM	Bill of materials
EPD	Environmental Product Declaration
FPC	Factory Production Control
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
Luminaire	Apparatus which distributes filters or transforms the light transmitted from one or more lamps.
NCR	Non Conformance Report
MTBF	Mean Time Before Failure
PCB	Printed Circuit Board
PVT	Product Verification Test
QMS	Quality Management System
Scope	Detailed specification of certified products and associated components.
Taxonomy	A classification system to help investors, companies and policymakers to identify economic activities that can be considered sustainable.

TM65 CIBSE Technical Memorandum TM65 Embodied Carbon in building services: calculation methodology and Embodied Carbon Calculator.

TM65.2 CIBSE Technical Memorandum TM65.2 Embodied carbon in building services: lighting

Location of final assembly factory:

The facility where the product is finally assembled into its complete, saleable form, including integration of all main sub-components (e.g. LED modules, drivers, housing, optics) and where the product is packaged for market release.

Service Life: The estimated number of years during which an item will perform its function according to some established performance standard.

More detail of the definitions is given in DT65, TM65, TM65.2 and CIBSE M.

6 SCHEME REQUIREMENTS

6.1 Changes to laboratory

Any relevant changes to the laboratory (e.g. new test equipment, change of assessment processes, new assessment staff) shall be communicated with The LIA Laboratory Ltd.

6.2 Evaluation procedures

Assessment procedures and rational for scoring shall be available to all personnel involved in assessments, these procedures shall be written to take account of the requirements of any currently available harmonised standards and/or guidance documents appropriate to the type of testing/assessment.

All assessment procedures shall be established, reviewed and controlled.

The scheme member shall establish and maintain procedures to control all documents that form part of its management system related to TM65.2 assessments (internally generated or from external sources), such as regulations, standards, other normative documents, test and/or calibration methods, as well as drawings, software, specifications, instructions and manuals.

The scheme member shall document its policies, systems, programs, procedures and instructions to the extent necessary to assure the quality of the assessment results. The system's documentation shall be communicated to, understood by, available to, and implemented by the appropriate personnel.

All documents issued to personnel in the laboratory as part of the management system shall be reviewed and approved for use by authorised personnel prior to issue. A master list or an equivalent document control procedure identifying the current revision status and distribution of documents in the management system shall be established and shall be readily available to preclude the use of invalid and/or obsolete documents.

All documentation shall be uniquely identified, such identification shall include the date of issue and/or revision identification, page numbering, the total number of pages or a mark to signify the end of the document, and the issuing authority(ies).

6.3 Procedures for quality checking

Where equipment and/or testing control/target values are out of specification there must be a procedure for identifying and correcting these deficiencies. The QMS should be

adequate enough to be able to detect non-conformances quickly enough so that effected data/reports can be quarantined.

6.4 Records

Scheme members shall ensure that a suitable control process is in place and all records are legible and shall be stored and retained in such a way that they are readily retrievable and kept in a format that is acceptable to LIA Laboratory Ltd for a minimum of 10 years.

All records shall be held secure and in confidence without risk of accidental or intentional unauthorised change. The scheme member shall have procedures to protect and back-up records stored electronically and to prevent unauthorised access to or amendment of these records.

The laboratory shall retain technical records of original assessment observations, derived data and sufficient information to establish an audit trail, calibration records, staff records and a copy of each test report issued. The records for each assessment shall contain sufficient information to facilitate, if possible, identification of factors affecting the uncertainty and to enable the test or assessment to be repeated under conditions as close as possible to the original. The records shall include the identity of personnel responsible for the sampling, performance of each assessment and reviewing of results. Observations, data and calculations shall be recorded at the time they are made and shall be identifiable to the specific task.

Scheme members are required to maintain a record of each assessment request, request review and acceptance for all assessment work carried out. They shall ensure the requirements, including the methods to be used, are adequately defined, documented and understood before commencing assessment.

Such records must provide a cross reference to a unique job number and corresponding report reference.

When mistakes occur in technical records, each mistake shall be crossed out, not erased, made illegible or deleted, and the correct value entered alongside. All such alterations to records shall be signed or initialled by the person making the correction. In the case of records stored electronically, equivalent measures shall be taken to avoid loss or change of original data.

The following records shall be maintained:

- Bill of materials
- Product evaluation record
- DT65
- Test reports
- Critical components information, e.g datasheets, certificates, etc.
- Any other relevant technical product information
- Training records
- Corrective and preventative action meeting records
- Audit records (internal / external)
- Records of any procedure changes

6.5 Personnel and training

Management shall formulate the goals with respect to the education, training and skills of the laboratory personnel. The scheme member shall have a policy and procedures for identifying training needs and providing training to its personnel.

The scheme member shall establish appropriate training plans and maintain records to show that staff have been satisfactorily trained to undertake the assessment activities that they have been assigned. Records must be kept of this training and the effectiveness of

the training actions taken shall be evaluated.

The scheme member shall maintain current job descriptions for managerial, technical and key support personnel involved in testing.

6.6 Equipment maintenance & calibration

The scheme member shall establish an equipment register and all equipment being used shall be uniquely identifiable. All equipment used to conduct tests shall be appropriate to its intended use, properly maintained. The equipment required shall be established based on the requirements of appropriate current harmonized standards and relevant CIE publications for the type of products the scheme member is intending to measure.

Equipment shall be operated by authorised personnel only. Up-to-date instructions on the use and maintenance of equipment (including any relevant manuals provided by the manufacturer of the equipment) shall be readily available for use by the appropriate laboratory personnel.

Where equipment has been subjected to overloading or mishandling, gives suspect results, or has been shown to be defective or outside specified limits, it shall be taken out of service. It shall be isolated to prevent its use or clearly labelled or marked as being out of service until it has been repaired and shown by calibration or test to perform correctly. The scheme member shall examine the effect of the defect or departure from specified limits on previous tests and shall implement the “Procedures for non-conformances” (see 7.8 below).

A record of the maintenance carried out shall be stored.

All equipment used to conduct tests shall be appropriate to its intended use, properly calibrated. Whenever practicable, all equipment requiring calibration shall be labelled, coded or otherwise identified to indicate the status of calibration, including the date when last calibrated and the date when recalibration is due.

All equipment used for tests and/or calibrations, including equipment for subsidiary measurements (e.g. for environmental conditions) having a significant effect on the accuracy or validity of the result of the test, calibration or sampling shall be calibrated before being put into service. The scheme member shall have an established programme and procedure for the calibration of its equipment including procedures for the safe handling, transport, storage, use and planned maintenance of measuring equipment to ensure proper functioning in order to prevent contamination or deterioration. A record of the calibration carried out shall be kept.

The scheme member shall establish calibration acceptance criteria for all critical equipment and ensure that a check is performed against said criteria before putting the equipment into service after calibration.

If the calibration is carried out ‘in-house’ then the references shall be calibrated at an acceptable period against national or international standards by a third party. Calibration of test equipment shall be carried out when the equipment is suspected of malfunction, or subject to physical or environmental abuse. Calibration must be conducted at least once per year, unless otherwise justified.

Records shall be kept of calibration and shall include:

- Reference number and identification
- Date of calibration
- Date of next calibration due
- Traceability of reference standards
- Name or reference of person carrying out the calibration
- Statement of calibration compliance/non-compliance

The current calibration status of test equipment used must be clearly visible to the operator. Use of test equipment outside calibration validity is not permitted.

6.7 Test/Calibration procedures

Testing procedures and pass/fail criteria (where applicable) shall be available to all personnel involved in testing, these procedures shall be written to take account of the requirements of any currently available harmonised standards and/or guidance documents appropriate to the type of assessment.

All testing procedures shall be established, reviewed and controlled.

The scheme member shall establish and maintain procedures to control all documents that form part of its management system (internally generated or from external sources), such as regulations, standards, other normative documents, test and/or calibration methods, as well as drawings, product specifications, software, shipping details instructions and manuals.

The scheme member shall document its policies, systems, programs, procedures and instructions to the extent necessary to assure the quality of the test results. The system's documentation shall be communicated to, understood by, available to, and implemented by the appropriate personnel.

All documents issued to personnel in the laboratory as part of the management system shall be reviewed and approved for use by authorised personnel prior to issue. A master list or an equivalent document control procedure identifying the current revision status and distribution of documents in the management system shall be established and shall be readily available to preclude the use of invalid and/or obsolete documents.

All documentation shall be uniquely identified, such identification shall include the date of issue and/or revision identification, page numbering, the total number of pages or a mark to signify the end of the document, and the issuing authority(ies).

6.8 Procedures for non-conformances

Where equipment and/or testing control/target values are out of specification there must be a procedure for identifying and correcting these deficiencies. The QMS should be adequate enough to be able to detect non conformances quickly enough so that effected data/reports can be quarantined.

6.9 Internal audits

The scheme member shall periodically, and in accordance with a predetermined schedule and procedure, conduct internal audits of its activities to verify that its operations continue to comply with the requirements of the management system and this scheme.
A schedule of audit activities and key areas shall be established and ongoing assessment of capabilities carried out, the outcome of all internal audits should then be fed back into corrective and preventative actions as well as management reviews.

6.10 Independence and impartiality

The laboratory should be able to demonstrate that it is impartial and that it and its personnel are free from any undue commercial, financial and other pressures which might influence their technical judgement. The laboratory should not engage in any activities that may endanger the trust in its independence of judgement and integrity in relation to its testing activities.

The responsibilities of key personnel in the organisation that have an involvement or influence on the assessment activities of the laboratory shall be defined in order to identify

potential conflicts of interest. The organisational arrangements should be such that departments having conflicting interests, such as production, commercial marketing or financing do not adversely influence the laboratory's compliance with the requirements of this scheme.

6.11 Audit process

The initial, annual & re-certification audits shall follow the structure as set out by the auditor prior to the site visit. The general requirements to observe during the audit include:

- Request for an existing TM65.2 evaluation and supporting documentation
- Evaluation process witness – physical + documentation
- Sample evaluation – disassembly – comparison against BOM Control process assessment
- Non-conformity assessment
- Recording of technical information review
- Structure of technical folder review
- Responsible personnel review
    - Training
    - Evaluation
    - Signatories
- Internal audits review
- Impartiality review
- During all audits at least 1 full DT65 to be checked with full review at The LIA Laboratory Ltd as per 6.12

6.12 LIA WITNESS/COMPARISON ASSESSMENT

The LIA Laboratory Ltd shall request a sample of the product reviewed during the annual audit and perform a full TM65.2 assessment.

The results obtained from the comparison assessment of the selected sample(s) shall meet within ±5% of The LIA Laboratory Ltds' reference assessment, where measurements made by the scheme member fall outside this limit LIA Laboratory Ltd will consider these on a case by case basis.

The final decision to accept a manufacturer into the scheme shall remain with The LIA Laboratory Ltd.

6.13 COSTS

The complete costs for the operation of this scheme will be borne by the individual manufacturers.

(a) Pre-agreement costs will consist of the pre-agreement visit with the associated preparation and report writing and the cost of assessment of not more than one product.

(b) The re-inspection of 'Registered' Laboratories will require senior personnel making visits at intervals of approximately 12 months.

(c) Review of data and issue of individual test certificates.

(d) In the event that LIA Laboratory Ltd receives a complaint regarding one or more products or the results submitted for report production appear questionable, the manufacturer will be required to submit additional samples to the LIA Laboratory Ltd for verification purposes with testing charged at the prevailing rate.

If a particular manufacturer does not meet the approval requirements, extra tests and visits may be necessary which will involve an extra charge.

6.14 Technical Conformity

The product shall have been self-assessed in line with requirements of documents TM65.2, and TSD-016. No deviations to the self-assessment process are accepted, all relevant tabs and questions of the DT65 shall be completed, each with sufficient, relevant and provable evidence as to the why each individual rating has been awarded. Only self-assessments that are in line with the DT65 can be accepted for TM65.2 Assurance.

Product families may be TM65.2 assured (if requested). Product family self-assessments submitted for TM65.2 Assured must be accompanied by reasonable evidence that each member of the family does not materially vary in embodied carbon performance from any other (See 6.14.2). Representative product(s) may be selected by the certification body.

The assurance process is based on evaluation of evidence provided by the submitting party. This includes the correctly filled document DT65 and any relevant evidence that supports the information in the DT65 (BOM, photos of the product, information about components and their supply chain, materials and fixings of the product, etc.).

In addition, the physical sample of the representative product (selected by The LIA representative) may be requested for the assessment.

A positive assurance decision will be granted to any product/product family assessment(s), as provided by the client (DT65 document and supporting documentation required) that meets the pass criteria of ±5% of TM65.2 Assured evaluation scheme and supporting evidence, as conducted by certification body.

Note: The ±5% refers to the $kgCO_2e$ value of the final DT65 calculation.

Note 2: The optional cells relating to replacement rate and gas are considered mandatory for compliance with this scheme.

6.14.1 Method and assessment criteria

The embodied carbon calculated according to DT65 for a mid-level assessment (for all relevant tabs) shall be marked against The LIA's marking criteria. The LIA Laboratory Ltd shall request a sample of the product reviewed during the audit and perform a full TM65.2 assessment. When the embodied carbon calculated across the different life cycle stages of the product does not differ by more than ±5% of the LIA Laboratory Ltds assessment value, then the self-assessment shall be deemed to have passed and the applicant shall be eligible for Assured Company Verification certification. Where the situation arises that evidence provided indicates that the self-assessed value is different to LIA's marking criteria by ±5%, on one or more criteria, Assured Company Verification certification shall not be awarded. The client may appeal the decision, see appeals procedure below, or shall accept it. On acceptance the client shall have a period of 3 months to show the revised value(s) in all product(s) and marketing literature or any database or digital tool where the product is included along with any root cause analysis of the discrepancies in assessment and any training provided post audit. An additional audit assessment will be required at the end of the 3 month period to review and approve the application to the TM65.2 Assured Company Verification Scheme.

6.14.2 Family variants - Initial

Where a particular product has family variants these may be assessed as family groupings and added to the TM65.2 Product Verification certificate, this will be considered by The LIA Ltd as the 3rd party assurance body on a case by case basis.

Initial family member products shall have:

- The same material breakdown
- The same final assembly locations
- The same energy requirements during manufacturing

Note: Material breakdown is considered to be the materials which make up a product. Some materials may differ in form (for example lenses) but shall be of the same material types and general form.

When selecting type test sample(s) from a range of products of similar construction for embodied carbon assessment, the product(s) chosen shall be those which display the representative combination of material breakdown, final assembly location and energy requirements. The best case product that is not likely to be representative of typical sales shall not be used. Justification shall be recorded for the selection of the primary test sample.

Products within the initial family may vary based on characteristics that do not significantly affect the embodied carbon calculated with DT65. These may include (but are not limited to):

- Different LED colour temperature and CRI
- Different optics (where the material quantities don't change or are within a tolerance range of ±5%)
- Body colour or finish (where the method remains the same and no additional work i.e. respraying is done)

Note: The ±5% refers to the mass of individual components. Evidence may be requested as proof of compliance within deviation limits.

The range of products under the initial family shall be manufactured by the same manufacturer, under the same quality assurance system. The type variants of the range should be essentially identical with the respect to materials used, components and technology applied.

During the TM65.2 Assured application the manufacturer shall submit a TM65 report for the primary sample and indicate the products that they wish to include in the initial family group The initial family group shall have the same embodied carbon as the reference product, according to the above criteria.

Note: The need for granular detail on evaluating families, for example all relevant alternative components/materials share the same supply chain, weight and technical specification. If alternative components are used within a family range, information about all alternative components will be required for the certification process and family members may not be suitable to be grouped together within the initial family where different materials/components, which could affect the $kgCO_2e$ or TM65.2 calculation, are used.

If one or more products of a family varies significantly to the rest of the family (either positively or negatively) this shall be declared at the submission.

6.14.2.1 Family variants - Secondary

The LIA Laboratory Ltd may accept submissions of different product family members which share the same core product as the initial family outlined in clause 6.14.2, but vary in aspects such as (but not limited to):

- BOM and/or material quantities (e.g. addition or change of certain components, such as louvers, snoots, barn doors)
- Final assembly locations
- Energy requirements during manufacturing
- Difference in driver/control gear use in the product to provide a different control protocol and where mass and embodied carbon varies as a result
- Where a different light source is used and where mass and embodied carbon varies from the initial family
- Where the variations take the embodied carbon value out of the ±5% tolerance defined by the LIA

Note: The above requirements relate to family members which fall outside of the requirements clause 6.14.2. Where these family members are required to be added to the certification scheme a new certificate shall be issued by The LIA Laboratory Ltd, providing suitable evidence of kgCO2e value and difference from the initial family grouping is provided. The LIA Laboratory Ltd shall perform a limited assessment based on the differences from the initial sample application.

Note 2: The type of product variations which may fall under these requirements include significant structural changes (length, mass or design differences), use changes (emergency variants) and factory location changes.

Requests for family grouping outside of those set out in clause 6.14.2 will be considered upon request by The LIA Laboratory Ltd. Where additional assessment is required additional charges may be required.

6.15 Certification Period

6.15.1 Certification duration

Following a successful audit assessment a certificate will be issued to the applicant. The certification period will run for three (3) years from the date of issue, assuming that on-going assessment (every 12 months) confirms that the products and/or systems remain in conformity with the scheme. Prior to the end of the three year period, a re-assessment audit and certification review shall be undertaken to determine whether it is appropriate to reissue the certificate and commence a new certification cycle for a period of three years.

The purpose of the review is to assess whether:

Any of the supporting documents (TM65.2, DT65) or scheme requirements have been updated since the initial assessment.

- There have been changes to production location or facilities.
- There have been any significant changes to the quality management system
- There have been any significant changes to the assessment staff

The impact of any such changes on the validity of the initial TM65.2 Assured Company Verification and hence certification decision shall be assessed.

Where no significant changes are identified, and on-going conformity is assured, then the certificate will be re-issued for a further 3 years, subject to the ongoing scheme requirements.

If an Assured Company Verification Scheme certificate is amended or withdrawn by The LIA, the client will be notified and product/companies shall not be marketed based on the results of withdrawal certificate after a period of 3 months. This includes all product and marketing literature or any database or digital tool where the product is included.

6.15.2 Changes during certification

In addition to the re-certification review and annual audits, it is the responsibility of the customer to inform LIA of any changes that occur affecting certification as identified throughout this document within the certification period. Customers shall contact The LIA before applying the changes.

The impact of any such changes on the validity of the initial type testing and hence certification decision shall be assessed.

Where no significant changes are identified, and on-going conformity to the previous DT65 rating(s) is assured, then the certificate will remain valid, subject to the ongoing scheme requirements.

Where significant changes are identified, which affect the validity and scope of the certification, actions necessary to address these changes will be communicated to the customer. The certificate may be suspended or withdrawn until the issues have been addressed satisfactorily.

6.16 Documentation for certification evaluation

6.16.1 Embodied Carbon Information

The DT65 document for TM65.2 assessment requires information relating to:

- Material specification
- Material mass
- Final assembly location
- Total electricity and gas used during manufacturing during the reporting period
- Total quantity of products (tonnage) produced during the reporting period

All required documentation shall be held by the applicant for the relevant products and may be requested by The LIA Laboratory Ltd.

6.16.2 Product Information

The client shall provide sufficient evidence supporting each question in the submitted self-assessed DT65 rating in document DT65, provided for certification.

The provided evidence shall support:

6.16.2.1 Factory Information

- Factory address
- Energy consumption
- Tonnage placed onto the market

6.16.2.2 Material Information

- Weight
- Location
- Type
- Replacement rate of components

7 IDENTIFICATION AND USE OF THE CERTIFICATION LOGOS

The customer is permitted to use the TM65.2 Assured Company logo. Logo usage policy is explained in The LIA Ltd. document LUG009.

The logo shall only be used once all stages of the TM65.2 Assured Company Verification certification scheme process are successful.

The TM65.2 Assured Company logo remains the property of LIA and it's only permitted to be used in accordance with this document (and LUG009).

After successful certification process the applicant will be awarded with TM65.2 Assured Company Verification certificate with unique certification number (and company logo).

Validity of the certificate(s) can be checked directly in The LIA Laboratory Ltd certificates database www.lialabcert.org.uk/certificates-search

Certification logo

8 ACCESS TO FACILITIES AND INFORMATION

Where a complaint is received regarding a product, company and/or data covered by the Scheme, the customer will make available to The LIA any information, data, samples and access to facilities, personnel and subcontractors in order to investigate such complaints.

On occasion, where a Scheme is covered within the LIA Laboratory's ISO/IEC 17065 schedule of accreditation with UKAS, there may be a need to allow third party access to manufacturer's facilities during the assessment process. It should be noted that the customer will be notified of any such requirement, all information obtained during such visits will remain confidential at all times.

9 IMPARTIALITY

The latest copy of The LIA Laboratory's impartiality policy along with the Terms & Conditions of this Scheme can be found on
https://www.thelia.org.uk/general/custom.asp?page=Lab_Certification_Services
Alternatively a copy can be requested by e-mail at lab@thelia.org.uk.

10 APPLICATION

An application form for this Scheme can be downloaded from Certification Services | At The Heart of Lighting
Alternatively a copy can be requested by e-mail at TM66@thelia.org.uk.

11 SCHEME FEES

The cost of company assessment shall be borne by the applicant.

The exact cost for a complete assessment will be determined on a case by case basis. A quotation with a complete breakdown of costs will be provided prior to commencing any certification activities.

12 APPEALS

Any appeals shall be put in writing to The LIA. The appeal investigation will be conducted by personnel who were not involved in the original assessment process in order to ensure impartiality.
Further details of the complaints and appeals process is available on request. In the event that The LIA appeals process cannot resolve a dispute, the matter shall be taken to an independent person or body such as a specialist arbitrator or tribunal. Where upon their ultimate decision will be final.

13 ADDITIONAL INFORMATION

Details of the evaluation process, rules and procedures for granting, maintaining, extending or reducing the scope, for suspending and for withdrawing certification can be requested by email at lab@thelia.org.uk.

ANNEX 1 – REFERENCE DOCUMENTS

DT65	Embodied Carbon Calculator
TM65	Embodied carbon in building services: A calculation methodology
CIBSE M	Maintenance engineering and management
BS EN ISO 9001	Quality management systems. Requirements
BS EN ISO/IEC 17065	Conformity assessment. Requirements for bodies certifying products, processes and services
ISO/IEC 17067	Conformity assessment -- Fundamentals of product certification and guidelines for product certification schemes

Note: Where a document is referenced the latest valid version of the document shall be used.