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SCS GLOBAL SERVICES
TYPE III ADVANCED ENVIRONMENTAL DECLARATION PROGRAM

Program Operator Manual

Table of Contents

1 Introduction

(1.1) Neutral Third Party. SCS is a neutral third-party certification body and standards developer specializing in the assessment of sustainability, environmental, safety and quality performance claims.

(1.2) This Manual. This manual provides the general program instructions for use in the operation of the SCS Type III Advanced Environmental Declaration Program. These Instructions meet the requirements of *ISO 14025 Environmental labels and declarations – Type III environmental declarations – Principles and Procedures, ISO 14040 Environmental management – Life cycle assessment – Principles and framework, ISO 14044 Life cycle assessment – Requirements and guidelines*, and *SCS-002 Life Cycle Impact Assessment Framework Sufficient to Support Public Declarations, Ratings and Claims*.[1]

(1.3) Sole Party. SCS is the sole party responsible for the development and administration of this program.

2 References

(2.1) Normative References. Normative references include:

- ISO/IEC Guide 65:1996(E) and ISO/IEC 17065
- ISO 14025:2006
- ISO-14040:2006
- ISO-14044:2006
- LEO-SCS-002 (currently in draft form)

3 Scope of the Program

(3.1) Coverage. This Program covers the establishment of product category rules (PCRs) and the development and administration of environmental product declarations (EPDs). The program is applicable to any product, service or system evaluated using life cycle assessment (LCA) conducted in accordance with ISO-14044 and LEO-SCS-002.

(3.2) Intended Market. The program is intended for use in any market in which SCS provides services globally.

(3.3) Intended Audience. The intended audience for the EPDs generated under this Program are businesses, government agencies, institutions, consumers, environmental advocacy organizations, and other stakeholders interested in making informed decisions about products and systems based on their environmental performance.

4 Program Objectives

(4.1) Objectives. The Program has been established to promote full, scientifically sound environmental transparency about the environmental and human health impacts of products, based on life cycle assessment conducted in accordance with ISO 14044 and LEO-SCS-002, and to generate Environmental Declarations for products and systems in accordance with ISO 14025 and the applicable PCRs.

[1] At the time of publication of this document, LEO-SCS-002 is a committee draft standard being developed under the American National Standards Institute process.

5 Definitions

(5.1) Normative Definitions. Definitions contained in ISO 14025, ISO 14040, ISO 14044 and LEO-SCS-002 apply as relevant.

(5.2) Additional Definitions. In addition, the following definitions apply:

1. **Applicant**: An entity that applies for an EPD.
2. **Audit**: A third-party verification of the Client-reported information, conducted as required by the PCR.
3. **Auditor:** A representative of the Program Operator appointed to undertake the audit of a Client or Applicant. An auditor may be an employee or subcontractor, and is independent of the critical reviewer.
4. **Certified**: Status awarded to a Client with possession of a valid EPD, where privileges to use the Program Marks in accordance with the SCS Program are granted.
5. **Client**: An entity that has agreed to receive the services of the SCS program. This entity may be a new applicant or an existing certified operation.
6. **Decision Maker**: A Program Manager, Supervising Director, or delegate authorized to issue EPDs.
7. **Desk Audit**: A Desk Audit may involve a review of documents, test data, and/or other evidence used to verify Client-reported information.
8. **Environmental Certification Services Division**: The Environmental Certification Services Division is the SCS division within which the Program is managed.
9. **Environmental Product Declaration (EPD)**: This term is often used interchangeably with "environmental declaration", as defined in ISO-14025. In this document, an Environmental Product Declaration can be issued for specific product system, an industrial system, or service depending on the scope of the assessment.
10. **Internal Audit**: A systematic periodic review and assessment of the objectives and performance of a program that is undertaken by SCS itself.
11. **International Organization for Standardisation (ISO)**: An international non-governmental organization that develops and publishes international standards. The organization is comprised of a network of the national standards institutes of 159 countries, with a Central Secretariat in Geneva, Switzerland.
12. **LEO**: The Leonardo Academy, the 501(c)(3) organization acting as the ANSI-accredited standards developer for the LEO-SCS-002 standard.
13. **Product Category Rule (PCR).** This term is defined in ISO-14025. In addition, in this document, PCR can stand for a System Category Rule, when an industrial system rather than a specific product system is the object of the assessment.
14. **Program**: The overall process by which an operation or product is evaluated under a life cycle assessment (LCA) and issued an EPD.
15. **Program Marks:** Program Trademarks licensed for use to the client by the Program Operator upon issuance of the EPD.

16. **Program Operator**: The body that conducts a Type III Advanced Environmental Declaration Program. SCS is herein referred to as the Program Operator.
17. **Quality System**: Documented procedures that are established, implemented and periodically audited to assure that production, handling, management, certification, and other systems meet specified requirements at all levels of the Program Operator.
18. **Records**: Completed forms, journals, reports and minutes that have been completed or created for specific purposes. Uncompleted forms or templates are not considered to be records.
19. **Renewal Assessment**: The periodic assessment of a Client required to determine whether an EPD shall be renewed.
20. **SCS Global Services (SCS)**: A provider of environmental certifications, and an EPD Program Operator.
21. **Standards**: The normative standards referenced in this document.
22. **Surveillance**: Annual assessment of Client information to determine whether changes to the EPD and renewal are warranted.
23. **Suspension**: The temporary removal of an EPD by Program Operator administration action.
24. **Third Party:** A person or entity that is recognized as being independent of the parties involved as concerns the issue in question.
25. **Termination**: Voluntary (or involuntary) cancellation of the EPD contract by either the Program Operator or the Applicant or Client according to contractual arrangements.
26. **Withdrawal**: The removal by the Program Operator of a Client's EPD certification.

6 Responsibilities of the Program Operator

(6.1) Program Operator Responsibilities. The Program Operator shall be responsible for fulfilling the following responsibilities:

- prepare, maintain and communicate general program instructions (this document in its entirety);
- publish the names of the organizations involved as interested parties in the program development;
- ensure that Type III environmental declaration requirements are followed (ISO 14025 Clause 7);
- implement a procedure to safeguard the consistency of data;
- maintain publicly available lists and records of PCR documents and Type III environmental declarations (www.scsglobalservices.com);
- adopt existing PCRs or publish PCR documents and Type III environmental declarations;
- monitor changes in procedures and documents of related Type III environmental declaration programs, and revise procedures and documents when necessary;
- ensure the selection of competent independent verifiers and PCR review panel members;
- implement a transparent procedure for the PCR review, including the scope of the review, details of the review and constitution of the PCR review panel;
- implement procedures to avoid misuse of references to ISO-14025, the SCS Type III Environmental Declaration Program, SCS-issued Type III Environmental Declarations and, where

relevant, the SCS Program Marks.

(6.2) SCS Quality System. The Program Operator follows procedures consistent with the SCS Quality System. Consistent with the SCS Quality Manual, Section 4.7, "SCS is solely responsible for its decisions relating to the granting, maintaining, extending, limiting, suspending and withdrawing of certification, validation or verification status under its certification and assessment programs. SCS does not delegate authority for granting, maintaining, extending, suspending or withdrawing certification, validation or verification to an outside person or body."

(6.3) Periodic Review of Instructions. SCS shall conduct a periodic review of these General Program Instructions at least every three years, and make updates as necessary.

(6.4) Resources for Program Development and Operation. As Program Operator, SCS either provides the funding, or seeks funding from additional organizations, to support initial and ongoing program development and operation activities. No fees are charged by SCS to interested parties to participate in the open consultation stage of PCR development, to participate on PCR Review Panel, or to commenting on a draft PCR document.

7 Procedures for Defining and Developing Product Category Rules (PCRs)

(7.1) Applicable PCRs. SCS shall conduct LCAs and prepare and issue EPDs in accordance with one or more of the following:

- Privately developed PCRs established by a recognized program operator in accordance with ISO 14025 rules and conformant with LEO-SCS-002;
- Publicly developed PCRs established under the ANSI open, consensus process by the LEO-SCS-002 PCR subcommittee and a recognized program operator, in accordance with ISO 14025 rules;
- PCRs developed by SCS in accordance with the ISO 14025 rules as described in Section 8.

(7.2) Open Consultation Process. SCS shall solicit the involvement of interested parties and facilitate their participation in an open consultation process in the development of any PCR, consistent with the requirements of ISO 14025, Clause 6.5. The resources and time required to achieve this consultation goal shall be provided by SCS. Among other procedures:

- Interested parties identified by SCS shall be invited to participate in the PCR process at least 30 days before initiation of the process.
- Interested parties shall be given at least 30 days to review and access details and sources of information used.
- Interested parties who provide comments shall receive responses to their comments within a reasonable timeframe, generally no more than 60-90 days.

(7.3) Product Categories. Product categories shall be determined in accordance with the procedures of the applicable PCR. For PCRs generated by SCS, product categories shall be defined using industry-recognized parameters.

(7.4) Development and Maintenance of PCRs

- **Contents of PCR.** Each SCS PCR conforms to the content requirements in ISO 14025, ISO-14044 and LEO-SCS-002.
- **Period of Validity.** PCRs are valid for three years, unless otherwise specified.
- **Selection Procedure for Predetermined Parameters**
  The PCR Committee shall identify the core impact categories and category indicators from the

standardized list of potential impact categories identified in LEO-SCS-002. In addition, the Committee shall determine whether additional impact categories relevant to the specific product category should be identified. This selection process shall be based on an understanding of the potential impact categories associated with the product category, and an assessment of the environmental relevance of the indicator node selected for analysis, consistent with ISO 14044 and LEO-SCS-002.

(7.5) PCR Review Panel. A third-party PCR Review Panel shall review the PCRs developed by SCS. SCS shall ensure that a reasonable balance among the members of the PCR Review Panel is achieved and potential conflicts of interest are identified. This panel consists of a chair and two additional members. Competence of the PCR verifiers and of the PCR Review Panel is determined in compliance with ISO 14025:2006, Clause 8.2, and includes:

- general background knowledge of the relevant sector, product and product-related environmental aspects;
- expertise in LCA and methodology for LCA work;
- awareness of relevant standards in the fields of environmental labeling, environmental declarations, and LCA;
- knowledge of the regulatory framework relevant to the scope of the PCR; and
- knowledge of the program for Type III environmental declarations.

(7.6) Content of PCR Review. The PCR review includes: 1) an evaluation of compliance with the ISO 14040 and 14044, LEO-SCS-002, and ISO 14025; 2) compliance with these general program instructions; and 3) inclusions of all environmental issues relevant to the product category. The PCR Review Panel shall determine whether substantive revisions are needed. If so, a new version shall be issued. The final PCR document includes or incorporates the PCR Review Panel findings, comments and recommendations.

(7.7) Subsequent Changes to PCRs. Any stakeholder may raise issues at any time for consideration, and changes may be made to the PCR before the three-year period has expired if deemed necessary.

8 LCA Methodology

(8.1) LCA Study. The LCA Practitioner will conduct an LCA study in conformance with the requirements of the relevant PCR. If an on-site audit was conducted, the LCA practitioner will incorporate the findings of that audit. PCRs developed by SCS under this Program shall follow the LCA methodological requirements of ISO-14044 and LEO-SCS-002.

(8.2) LCA Report. A report on the outcome of the LCA (LCA Report) will be prepared by the LCA Practitioner. If an on-site audit was conducted, the findings of the audit shall be included in the LCA report.

(8.3) EPD. The EPD is prepared based on the findings of the LCA report.

9 Data and Documentation

(9.1) Management of Data and Documentation. SCS manages data and documentation in accordance with SCS Quality System internal procedures.

(9.2) Public Postings. SCS maintains a publicly available list of completed PCRs and supporting documents as required by ISO 14025. These documents are available through SCS's website,

www.scsglobalservices.com. SCS shall request the posting of completed PCRs in applicable publicly available PCR repositories as well.

SCS also maintains a publicly available list of verified EPDs and supporting documents. These documents are available through SCS's website, www.scsglobalservices.com. EPD Verification Reports are available to all parties upon request. The verified EPDs may also be made publicly available by the manufacturer.

(9.3) Managing Data Confidentiality. The Program Manager and staff shall abide by the standard data confidentiality and proprietary information protection provisions contained in the SCS Assessment Services Agreement.

10 Program Personnel and Critical Reviewers

(10.1) SCS Program Personnel. Program personnel are part of SCS' Environmental Certification Services department. The department's operations concerning personnel are consistent with the SCS HR Policies.

(10.2) Program Manager. The Program Manager is responsible for ensuring that the program is operated in accordance with the applicable standards.

(10.3) LCA Practitioner. The LCA practitioner is responsible for conducting LCAs and generating EPDs. The LCA practitioner must be familiar with the requirements of ISO 14044, ISO 14025, and LEO-SCS-002, competent to perform life cycle assessments consistent with the relevant PCR, and capable of making technical judgements, writing reports, and conducting Client-related communications and other job duties and responsibilities. Terms of reference and/or job descriptions are provided to all program personnel, outlining duties and responsibilities. All job descriptions are documented in the SCS Human Resources Records.

(10.4) Auditors. Auditors may be needed to verify information provided by the Client. Auditors must be competent to conduct audits. At a minimum, Auditors must possess a B.A. or B.S. degree in a field of study relevant to the information being audited (e.g., engineering, chemistry, physics, industrial ecology, forestry).

11 Application and Assessment Process

(11.1) Initial Application Documents. Applicants are provided access to the following documents:

- An Application form;
- A copy of the pertinent PCR;
- Access to applicable documents and standards.

(11.2) Processing of Application. Upon receipt of an Application form completed by Applicant, the Program Manager ensures the following:

1) That SCS has the capability to complete the work, the location of the operation and any special requirements such as language used by the applicant;
2) That the Applicant is eligible to receive services of SCS;
3) That the Applicant's product or system is within the scope of the relevant PCR;
4) That the requirements for receiving an EPD have been clearly defined, documented and understood; and
5) That any difference(s) in understanding is resolved prior to project initiation.

(11.3) Fees. When the designated staff member receives the Application, certification expenses and specific scope of work are determined, and a proposal is sent to the Applicant. Applicant fees are determined using the appropriate program's basic cost structure. ***Fees are not contingent on the results of the LCA conducted or the publication of the EPD.***

(11.4) Work Order. Once a proposal is agreed upon by the Applicant and SCS, a Work Order and SCS Assessment Services Agreement are sent to the Applicant for review and signature. The Work Order clearly defines the scope of work by identifying the facilities, and the product or system to be assessed.

(11.5) Staff Assignment. Once a signed Work Order is received back from the Client, an LCA Practitioner is assigned and the first Invoice is sent to the client. If an on-site audit is required to verify any aspect of the information to be included in the LCA, the Program Manager will identify an Auditor, who will schedule an audit date with the Client.

(11.6) Conducting Assessment. The LCA Practitioner shall conduct the LCA in accordance with the provisions of Section 8 above.

(11.7) Production of EPD. The EPD shall be produced based on study results in accordance with the SCS approved EPD template, or at a minimum, in accordance with ISO 14025 requirements Clause 6.7.1.

(11.8) EPD comparisons. EPD comparisons may be made in conformance with the requirements of ISO 14025, Clause 6.7.2. and with the requirements of LEO-SCS-002.

12 Critical Review and Verification of EPD

(12.1) Review Required. Each LCA report and EPD shall be independently reviewed in accordance with the requirements of ISO 14044, ISO 14025, and LEO-SCS-002.

(12.2) Critical Reviewer. Any SCS employee or independent contractor may serve as the Critical Reviewer, provided that s/he: 1) has not been involved in the execution of the LCA or the development of the declaration; 2) does not have a conflict of interest either in terms of his/her employment position or in terms of ownership or brokerage interest in the company whose products are being evaluated; and 3) possesses the required knowledge as defined in ISO 14025, Clause 8.2.2. This includes:

- knowledge of relevant sector, product and product-related environmental aspects;
- process and product knowledge of the product category;
- expertise in LCA and methodology for LCA work;
- knowledge of relevant standards in the fields of environmental labeling and declarations and LCA;
- knowledge of the regulatory framework relevant to the Type III environmental declarations; and
- knowledge of the SCS Type III Advanced Environmental Declarations Program.

(12.3) Response to Reviewer Comments. Any actions or modifications recommended by the Critical Reviewer must be addressed to the Critical Reviewer's satisfaction before the LCA Report and the associated EPD are finalized.

(12.4) Independent Verifier. Any SCS employee or independent contractor may serve as the independent EPD Verifier, provided that s/he: 1) has not been involved in the execution of the LCA or the development of the declaration; 2) does not have a conflict of interest either in terms of his/her employment position or in terms of ownership or brokerage interest in the company whose products are being evaluated; 3) possesses the ability to perform the tasks as defined in ISO 14025, Clause 8.1.4; and 4) possesses the required knowledge as defined in ISO 14025, Clause 8.2.2. This includes:

- knowledge of relevant sector, product and product-related environmental aspects;
- process and product knowledge of the product category;
- expertise in LCA and methodology for LCA work;
- knowledge of relevant standards in the fields of environmental labeling and declarations and LCA;
- knowledge of the regulatory framework relevant to the Type III environmental declarations; and
- knowledge of the SCS Type III Advanced Environmental Declarations Program.

(12.5) Independent Verification of EPD. The independent verifier shall perform verification of data from LCA, LCI and information modules, and additional sources. The verification process shall as a minimum confirm the following:

- conformance with the PCR;
- conformance with ISO 14020;
- conformance with ISO 14040 and ISO 14044;
- conformance with the SCS Type III Advanced Environmental Declaration Program Operator manual;
- that data evaluation includes coverage, precision, completeness, representativeness, consistency, reproducibility, data sources, and uncertainty;
- the plausibility, quality, and accuracy of the LCA-based data;
- the quality and accuracy of additional environmental information;
- the quality and accuracy of supporting information.

At the end of the verification process, the EPD Verifier will produce a report confirming that the EPD was conducted in accordance with the PCR. EPD Verification Reports are available to all parties upon request.

(12.6) Signature. The EPD must be co-signed by the LCA Practitioner, the Critical Reviewer and the EPD Verifier to be considered final.

13 Publication of Final EPD

(13.1) Publication Permission. Finalized EPDs may be published with the Client's permission. Copies shall be posted to the SCS website.

(13.2) Authority. SCS shall not delegate authority for issuing, maintaining, extending, suspending or withdrawing an EPD to an outside person or body.

14 Changes in Program Requirements

(14.1) Program Changes. In the event of changes to program requirements, SCS Program staff will notify all affected Clients and personnel within 30-days of the approved changes.

For changes relevant to Clients, the Program Manager (or designee) will send an e-mail message within 30 days to all Clients alerting them of the modifications and actions necessary of the approved changes. For all changes, a directive will be sent via e-mail to all Auditors and relevant program staff alerting them of the modifications along with instructions for implementation as it pertains to their work.

(14.2) Posting on Website. Up-to-date versions of program requirements will also be maintained on the SCS website, www.scsglobalservices.com.

15 Appeals, Complaints and Disputes

(15.1) Appeals, Complaints and Disputes Process. The Program Manager is responsible for following up on all appeals, complaints and disputes. Upon receipt of an appeal, complaint or dispute, the Program Manager follows the SCS Corporate Appeal, Complaint and Dispute Investigation Procedure.

16 EPD Updates and Renewal

(16.1) EPD Renewal. In order for a Client to continue to use an EPD beyond the period of validity, data verification will be required. This data verification will involve documentation updates and analysis, and may in addition involve on-site surveillance auditing, depending on the nature of information being updated.

(16.2) EPD Updates. The declaration holder of a verified EPD is responsible for informing SCS of any significant changes to the information used to generate the EPD. A revised EPD may be required, necessitating verification of the new information.

17 Use of Trademarks

(17.1) Trademarks. SCS and SCS logos are registered trademarks of SCS. No entity shall apply or use the logos in connection with a product or EPD, or represent in any way that the EPD is independently verified by SCS, unless authorized in writing by SCS. SCS and Client shall abide by all relevant provisions as agreed to in the SCS Assessment Services Agreement.

18 Records

(18.1) Record-Keeping. Accurate, complete, up-to-date and legible records of the following are maintained by SCS.

(18.2) Safe Storage. Records are stored safely and are readily accessible for at least the previous five (5) years electronically on SCS's secure server and/or in hard copy in office filing cabinets.