INTERNATIONAL CLIMATE INTELLIGENCE SYSTEM

ICIS Program Instructions for EPD

ICIS General Program Instructions

v2.0

2023

General

The ICIS General Program Instructions (GPI) is guidelines that explain how the International Climate Intelligence System works. This system helps companies share information about how their products affect the environment. The GPI follows the ISO 14025 standard for Type III Environmental Product Declarations (EPDs).

ICIS GPIs play a crucial role in:

- **Credibility:** Ensuring that EPDs issued under the system are based on consistent methodologies and data quality.
- **Comparability**: Enabling comparisons between EPDs from different products and industries.
- **Transparency**: Promoting transparency in environmental performance reporting.
- **Trustworthiness**: Building trust in EPDs as a reliable tool for decision-making.

Disclaimer for General Program Instructions (GPI)

The General Program Instructions (GPI) provided herein is for informational purposes only. They are intended to offer a general understanding of the guidelines governing the International Climate Intelligence System and should not be considered legal advice.

While every effort has been made to ensure the accuracy and completeness of the GPI, it is essential to consult the official document for the most up-to-date and authoritative information. Any reliance on the information contained in this overview is at your own risk.

The GPI may be subject to changes or updates. It is recommended to refer to the latest version available from the official source.

Document Revision History

Version	Date	Revision Description
1.0	20.05.2021	First Version
2.0	18.03.2023	Second Version and Current

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1.0 INTRODUCTION

The International Climate Intelligence System (ICIS) embodies the vanguard in the global initiative to counteract climate change by harnessing the transformative power of knowledge. Recognising that informed decisions are the bedrock of impactful environmental stewardship, ICIS is steadfast in its mission to collect, scrutinise, and share essential climate intelligence. Our platform emerges as a central hub for cutting-edge findings, developments, and innovations within the realm of climate science, offering digestible and actionable insights to a broad spectrum of users.

At the heart of ICIS's ethos is the commitment to equip individuals, enterprises, and policymakers with accurate, transparent, and practical environmental insights. Our Environmental Product Declarations (EPD) framework stands as a testament to this pledge, delivering standardised evaluations of the environmental ramifications across the life cycles of products and services. By harnessing the depth and breadth of our Product Category Rules (PCRs), stakeholders are empowered to undertake comprehensive Life Cycle Assessments (LCAs), unveiling critical perspectives on their environmental footprints.

Yet, ICIS's vision transcends the mere dissemination of data. We strive to be a linchpin for sustainable decision-making across diverse sectors, championing the integration of eco-friendly practices that diminish environmental footprints and bolster sustainability. Through our intuitive platform, ICIS demystifies complex climate data, facilitating engagement with a myriad of subjects, from carbon emissions to renewable energy innovations and resilience-building measures.

Acknowledging the profound influence of greenhouse gases on the global climate, ICIS provides robust methodologies and standards for their meticulous evaluation and management. Our unwavering commitment to environmental preservation is highlighted by our adherence to globally recognised standards, including ISO 14025, ISO 14040, ISO 14044, and EN 15804 which underpin the credibility and universal relevance of our EPDs.

ICIS stands not merely as a purveyor of information but as a dynamic force for environmental transformation, steering the international community toward a pathway of sustainability and resilience. In bridging the chasm between knowledge and application, ICIS reaffirms its role not only as an information conduit but as a pivotal agent of change in the collective journey towards a sustainable and thriving planet.

2.0 PROGRAM PURPOSE AND SCOPE

ICIS is committed to enhancing the transparency and comprehension of the environmental impacts of products, providing a solid framework for Environmental Product Declarations (EPDs). Our main objective is to assist organisations in accurately conveying the life cycle-based environmental information of their products. This goal is realised through several key activities:

- **Enhancing the PCR review process:** ICIS continuously improves the Product Category Rules (PCR) review process by adding tasks and engaging external individual verifiers as

needed. This ensures our methodologies remain at the cutting edge of environmental assessment standards.

- **Active PCR management:** we adopt a proactive stance in managing PCRs, including notifying the PCR moderator well before PCR expirations, to maintain ongoing relevance and adherence to evolving standards.
- **Verifier network upkeep:** keeping an up-to-date list of independent verifiers is fundamental to our programme. We offer guidance to organisations in choosing suitable verifiers, guaranteeing the trustworthiness and accuracy of the environmental declarations.
- **Decisions on third-party verification:** we make decisions on the need for third-party verifications in line with the guidelines established in the GPI, ensuring a fair and unbiased approach to environmental reporting.
- **EPD registration and publication:** we rigorously assess applications for EPD registration based on verification reports and additional documentation, determining their eligibility for publication. This ensures that only precise and credible EPDs are made available.
- **Commitment to digital excellence:** our dedication to digital excellence is evident through the administration and upkeep of an accessible programme website and a database of EPDs in a machine-readable format.
- **Engagement and communication with the community:** through regular newsletters and the issuance of explanatory materials, we keep our stakeholders informed and engaged. We also maintain an extensive list of subscribers to ensure effective communication.
- **Global collaboration and standardisation:** our active participation in forming and upholding mutual recognition agreements with other established programme operators worldwide promotes international collaboration and standardisation in environmental reporting.
- **Management of technical and advisory committees:** ensuring the Technical Committee and the International Advisory Board are comprised of skilled, independent members and facilitating their work and meetings are crucial to our strategy.
- **Managing complaints and feedback:** addressing complaints and feedback about published EPDs or other documents is an essential aspect of our process, fostering continual improvement and stakeholder satisfaction.
- **Maintaining programme integrity and compliance:** we prioritise establishing procedures to prevent the misuse of references to our programme, its logo, ISO 14025, and registered EPDs. This safeguards the integrity and credibility of our efforts and the organisations we partner with.

ICIS ensures the efficient operation of these tasks. Where necessary, we delegate specific duties in regional markets to local organisations, such as EPD registrations, to guarantee localised efficiency and relevance.

The scope of the International Climate Intelligence System spans a broad array of product categories from various organisations. We reserve the right to make decisions on EPD

registrations based on strategic and ethical considerations, including international compliance and sanction regimes. An EPD in this program can focus on a single company's product or represent the average product of companies in a specific industry and region (a "sector EPD"). If certain conditions are met, similar products from the same company can be included in the same EPD.

Through these initiatives, ICIS strives to be a leading programme in facilitating transparent, reliable, and life cycle-based environmental information dissemination, making a significant contribution to global environmental sustainability efforts.

3.0 PROGRAM STRUCTURE

ICIS has meticulously designed its program structure to fortify the development, verification, and dissemination of Environmental Product Declarations (EPDs), ensuring a high degree of integrity, transparency, and operational efficiency. This comprehensive structure supports the strategic framework of the program, facilitating seamless interaction among various stakeholders involved in the EPD process. It encompasses the management of Product Category Rules (PCRs), the verification protocol, and the publication of EPDs, all orchestrated to align with international environmental and sustainability standards. The program's structure is built to accommodate the dynamic nature of environmental data, allowing for the integration of the latest scientific methodologies and best practices in sustainability. This ensures that the EPDs produced under the ICIS framework are not only reliable and transparent but also relevant to the current environmental challenges and market needs.

3.1 PROGRAM OPERATOR

As the Program Operator, ICIS upholds a central role in orchestrating the EPD program, encapsulating a broad spectrum of responsibilities to ensure the program's integrity and effectiveness:

- **Administrative oversight:** ICIS ensures meticulous management of the program's administrative facets, guaranteeing adherence to the established environmental standards and protocols.
- **EPD and PCR coordination:** the organisation orchestrates the development processes of EPDs and PCRs, facilitating the creation of comprehensive and reliable environmental declarations.
- **Verification management:** ICIS oversees the verification landscape, which includes sanctioning verifiers and scrutinising verification reports to uphold the credibility of the EPDs.
- **Document dissemination**: ICIS commits to the systematic dissemination of EPDs, PCRs, and ancillary documents, ensuring stakeholders have uninterrupted access to critical environmental information.
- **Stakeholder engagement:** the organisation actively involves diverse stakeholders, fostering an inclusive environment that propels the program's continuous enhancement and adaptability to evolving environmental standards.

The culmination of these responsibilities ensures the ICIS EPD program remains robust, transparent, and aligned with global sustainability goals, thereby fostering trust among consumers, manufacturers, and environmental advocates.

3.2 TECHNICAL OFFICE

The Technical Office is pivotal to the ICIS EPD program, providing indispensable support and expertise across various technical domains:

- **Guideline development:** the office is instrumental in crafting and maintaining the General Programme Instructions (GPI), ensuring they reflect the highest international standards and practices in sustainability and environmental reporting.
- **Expert support:** it offers specialised support in EPD and PCR development, lending its expertise in LCA methodologies and environmental impact assessment to ensure accuracy and comprehensiveness in environmental declarations.
- **Verification oversight:** the Technical Office plays a crucial role in supervising the verification process, guaranteeing that verifications are executed in strict accordance with the program's requisites and standards.

The Technical Office's commitment to excellence and adherence to rigorous scientific principles significantly contributes to the reliability and trustworthiness of the ICIS EPD program. Its role in ensuring technical accuracy, methodological integrity, and the continuous advancement of environmental reporting standards underscores the program's dedication to fostering sustainable practices and informed decision-making within the global market.

3.3 TECHNICAL WORKING GROUP

ICIS's Technical Working Group is a pivotal assembly of subject matter experts, each bringing a wealth of knowledge from their respective fields to the EPD program. This group's collective expertise spans across the industrial spectrum, environmental science, and life cycle assessment methodologies, ensuring that the EPD development process is both rigorous and reflective of the latest advancements in sustainability practices:

- **PCR development and enhancement:** members actively participate in creating new PCRs and refining existing ones, ensuring they remain relevant and technically sound considering evolving industry practices and environmental knowledge.
- **Guideline and methodology review:** the group critically evaluates ICIS's program guidelines and methodologies, proposing enhancements to maintain alignment with international standards and best practices in LCA and environmental declarations.
- **Research and innovation support:** engaging in research initiatives, the group contributes to pioneering projects that push the boundaries of environmental declarations, enhancing the scientific foundation and applicability of EPDs.

This collaborative effort ensures that ICIS's EPD program remains at the forefront of environmental sustainability, guided by cutting-edge science, and tailored to the nuanced needs of various industries. The Technical Working Group's contributions are instrumental in fostering the program's continuous evolution, ensuring its methodologies and outputs are both robust and reflective of the latest in environmental science.

3.4 ADVISORY TEAM

The Advisory Team within ICIS plays a strategic role, wielding their expertise to shape the broader vision and trajectory of the EPD program. This team's guidance is crucial in navigating the complex landscape of sustainability, market demands, and stakeholder expectations:

- **Strategic direction and program vision:** offering insights into long-term strategic planning, the Advisory Team ensures that the EPD program's objectives are ambitiously set yet achievable, aligning with broader sustainability goals and market needs.
- **Enhanced stakeholder engagement:** the team emphasises the importance of inclusive stakeholder dialogue, facilitating platforms and opportunities for diverse stakeholder groups to voice their perspectives and contribute to the program's development.
- **Market trends and regulatory insight:** keeping a pulse on the evolving market trends and regulatory changes, the Advisory Team advises on adapting the program to remain relevant and effective in promoting sustainable practices across industries.

The Advisory Team's strategic insights and foresight enable ICIS to adeptly navigate the challenges and opportunities within the sustainability landscape. Their contributions ensure that the EPD program not only meets the current needs of its stakeholders but is also poised to address future sustainability challenges, making a lasting impact on environmental product declarations and LCA practices.

4.0 EPD DEVELOPMENT AND VERIFICATION

The process of developing and verifying Environmental Product Declarations (EPDs) at ICIS is underpinned by a detailed and methodical framework. This framework ensures that every EPD reflects a true and fair representation of the product's environmental impact, adhering to the highest standards of accuracy, reliability, and transparency. The comprehensive approach encompasses all phases of EPD creation, from the initial life cycle assessment (LCA) through to the final verification stage, ensuring that each EPD provides stakeholders with credible and comparable environmental information. Through this rigorous process, ICIS aims to facilitate informed decision-making and promote sustainable practices within various industries.

4.1 EPD DEVELOPER/OWNER

The EPD Developer, also referred to as the EPD Owner, carries the primary responsibility for the initiation and execution of the EPD development process. Key responsibilities include:

- **LCA study execution:** conducting a thorough Life Cycle Assessment (LCA) in accordance with international standards, such as ISO 14040 and ISO 14044, to evaluate the environmental impacts of the product across its lifecycle.
- **EPD compilation:** compiling the findings of the LCA study into an EPD that adheres to ICIS's specified format, prepare an LCA report in accordance with EN 15804 ensuring that all pertinent environmental information is accurately and comprehensively represented.
- **Verification engagement:** collaborating with approved verifiers to independently validate the EPD, ensuring that the data and claims presented are rigorously verified and free from bias.

- **EPD maintenance:** addressing any necessary changes or updates to the EPD during its validity period to reflect significant shifts in the product's environmental impact or to correct identified inaccuracies.

For products not yet on the market, EPD Developers are guided to base their EPDs on similar, existing products, ensuring the LCA model remains substantially equivalent, with variances primarily in activity data such as material composition or energy consumption. In instances where extensive modifications to the LCA model are required, EPD Developers are obliged to demonstrate that the data quality meets specific criteria, utilising either specific or analogous market data to uphold the EPD's integrity.

4.2 APPROVED VERIFIERS

ICIS's system for approving verifiers is designed to ensure the integrity and credibility of EPD verifications. Approved Verifiers are required to:

- **Methodological expertise:** possess in-depth knowledge of LCA methodologies and EPD development processes, ensuring a comprehensive understanding of the various product categories and the standards that govern them.
- **Verification independence:** maintain strict independence from the EPD development process to avoid potential conflicts of interest, ensuring that verifications are conducted impartially and objectively.
- **Verification protocol:** follow a systematic verification protocol, which includes detailed document reviews, data validation, and, where necessary, on-site audits to examine manufacturing processes and other key factors influencing environmental impacts.

The verification process is structured into two main phases:

- **Document review:** conducting an exhaustive review of the EPD and the supporting LCA report to ensure compliance with ICIS's guidelines and the relevant Product Category Rules (PCRs).
- **Data validation:** engaging in a more in-depth validation process, which may include on-site audits, to verify the methodologies employed, the accuracy of the data, and the conclusions drawn within the EPD.

ICIS encourages organisations to implement internal procedures for continuous monitoring and updating of the EPD, ensuring it accurately reflects the current environmental performance of the product. This includes making necessary amendments to the EPD within its validity period, with significant changes subjected to re-verification to preserve the EPD's credibility.

Approved Verifiers play a pivotal role in maintaining the quality and trustworthiness of EPDs within the ICIS framework, contributing significantly to the program's overall integrity and the value it delivers to stakeholders throughout the product lifecycle.

5.0 PROGRAM MANAGEMENT

ICIS provides a structured and transparent framework that streamlines the entire process involved in the development, verification, and dissemination of Environmental Product Declarations (EPDs). This management approach ensures the application of international standards and best practices throughout the lifecycle of an EPD, from its initial creation to its final publication and subsequent updates. By adhering to these rigorous management protocols, ICIS ensures the reliability, consistency, and credibility of the environmental information provided to stakeholders, fostering trust in the EPD system.

5.1 GENERAL

The program management within ICIS is designed to oversee the comprehensive lifecycle of EPD processing, incorporating elements from inception through to publication and continuous updates:

- **Lifecycle management:** emphasising the importance of managing EPDs from their development phase to their publication and beyond, ensuring a continuous alignment with evolving standards and practices.
- **Adherence to standards:** ensuring strict compliance with international environmental declaration standards and guidelines, such as ISO 14025 and EN 15804, to maintain the integrity and credibility of the EPDs.
- **Stakeholder engagement:** engaging a wide array of stakeholders throughout the EPD development process to gather diverse perspectives and enhance the robustness of the EPDs.
- **Transparency and accessibility:** committing to transparency by making all program-related documents, including PCRs and guidance materials, readily accessible to the public.
- **Continuous improvement:** implementing mechanisms for the regular review and improvement of program management practices to adapt to new scientific findings and market needs.

The comprehensive program management approach within ICIS ensures that all EPDs are developed, verified, and maintained in accordance with the highest industry standards, providing stakeholders with reliable and actionable environmental information.

5.2 EPD AND OTHER RESOURCES PUBLICATION

ICIS is committed to the widespread dissemination of EPDs and related resources, ensuring that these crucial environmental documents are easily accessible to all interested stakeholders:

- **Online platform:** utilising a dedicated online platform for the systematic publication of EPDs, PCRs, and other essential guidance documents, enhancing the visibility and accessibility of environmental information.
- **User-friendly access:** designing the publication platform to be user-friendly, allowing stakeholders to easily locate and retrieve the information they need to make informed decisions.

- **Transparency in publication:** maintaining transparency in the publication process by clearly indicating the validity periods of EPDs and any updates or revisions made to PCRs and other program documents.
- **Engagement and education:** providing educational resources and support materials to assist stakeholders in understanding and utilising EPDs and PCRs effectively.
- **Feedback mechanism:** incorporating a feedback mechanism to continuously improve the publication process based on stakeholder input and evolving information needs.

Through the dedicated publication of EPDs and related resources, ICIS ensures that environmental information is transparent, accessible, and useful to a wide audience, including manufacturers, consumers, policymakers, and environmental advocates. This open access to information empowers stakeholders to make informed choices and fosters a culture of sustainability and environmental responsibility across industries.

5.3 COMPLIANT HANDLING

ICIS implements a comprehensive and transparent procedure (www.climateintell.com) to manage complaints concerning published EPDs, program documents, or the conduct of approved verifiers. This system ensures that all concerns are addressed fairly and effectively:

- **Submission guidelines:** outlining clear guidelines for submitting complaints, including the requirement for substantiation, non-anonymity, and specific references to the standards or guidelines in question.
- **Investigation process:** detailing the steps taken by ICIS to investigate complaints, including the evaluation of the complaint's validity, gathering of relevant information, and engagement with affected parties.
- **Temporary withdrawal:** describing the circumstances under which a document may be temporarily withdrawn from public access to maintain the integrity and trust in the ICIS program during an investigation.
- **Resolution and communication:** explaining the process for resolving complaints, including the actions taken to address the issue, and the communication of outcomes to the complainant and other relevant stakeholders.

Through this structured complaint handling process, ICIS ensures that all concerns are addressed promptly and effectively, maintaining the credibility and reliability of the EPD program.

5.4 APPEAL HANDLING

ICIS recognises the necessity of a fair and transparent appeal process (www.climateintell.com) for decisions related to EPD verification, publication, or other program-related matters. This process is designed to ensure equitable resolution of disputes:

- **Appeal submission:** guidelines for submitting an appeal, including the necessary details and the timeframe within which appeals must be lodged.
- **Review committee:** establishment of an impartial review committee to assess the appeal, ensuring that the committee members have no conflict of interest with the case.

- **Hearing and evidence:** procedures for conducting a hearing where all parties can present their case and submit evidence supporting their position.
- **Decision and notification:** the process for making a decision on the appeal, including the criteria considered, and the subsequent notification of the decision to all involved parties.

This appeal handling process underscores ICIS's commitment to fairness and transparency, providing a mechanism for stakeholders to challenge decisions, and ensuring that all perspectives are considered.

5.5 LOGO USAGE TERMS AND CONDITIONS

The usage of the ICIS logo, symbolising the reliability and trustworthiness of environmental declarations, is governed by specific terms and conditions to preserve its value and significance:

- **Guidelines for use on EPDs:** detailed instructions on how to appropriately display the logo on EPDs, including placement and visibility requirements.
- **Conditions for use on products and packaging:** rules governing the use of the logo on products and packaging, including the need to accompany the logo with the EPD registration number and a direct reference to the ICIS platform for detailed information.
- **Usage on informational materials:** standards for using the logo in promotional or educational materials, emphasising the necessity of including the EPD registration number and a link to the ICIS platform for comprehensive details.
- **Misuse prevention:** measures implemented by ICIS to prevent the misuse of the logo and ensure it is used in a manner that accurately represents the association with verified EPDs.

By setting clear terms and conditions for logo usage (www.climateintell.com), ICIS ensures that the logo remains a trusted symbol of environmental transparency and integrity.

5.6 ACCEPTANCE OF OTHER PROGRAMS

ICIS fosters collaboration and mutual recognition with other environmental declaration programs, enhancing the global interoperability and acceptance of EPDs. This collaborative approach facilitates the broader application and recognition of EPDs across different sectors:

- **Assessment of compatibility:** the process ICIS employs to evaluate other programs for compatibility with its standards, ensuring that only EPDs or PCRs that meet ICIS's stringent requirements are accepted.
- **Mutual recognition agreements:** the establishment of agreements with other programs that promote the exchange and recognition of EPDs and PCRs, broadening the impact and reach of environmental declarations.
- **Harmonisation efforts:** initiatives undertaken by ICIS to harmonise its standards and practices with those of other programs, reducing redundancy and fostering a unified approach to environmental declarations.

Through these program management practices, ICIS aims to uphold the highest standards in environmental declaration, fostering confidence among stakeholders in the reliability, accuracy, and integrity of the information provided.

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6.0 APPROVAL OF VERIFIERS

Reliability, accuracy, and integrity of the information provided are foundational pillars that ICIS upholds to ensure that all Environmental Product Declarations (EPDs) reflect true environmental performance. This commitment to high-quality standards extends to the rigorous process of approving verifiers, who are instrumental in validating the data and claims made in EPDs.

ICIS's dedication to upholding the highest verification standards for EPDs is reflected in the stringent criteria and comprehensive process established for the approval of verifiers. Recognising the critical role verifiers play in the EPD process, ICIS has set forth a structured framework to ensure that only the most qualified professionals are entrusted with this responsibility.

6.1 REQUIREMENTS

The criteria for verifier approval are designed to ensure that all applicants possess not only the technical knowledge and expertise necessary for accurate verification but also a deep commitment to ethical practices and the principles of sustainability. Key requirements include:

- **Professional experience:** applicants must showcase a significant history of involvement in LCA and EPD projects, with a portfolio that highlights their expertise and contributions to the field. This should be supported by a detailed CV that outlines their professional journey, key projects, and the impact of their work.
- **Educational background and training:** a solid educational foundation in environmental sciences, complemented by specialised training in LCA, EPDs, knowledge & experience in LCA methodology as per ISO 14040 & 14044, environment labelling as per ISO 14020, ISO 14025 and EN 15804 and auditing, is essential. Certifications, diplomas, or other credentials that attest to the applicant's proficiency in these areas will be closely reviewed.
- **Verification management processes:** applicants are expected to present a well-defined methodology for conducting verification activities including critical review. This includes robust procedures for protecting client confidentiality, ensuring the impartiality of the verification process, and addressing potential conflicts of interest.
- **Industry-specific knowledge:** verifiers must have a nuanced understanding of the product categories that fall within ICIS's purview, as well as the international standards and regulations that apply to those categories. This ensures that verifications are not only accurate but also relevant and compliant with current best practices.
- **Ongoing professional development:** in a field that is constantly evolving, verifiers are required to engage in continuous learning to keep pace with new methodologies, technologies, and standards in environmental declarations. ICIS expects verifiers to

demonstrate a commitment to their professional growth and to the advancement of the EPD verification practice.

By adhering to these rigorous requirements, ICIS ensures that the verifiers approved to assess EPDs bring a level of expertise and integrity that matches the programme's commitment to environmental sustainability and transparency. This meticulous approval process is a testament to ICIS's dedication to delivering EPDs that stakeholders can trust to make informed, responsible decisions.

6.2 APPROVAL PROCESS

The approval process for verifiers within the International Climate Intelligence System (ICIS) is meticulously designed to ensure that only those with the highest standards of expertise, ethics, and professional conduct are certified to verify Environmental Product Declarations (EPDs). This multi-stage process is outlined below:

- **Application submission:** Prospective verifiers begin by submitting a detailed application package to ICIS. This package must include a fully completed application form, a comprehensive Curriculum Vitae (CV) highlighting relevant experience and qualifications in Life Cycle Assessment (LCA) and EPD verification, detailed descriptions of the applicant's verification management processes, and references from previous projects or roles that attest to their expertise and integrity.
- **Credential evaluation:** upon receipt of the application, the Technical Committee, a panel of experts within ICIS, conducts a rigorous evaluation of the applicant's credentials. This critical review focuses on assessing the depth of the applicant's LCA and EPD expertise, their practical experience in the field, and their commitment to upholding the principles of independence, objectivity, and confidentiality in their verification work.
- **Practical experience development:** applicants new to the ICIS verification process may be required to undergo a period of observation or participate in guided verification exercises. These activities, conducted under the mentorship of experienced ICIS-approved verifiers, are designed to provide practical, hands-on experience in applying ICIS's verification standards and methodologies. This stage is crucial for ensuring that new verifiers are fully prepared to conduct independent verifications in accordance with ICIS's rigorous requirements.
- **Formal approval and listing:** applicants who successfully complete the evaluation and practical experience stages are formally approved by ICIS as authorised verifiers. They are then listed on the ICIS platform, making their services available to organisations seeking verification for their EPDs. This listing serves as a seal of approval, indicating that the verifier has met ICIS's high standards for technical competence and professional conduct.

Through these structured approval processes, ICIS guarantees that its EPDs are verified by professionals who not only possess the necessary technical expertise but also uphold the values of integrity, impartiality, and confidentiality essential for the credibility of environmental product declarations.

6.3 CERTIFICATION AND INSPECTION BODIES

The International Climate Intelligence System (ICIS) acknowledges the vital contribution of certification and inspection bodies in the robust verification process of Environmental Product Declarations (EPDs). These entities play a critical role in maintaining the integrity and credibility of the EPD process. To participate in the ICIS program, these bodies are subject to a comprehensive set of requirements:

- **Accreditation adherence:** These bodies are required to hold accreditation according to internationally recognised standards such as ISO/IEC 17065:2012. This accreditation confirms their capability and impartiality in conducting thorough and unbiased verifications, ensuring that they meet global best practices in certification processes.
- **Specialised expertise:** It is imperative for these bodies to possess in-depth knowledge and expertise in the specific product categories for which ICIS issues EPDs. This specialisation ensures that verifications are conducted with a deep understanding of the product's life cycle and the unique environmental aspects associated with each category.
- **Confidentiality and integrity:** Certification and inspection bodies must implement and adhere to stringent protocols for maintaining data confidentiality and managing potential conflicts of interest. This commitment to integrity is crucial for preserving the trust and reliability of the EPD verification process.
- **Active participation in quality assurance:** ICIS requires these bodies to engage in regular audits and assessments to verify their ongoing compliance with ICIS's verification standards. These evaluations ensure that the bodies continuously meet the high standards expected by ICIS and its stakeholders.

To support a culture of continuous improvement and ensure adherence to the highest standards, ICIS implements a rigorous oversight mechanism for both individual verifiers and certification bodies. This includes annual reviews to assess their ongoing engagement and contributions to the EPD ecosystem. Such activities might include their involvement in conducting EPD verifications, undertaking LCA studies that lead to the creation of EPDs, or their active participation in the development and refinement of Product Category Rules (PCRs).

Through these measures, ICIS ensures that all parties involved in the verification process, whether they are individual experts or institutional bodies, are not only equipped with the necessary expertise but also remain committed to upholding the principles of accuracy, transparency, and integrity that are foundational to the EPD program.

6.4 INDIVIDUAL VERIFIER

To qualify as an individual verifier, need 4-7 years of experience in LCA, carbon footprint, or environmental footprint, including conducting critical reviews of LCA studies. General auditing skills and experience are helpful but not required. Conducted 3-5 verification process of EPD along with the approved verifier or completed 5 critical reviews of the LCA's.

Before taking on a verification task, the verifier must have knowledge and experience in the specific product type, industry, regional requirements and relevant standards related to the EPD.

7.0 PRODUCT CATEGORY RULES

ICIS employs a comprehensive approach in the development of Product Category Rules (PCRs), essential tools for the creation of consistent and transparent Environmental Product Declarations (EPDs). PCRs delineate specific guidelines for assessing the environmental impacts of products within defined categories, thereby ensuring uniformity and comparability across EPDs. The process encompasses thorough research, stakeholder engagement, and alignment with international standards, guaranteeing that the resulting PCRs facilitate accurate environmental reporting and support informed decision-making.

7.1 DEVELOPMENT AND SCOPE OF PCRS

ICIS's PCR development process is characterised by inclusivity, technical rigor, and alignment with global environmental standards, ensuring PCRs are comprehensive and universally applicable:

- **Inclusive development process:** ICIS engages a broad spectrum of stakeholders in PCR development, including industry experts, environmental organisations, and regulatory bodies, to incorporate a wide range of insights and perspectives.
- **Global relevance and harmonisation:** aiming for global applicability, ICIS seeks to harmonise its PCRs with international standards to facilitate global trade and avoid market barriers.
- **Technical rigor and environmental relevance:** PCRs are based on robust Life Cycle Assessment (LCA) methodologies, covering all significant environmental aspects across the product's lifecycle.
- **Geographical and market specificity:** while maintaining global scope, PCRs are adapted to address regional environmental concerns and market requirements, ensuring relevance across different geographical contexts.
- **Dynamic updating and revision:** ICIS commits to regular updates and revisions of its PCRs to reflect the latest scientific developments and industry practices.
- **Stakeholder collaboration in PCR committees:** formation of PCR Committees with diverse representation to encourage collaborative development and broad acceptance.
- **Open consultation for transparency:** implementation of open consultations to gather feedback from the global community, ensuring transparency in the PCR development process.
- **Alignment with international standards:** efforts to align PCRs with existing international standards, promoting harmonisation and consistency across environmental assessments.
- **Adaptation to regional environmental priorities:** tailoring PCRs to specific regional environmental priorities and regulatory frameworks to ensure practical application.
- **Regular review cycles for PCRs:** establishing periodic review cycles to update PCRs in line with new scientific insights and technological advancements.
- **Stakeholder engagement for PCR improvement:** actively engaging with the PCR user community to gather feedback and suggestions for enhancing PCR content and applicability.

Through these principles, ICIS ensures the creation of PCRs that are scientifically sound, technically accurate, and globally applicable, facilitating the generation of EPDs that provide transparent, comparable, and actionable environmental information.

7.2 PCR COMMITTEE AND FACILITATION

The PCR Committee, under the guidance of an appointed PCR Facilitator, plays a critical role in the structured development of Product Category Rules within ICIS. Their responsibilities include:

- **Establishing the PCR framework:** setting the foundation for each PCR, ensuring it aligns with global standards and ICIS's specific guidelines for environmental product declarations.
- **Stakeholder engagement:** actively engaging with a broad range of stakeholders to ensure a diverse and comprehensive perspective is incorporated into the PCR development process.
- **Technical oversight:** overseeing the technical aspects of PCR development, including the selection of relevant environmental impact categories and the establishment of methodological approaches in line with LCA standards.
- **Documentation and transparency:** ensuring all decisions, methodologies, and data sources are thoroughly documented and made transparent throughout the PCR development process.
- **Adherence to timelines:** managing the PCR development timeline effectively, from initiation through to public consultation and final publication.
- **Facilitation of public consultation:** organising and facilitating public consultation processes to gather and incorporate feedback from a wide range of interested parties.
- **Revision and finalisation:** leading the revision process based on feedback received during public consultation and finalising the PCR for publication and implementation.
- **Continuous improvement:** committing to the ongoing evaluation and improvement of PCRs to reflect advancements in science, technology, and regulatory requirements.

The collective efforts of the PCR Committee and PCR Facilitator ensure that the PCRs developed are not only scientifically sound and technically accurate but also reflective of the latest industry practices and environmental considerations. This collaborative approach guarantees that the EPDs produced under these PCRs provide transparent, comparable, and actionable environmental information, thereby facilitating informed decision-making among consumers and stakeholders.

7.3 HARMONISATION AND INTEGRATION

ICIS prioritises the harmonisation of PCRs across different product sectors to ensure consistency and comparability of EPDs. Key initiatives in this area include:

- **Sector Coordinators:** Appointing sector coordinators to oversee the harmonisation efforts within specific product sectors, ensuring alignment with overarching environmental goals and ICIS standards.

- **Cross-Referencing Existing PCRs:** Encouraging the use of existing PCRs as references to promote consistency and avoid duplication of efforts across related product categories.
- **Integration of Global Standards:** Aligning PCRs with internationally recognised environmental and sustainability standards to facilitate global acceptance and implementation.
- **Collaborative development:** fostering collaboration between PCR Committees across different sectors to share best practices and harmonisation strategies.
- **Adaptation to market changes:** continuously monitoring market trends and regulatory developments to adapt PCRs accordingly, ensuring they remain relevant and effective.

Through these harmonisation and integration efforts, ICIS ensures that PCRs remain not only consistent and comparable but also flexible and adaptable to the evolving landscape of environmental sustainability. This strategic approach enhances the utility and applicability of EPDs, making them valuable tools for stakeholders across the globe in making informed decisions based on environmental performance.

7.4 GEOGRAPHICAL SPECIFICITY

ICIS recognises the importance of geographical specificity in PCR development to address regional environmental priorities and market requirements:

- **Regional adaptations:** incorporating specific provisions within PCRs to cater to the unique environmental, legal, and market conditions of different regions.
- **Clear communication:** ensuring that any geographical-specific requirements within a PCR are clearly communicated to users, outlining the scope and applicability of these provisions.
- **Stakeholder consultation:** engaging with regional stakeholders during the PCR development process to understand and integrate local environmental concerns and regulatory requirements.
- **Flexibility for localisation:** allowing for flexibility within PCRs to accommodate local adaptations without compromising the integrity and comparability of the EPD.
- **Monitoring and updating:** regularly reviewing and updating PCRs to reflect changes in regional environmental policies, market dynamics, and technological advancements.

Through these focused efforts, ICIS ensures that its PCRs are not only globally applicable but also sensitive to the nuanced requirements of different geographical contexts, enhancing the relevance and impact of EPDs worldwide.

7.5 SELECTION OF ENVIRONMENTAL INDICATORS

ICIS PCRs mandate the inclusion of all relevant environmental aspects throughout the product's life cycle, as per ISO 14025 and EN 15804 standards. The selection of LCA-based indicators is based on comprehensive analyses, including supporting LCA studies, literature reviews, and stakeholder consultations. This ensures that the chosen indicators accurately reflect the

significant environmental impacts of the product category. The key considerations in selecting these indicators include:

- **Impact categories:** the primary environmental impact categories such as global warming potential, water usage, and energy consumption are assessed to address the most pressing environmental concerns.
- **Regional relevance:** indicators relevant to specific environmental challenges faced by different geographical regions are incorporated to ensure global applicability.
- **Scientific basis**: regular updates of indicators are made to align with the latest scientific research and consensus on environmental impacts.
- **Emerging trends:** new indicators are integrated for emerging environmental concerns, like biodiversity loss and resource depletion, ensuring a forward-looking approach.

The selection process for environmental indicators in ICIS PCRs is designed to be dynamic and responsive, adapting to new environmental challenges and scientific discoveries. This approach ensures that EPDs remain relevant and effective tools for communicating the environmental performance of products, driving informed decision-making among consumers and industry stakeholders.

7.6 ADDITIONAL INFORMATION

Beyond LCA-based indicators, ICIS PCRs may require or recommend the inclusion of additional environmental, social, and economic information to provide a more holistic view of the product's impact. This additional information enriches the EPD with broader insights into sustainability:

- **Circular economy practices:** information on recyclability and reuse potential is provided to highlight contributions to the circular economy.
- **Social impact:** details on supply chain ethics and labour practices are included to reflect the social dimensions of product manufacturing.
- **Economic advantages:** insights into the economic benefits derived from environmental improvements are shared to underline the business case for sustainability.

The inclusion of additional information in ICIS PCRs enriches EPDs by providing a comprehensive view of a product's impact, encompassing environmental, social, and economic dimensions. This holistic approach empowers stakeholders to make more informed decisions based on a broader understanding of sustainability.

7.7 RULES FOR COMPARABILITY

ICIS establishes clear rules within the PCRs to ensure comparability of EPDs, facilitating meaningful and reliable comparisons between similar products. This is crucial for stakeholders looking to make informed choices based on environmental performance:

- **Standardisation framework:** a standardised framework is developed to ensure consistency across EPDs within the same product category.

- **Defined life cycle stages:** Specific life cycle stages to be included in the EPD are clearly defined to ensure uniformity in environmental reporting.
- **Functional unit specification:** the use of consistent functional units across EPDs allows for straightforward comparison of environmental performance.
- **Data quality requirements:** minimum data quality criteria are set to uphold the reliability and credibility of the information presented in EPDs.

The establishment of rules for comparability in ICIS PCRs is a cornerstone for ensuring that EPDs serve their intended purpose of providing transparent and reliable environmental information. This structured approach to comparability enhances the utility of EPDs as tools for environmental communication and decision-making.

7.8 QUALITY ASSURANCE AND CONSULTATION

Prior to the open consultation phase, ICIS ensures each PCR undergoes a meticulous quality assurance review. This step is crucial for confirming that the document aligns with both international standards and ICIS's specific guidelines, guaranteeing the PCR's integrity and applicability.

- **Quality assurance measures:** rigorous checks are conducted to ensure draft PCRs comply with global standards and ICIS's stringent guidelines, ensuring technical accuracy and comprehensiveness.
- **Inclusive consultation process:** ICIS's consultation phase is designed to be inclusive, inviting contributions from a diverse range of stakeholders to ensure the PCR reflects a broad spectrum of perspectives and expertise.
- **Stakeholder engagement:** through various platforms and forums, ICIS encourages active participation from all interested parties, fostering a collaborative environment for the development of PCRs.

The quality assurance and consultation processes are fundamental to the PCR development framework at ICIS, ensuring that each PCR not only meets high standards of technical rigor but also embodies the collective insights of a diverse stakeholder community. This comprehensive approach to PCR development underpins the credibility and effectiveness of EPDs, reinforcing their role as key instruments for environmental sustainability.

7.9 REVIEW AND PUBLICATION

Following the consultation period, each PCR is subject to a comprehensive review process conducted by a panel of experts. This critical evaluation ensures that the PCR not only meets scientific and technical standards but also aligns with the latest in environmental best practices.

- **Scientific and technical review:** the review panel rigorously assesses each PCR to confirm its scientific validity and technical accuracy, ensuring it meets the high standards expected by ICIS and the broader environmental community.
- **Formal approval:** once a PCR successfully passes the review phase, it receives formal approval, signifying its reliability and adherence to recognised environmental declaration standards.

- **Publication and accessibility:** approved PCRs are then published on the ICIS platform, clearly indicating their period of validity, and ensuring they are accessible for stakeholders interested in developing transparent and reliable EPDs.

The review and publication phase of the PCR development process is a testament to ICIS's commitment to maintaining the highest levels of quality and transparency in environmental declarations. This meticulous approach ensures that all stakeholders can trust the integrity and validity of EPDs developed under the guidance of ICIS PCRs, thereby fostering confidence in the environmental information shared within the community.

7.10 PCR UPDATES AND AMENDMENTS

ICIS acknowledges the dynamic nature of environmental science and industry practices, which necessitates regular updates and amendments to PCRs. This ensures that they remain relevant and continue to provide a solid foundation for the development of accurate and meaningful EPDs.

- **Periodic review process:** ICIS has instituted a periodic review process for PCRs to ensure they stay in line with the latest scientific research, regulatory developments, and industry needs.
- **Dynamic update mechanism:** a structured mechanism is in place to facilitate the timely update of PCRs, incorporating new data, stakeholder feedback, and advancements in LCA methodologies.
- **Stakeholder participation in updates:** re-engagement with the stakeholder community is a critical part of the update process, ensuring that PCRs reflect the most current environmental priorities and industry insights.

Through these structured processes and a commitment to stakeholder engagement, ICIS ensures the continued relevance and effectiveness of PCRs, supporting the development of EPDs that accurately reflect the environmental impacts of products and services in a transparent and comparable manner.

8.0 EPD DEVELOPMENT PROCESS

The EPD Development Process at ICIS is a meticulously designed sequence aimed at producing Environmental Product Declarations (EPDs) that stand as benchmarks of transparency, reliability, and comparability for the environmental impacts of products. This structured approach encompasses a series of pivotal stages, starting from the initial Life Cycle Assessment (LCA) to the final publication of the EPD. Each stage within this process is crafted to contribute significantly to the robustness, integrity, and utility of the EPD, ensuring that the environmental information provided is not only comprehensive but also adheres to internationally recognised standards and best practices. Through this process, ICIS ensures that stakeholders have access to clear and consistent environmental information, facilitating informed decisions and fostering a culture of sustainability and environmental responsibility in product manufacturing and consumption.

8.1 LCA STUDY

The cornerstone of any EPD is an exhaustive Life Cycle Assessment (LCA) study, which meticulously evaluates the environmental impacts associated with all stages of a product's

lifecycle, from raw material extraction through to end-of-life disposal. Conducted in strict accordance with ISO 14040 and 14044 standards, the LCA study employed by ICIS ensures the application of a globally recognised methodology, laying a solid foundation for the environmental declarations presented in the EPD:

- **Global standards compliance:** adherence to ISO 14040, 14044 and applicable PCR ensures that the LCA study meets international criteria for environmental impact assessment and EPD in accordance with ISO 14025.
- **Comprehensive impact evaluation:** the study encompasses a thorough examination of environmental impacts across the product's entire lifecycle.
- **Scientific methodology application:** utilisation of scientifically validated methodologies to ensure the accuracy and reliability of the LCA findings.

The rigorous approach to conducting LCA studies underpins the validity of the environmental information presented in EPDs, providing stakeholders with a reliable basis for understanding the environmental performance of products. This foundational step is crucial for ensuring that the environmental declarations made within EPDs are not only transparent but also reflective of the product's true environmental impact.

8.2 EPD IN THE SPECIFIED TEMPLATE

After the LCA study, the collected data and insights are meticulously documented within a specifically designed EPD template and as per EN 15804. This template is structured to ensure that the environmental information is presented in a clear, coherent, and standardised manner, thereby enabling stakeholders to easily comprehend and compare the environmental performance of diverse products. The adoption of a standardised template is instrumental in achieving consistency across EPDs, which in turn enhances the communication of environmental information:

- **Standardised format:** the template provides a uniform structure for presenting EPD data, facilitating comparability and consistency.
- **Clear information presentation:** designed for clarity, the template ensures that environmental information is accessible and understandable to all stakeholders.
- **Comparability enhancement:** by standardising the presentation format, the template aids in making informed comparisons between different products' environmental performances.

The utilisation of a specified EPD template is a key aspect of the EPD development process, ensuring that the environmental information derived from the LCA study is communicated effectively and consistently. This step is vital in promoting transparency and reliability in environmental declarations, thereby empowering stakeholders to make informed decisions based on credible environmental product information. Through this structured approach to EPD development, ICIS reaffirms its commitment to environmental stewardship and the promotion of sustainable product choices.

8.3 VERIFICATION

Verification is an indispensable component in the EPD development process at ICIS, acting as a crucial quality control measure to validate the accuracy and reliability of the environmental information presented. This phase involves a meticulous review by independent, third-party verifiers who assess the comprehensive Life Cycle Assessment (LCA) study, the final EPD, and all supporting documentation. The aim is to ensure strict adherence to all relevant standards and guidelines, thereby reinforcing the EPD's credibility:

- **Third-party review:** verification by independent experts ensures unbiased assessment of the EPD.
- **Standards compliance:** verifiers confirm that the EPD adheres to international standards, including ISO 14040, ISO 14044, ISO 14025 and EN 15804.
- **Scientific methodology validation:** the verification process validates the scientific methodologies and principles underlying the LCA study and EPD content.

This verification phase is pivotal, as it not only confirms the scientific rigor behind the EPD but also enhances its value and trustworthiness among stakeholders. The rigorous verification process ensures that the environmental declarations within the EPD are both credible and dependable, making it a reliable source of environmental information for consumers, businesses, and other interested parties.

8.4 REGISTRATION AND MAKE AVAILABLE TO THE PUBLIC

After successful verification, the EPD undergoes a registration process with ICIS, culminating in its publication and availability to the public. This step is crucial for transparency, allowing stakeholders to access and review the EPD, thereby fostering informed decision-making based on environmental performance:

- **EPD registration:** the EPD is formally registered with ICIS, ensuring it is recognised and catalogued within the system.
- **Public accessibility:** registered EPDs are made publicly available, promoting transparency and accessibility of environmental information.
- **Stakeholder engagement:** making EPDs public encourages stakeholder engagement and fosters an informed community.

The registration and public availability of EPDs are fundamental in promoting environmental awareness and encouraging the adoption of sustainable practices. By providing accessible and transparent environmental information, ICIS empowers stakeholders to make informed choices that contribute to sustainable development.

8.5 FEES

The development and publication of EPDs within the ICIS framework involve specific fees (www.climateintell.com), which are integral to supporting the operational and administrative

costs of the EPD program. These fees are structured to ensure the program's sustainability while providing high-quality services to all participants:

- **Transparent fee structure:** ICIS maintains a clear and transparent fee structure, ensuring participants are well-informed of any costs involved.
- **Support program sustainability:** fees contribute to the ongoing maintenance and improvement of the EPD program, ensuring it remains a valuable resource.
- **Equitable access:** the fee structure is designed to be equitable, accommodating participants of varying sizes and sectors.

The fee system is a crucial aspect of the EPD program, enabling ICIS to continue offering robust support and services to participants. By contributing to the program's sustainability, fees ensure that the EPD framework remains a leading tool for environmental declaration and sustainability communication.

8.6 AMENDMENTS TO ISSUED EPD

ICIS acknowledges that changes in production processes, material sourcing, or other significant factors may necessitate amendments to an already issued EPD. To accommodate these changes, ICIS has established a streamlined amendment process to ensure that any modifications are rigorously verified and promptly made available to the public. This process ensures that the EPD consistently reflects the most current and accurate information regarding the product's environmental performance:

- **Update procedure:** guidelines for updating EPDs to reflect significant changes in product or process.
- **Verification of amendments:** a review process for any amendments, ensuring continued compliance with standards.
- **Public notification:** procedures for informing stakeholders of significant changes to an EPD.

The amendment process is vital in maintaining the relevance and accuracy of EPDs, ensuring they continue to provide stakeholders with reliable environmental information. This adaptability is key to the integrity of the EPD system, allowing for continuous improvement and transparency in environmental reporting.'

8.7 CANCELLATION OF REGISTRATION

There are instances where the cancellation of an EPD's registration may be necessary, such as product discontinuation, significant changes rendering the EPD inaccurate, non-payment of fee or non-compliance with program requirements. ICIS has a clear and systematic process for the cancellation of EPD registrations, ensuring the integrity of the public registry by retaining only current and accurate EPDs:

- **Cancellation criteria:** conditions under which an EPD registration may be cancelled.
- **Notification process:** steps for informing ICIS and stakeholders about the need for cancellation.

- **Archive and removal:** procedures for archiving or removing the cancelled EPD from public listings.

The cancellation process is an essential aspect of EPD management, ensuring the registry remains a reliable source of up-to-date and accurate environmental information. This process supports the credibility of the EPD system and the trust stakeholders place in the environmental declarations it provides.

Through its comprehensive approach to EPD development, amendment, and cancellation, ICIS ensures the provision of valuable and reliable environmental information to all stakeholders, promoting informed decision-making and sustainable product choices.

9.0 VERIFICATION METHODS

ICIS employs a structured and meticulous approach to the verification of Environmental Product Declarations (EPD), ensuring the credibility and reliability of the environmental information presented. This comprehensive process encompasses various key components, each meticulously designed to maintain the highest data integrity and impartiality standards. The verification journey spans from document review to the final approval by an independent verifier, with each step meticulously orchestrated to uphold the EPD's credibility.

9.1 VERIFICATION IMPARTIALITY

Maintaining impartiality throughout the verification process is of utmost importance to ICIS. To achieve this, verifiers are selected based on strict criteria to ensure their independence and lack of conflicts of interest. This includes prohibitions on verifiers being employed by or involved in the LCA study or EPD development in any capacity that could compromise the impartiality of the verification:

- **Verifier selection:** careful selection of verifiers to ensure they have no vested interest in the EPD outcome.
- **Conflict of interest management:** implementing strict guidelines to manage and disclose any potential conflicts of interest.
- **Verifier independence:** ensuring verifiers operate independently from the LCA practitioners and EPD developers to uphold the credibility of the EPD.

The emphasis on impartiality within the verification process underscores ICIS's commitment to upholding the integrity and reliability of EPDs, ensuring that they serve as unbiased representations of a product's environmental performance.

9.2 REVIEW OF DOCUMENTS

The document review phase is a cornerstone of the verification process, involving a detailed examination of the LCA report, EPD document, and any supplementary materials. This thorough review ensures the accuracy and compliance of the data and methodologies used with established standards, as well as the clarity and transparency of the environmental claims made:

- **Document compliance check:** ensuring all documents adhere to relevant LCA standards and guidelines.
- **Data accuracy review:** verifying the accuracy and reliability of the data presented in the EPD and supporting documents.
- **Transparency and clarity assessment:** evaluating the presentation of environmental information to ensure it is understandable and accessible.

This meticulous review process plays a critical role in reinforcing the trustworthiness of EPDs, providing stakeholders with confidence in the environmental claims presented.

9.3 DATA AND IMPACT VALUE ACCURACY

The precision of data collection and the representation of impact values are fundamental to the verification process within ICIS. This stage involves an exhaustive evaluation of the data underpinning the Life Cycle Assessment (LCA), the computational methods employed, and the applied methodologies. The verification process meticulously examines the methods used for data collection, the quality and source of the data, and the assumptions inherent in the LCA study to confirm that the impact values delineated in the EPD are grounded in robust scientific methodologies and are therefore reliable. This critical phase is instrumental in substantiating the environmental assertions made within the EPD:

- **Data collection methods:** scrutiny of the methods employed to gather data for the LCA to ensure they are robust and comprehensive.
- **Data quality and sources:** examination of the data's quality and its sources to ascertain its reliability and relevance to the EPD's scope.
- **Methodological assumptions:** review of the assumptions made during the LCA study to ensure they are justified and transparent.

Ensuring the accuracy of data and impact values is a pivotal element of the verification process, serving to validate the environmental claims presented in the EPD. This rigorous approach to data evaluation underpins the trustworthiness and credibility of the EPD, offering stakeholders a reliable representation of the product's environmental impact.

9.4 DEVELOPER RESPONSIBILITY

The role of the EPD developer is a cornerstone of the verification process, emphasising the need for adherence to relevant standards and guidelines throughout the EPD and underlying LCA study. Developers are tasked with ensuring the provision of comprehensive and transparent documentation to facilitate the verification process. Moreover, they must institute internal controls to monitor any significant modifications that could affect the EPD's accuracy, thereby guaranteeing that the document remains reflective of the product's current environmental performance:

- **Transparent documentation:** provision of clear and comprehensive documentation to support the verification process.

- **Monitoring of changes:** implementation of internal monitoring mechanisms to identify and assess significant changes impacting the EPD.
- **Adherence to standards:** commitment to conforming with applicable standards and guidelines to ensure the EPD's integrity.

The emphasis on developer responsibility ensures that the EPD remains a current and accurate document, reflecting the latest environmental performance data of the product. This responsibility underlines the importance of a systematic and diligent approach to EPD development and maintenance, ensuring its ongoing relevance and credibility.

9.5 VERIFICATION REPORT

The culmination of the verification process is articulated in the verification report, a detailed document that encapsulates the verifier's findings. This report provides a comprehensive analysis of the EPD's conformity with pertinent standards, the methodologies employed in the LCA study, and the veracity of the data and impact values presented. The verification report stands as a testament to the thoroughness of the verification process, instilling confidence among stakeholders in the reliability of the EPD. It serves as a vital document for both the developer and the users of the EPD, highlighting the environmental attributes of the product:

- **Compliance assessment:** evaluation of the EPD's adherence to relevant standards and guidelines.
- **Methodology review:** analysis of the methodologies applied in the LCA study to ensure they are appropriate and scientifically sound.
- **Data and impact value scrutiny:** detailed examination of the data and impact values to confirm their accuracy and reliability.

The verification report is a crucial component of the verification process, providing a transparent and comprehensive overview of the EPD's credibility. It reinforces the integrity of the verification process and the EPD itself, underscoring ICIS's commitment to delivering reliable and impartial environmental product information. Through these meticulous verification methods, ICIS upholds its dedication to environmental transparency and the provision of accurate, trustworthy EPDs, reflecting the organisation's commitment to sustainability and environmental responsibility.

10.0 EPD VALIDITY

Environmental Product Declarations (EPD) hold significant value in representing the environmental impact of products, both existing and forthcoming. The validity of an EPD is crucial for maintaining the trust and credibility of the environmental claims made by the product owner. EPD is valid for 5 years from the date of verification approval and from publication date in the ICIS data base. In this context, the following points outline the essential validity aspects of an EPD:

- **Inclusion of forthcoming products:** forthcoming products that are designed and planned but not yet launched can be included in an EPD, provided there is an existing valid EPD for a similar product. This ensures that the forthcoming product's environmental claims are grounded in already verified data, maintaining the EPD's integrity.

- **Sibling and non-sibling products:** the distinction between sibling and non-sibling products is vital. Sibling products share the same Life Cycle Assessment (LCA) model with only differences in activity data, such as material composition or energy consumption, allowing for a straightforward comparison. In contrast, non-sibling products, which differ more significantly, require a more thorough demonstration that data quality requirements are met, ensuring the EPD's validity is not compromised.
- **Amendments and changes:** the EPD owner is allowed to make amendments or changes to an EPD during its validity period. However, changes affecting verified data require re-verification to ensure the EPD remains valid and reliable. This re-verification can be based on the same or current versions of the General Programme Instructions (GPI) and the Product Category Rules (PCR), affecting the EPD's validity period.
- **Verification process:** the verification process is a critical component in establishing and maintaining the EPD's validity. It must be conducted by approved verifiers or accredited bodies, ensuring impartiality and expertise. The process covers the LCA-based data, the calculations, and the presentation of environmental performance, among other aspects, ensuring the EPD's claims are credible and valid.
- **Independence of verification:** to maintain the EPD's validity, the verification process must be independent. Verifiers cannot be affiliated with the LCA practitioner or the EPD owner to prevent conflicts of interest, ensuring an unbiased and valid assessment of the EPD.
- **Principles for verification:** the verification principles, based on the GPI, PCR, and relevant standards, ensure that the EPD's underlying data and presentation meet the required quality and transparency standards. This includes the verification of sampling methods when applicable, further solidifying the EPD's validity.
- **Validity Period and renewal:** an EPD remains valid as long as the applicable fees are paid and the EPD owner complies with the terms and conditions, including the GPI and PCR. The EPD owner has the option to renew the EPD by undergoing a new verification process, which can extend the validity period based on the new approval date.
- **Handling of expired EPDs:** EPDs that have passed their validity period can still be published but cannot be used in market applications unless an exception is granted. This ensures that only current and valid EPDs are used in market representations, maintaining the integrity of environmental claims.
- **De-registration of EPDs:** EPDs can be de-registered for non-payment of fees or non-conformance with terms and conditions, among other reasons. A de-registered EPD cannot be used, and its registration number cannot be reused, ensuring that only valid EPDs are in circulation.
- **Transparency and accessibility:** the EPD program operator maintains a list of de-registered EPDs, which can be made available upon request. This transparency helps stakeholders verify the validity of EPDs and ensures that only accurate and current environmental information is disseminated.

By adhering to these validity aspects, EPDs can maintain their credibility and continue to serve as reliable indicators of a product's environmental performance, contributing to informed decision-making by consumers and stakeholders.

11.0 CERTIFICATION OF ORGANISATIONAL LEVEL EPD

ICIS offers an innovative approach to Environmental Product Declarations (EPDs) with its Organisational Level EPD Certification process, tailored for enterprises with extensive product ranges. This certification empowers organisations to autonomously manage EPD data collection, Life Cycle Assessments (LCAs), and EPD creation, significantly streamlining the process. By reducing reliance on external verification for each EPD, organisations can achieve greater efficiency and agility in their sustainability reporting efforts, aligning with the growing global emphasis on environmental transparency and accountability.

11.1 ORGANISATIONAL EPD PROCESS CERTIFICATION OVERVIEW

The Organisational Level EPD Certification by ICIS is meticulously designed to support complex, multi-site organisations, offering a cohesive framework that spans various entities or subsidiaries under a single certification. This unified approach not only promotes consistency in EPD development across diverse organisational structures but also enhances the efficiency and scalability of environmental reporting processes:

- **Unified certification framework:** the certification is structured to provide a comprehensive solution for multi-site organisations, ensuring uniformity in EPD development across different entities or subsidiaries.
- **Adaptability across sectors:** designed to be versatile, the certification is applicable to a wide range of industries, accommodating the unique needs and complexities of each sector.
- **Streamlined EPD development:** by facilitating internal management of EPD processes, the certification significantly streamlines the development and issuance of EPDs, fostering a culture of sustainability within the organisation.

This strategic approach to EPD certification underscores ICIS's commitment to supporting organisations in their quest for sustainable development and environmental stewardship, providing a robust framework for consistent and efficient EPD management.

11.2 CERTIFICATION PROCESS

ICIS's certification process is anchored in the Plan-Do-Check-Act (PDCA) principle, embodying a structured and iterative approach that promotes continuous improvement and adherence to the highest standards of environmental reporting:

- **Planning phase:** this initial stage involves the meticulous planning of resources, assessment procedures, and approval criteria, ensuring a solid foundation for the EPD process.
- **Execution phase:** in this phase, the planned assessments are carried out by trained internal staff, following the predefined criteria, and meticulously documenting all activities and outcomes.
- **Verification phase:** an independent internal review is conducted to verify the accuracy and effectiveness of the EPD process, ensuring compliance with established norms and standards.

- **Certification phase:** the process culminates in formal certification by the organisation's management, affirming the reliability and conformity of the EPD process to the stipulated guidelines. This certification is subject to annual review and updates to accommodate any process enhancements or changes.

Through this rigorous certification process, ICIS empowers organisations to internalise and manage their EPD development, fostering a proactive approach to environmental reporting and sustainability management.

11.3 EPD DOCUMENT ASSESSMENT

In the critical phase preceding the release of Environmental Product Declarations, ICIS mandates an internal verification of EPD documents, conducted by carefully selected verifiers within the organisation. This essential step ensures that every EPD not only meets the stringent ICIS standards but also provides stakeholders with reliable and accurate environmental information. The internal verifiers chosen for this task are subject to a thorough competency evaluation, a process meticulously documented to affirm their expertise and alignment with the intricate requirements of the EPD process:

- **Verifier competency:** ensuring internal verifiers possess the requisite knowledge and skills in Life Cycle Assessment methodologies and EPD development.
- **Documentation and record-keeping:** maintaining comprehensive records of verifier qualifications, training, and assessment outcomes to uphold transparency and accountability.
- **Alignment with standards:** verifiers must demonstrate proficiency in relevant environmental standards and guidelines, ensuring the EPD's compliance and reliability.

The rigorous assessment of EPD documents by competent internal verifiers underscores ICIS's commitment to maintaining the highest standards of environmental reporting, reinforcing the trust and confidence of all stakeholders in the EPD information provided.

11.4 THIRD-PARTY VERIFICATION ACTIVITY

To further solidify the credibility of its Organisational Level EPD Certification, ICIS incorporates an independent verification step conducted by third-party verifiers. These verifiers, distinguished by their accreditation in auditing management systems, undertake a comprehensive review of the EPD process to ensure its integrity, compliance, and adherence to best practices. This external layer of scrutiny is pivotal in certifying that the organisational EPD process stands up to international standards:

- **Accredited verifiers:** selection of verifiers accredited by recognised bodies, ensuring impartiality and expertise in environmental standards.
- **Management system audit:** a thorough examination of the organisational EPD process, focusing on its efficiency, compliance, and alignment with established environmental reporting norms.

- **Verification under accreditation:** conducting the verification in accordance with the strict criteria set by the accreditation body, ensuring a consistent and high-quality audit process.

This external verification by accredited third parties plays a crucial role in validating the robustness and reliability of the EPD process, reinforcing ICIS's dedication to upholding the highest standards of environmental transparency and accountability.

11.5 CERTIFICATION VERIFICATION

The pinnacle of the Organisational Level EPD Certification process is the comprehensive external verification conducted by an accredited certification body. This pivotal step ensures that the organisation's internal EPD process assurance is robust, transparent, and in line with industry best practices:

- **Accredited certification body:** engaging with a certification body accredited for its capacity to conduct thorough and impartial verifications, ensuring the process's integrity.
- **Assessment of process assurance:** evaluating the organisation's mechanisms for assuring the quality and consistency of its EPD process, from data management to final EPD publication.
- **Alignment with industry standards:** confirming that the organisational EPD process aligns with international standards and best practices, ensuring its relevance and reliability.

Through this comprehensive verification process, ICIS empowers organisations to manage their EPD development efficiently, fostering a culture of sustainability and transparency across their product portfolios while upholding the highest standards of verification and compliance.

12.0 CONTENT FOR EPD

ICIS establishes a detailed framework for the content and structure of Environmental Product Declarations (EPDs), ensuring that they are clear, consistent, and adhere to international standards. This framework is designed to support the creation of EPDs that effectively communicate the environmental impact of products, providing stakeholders with accurate and actionable information. By standardising the format and content of EPDs, ICIS aims to enhance the reliability and comparability of environmental data, fostering transparency and informed decision-making in the marketplace.

12.1 GENERAL PRINCIPLES

In line with the guiding principles of transparency and precision, ICIS mandates that EPDs provide information that is verifiable, accurate, relevant, and devoid of ambiguity. To preserve neutrality, the guidelines prohibit any form of product comparison or ranking within EPDs, promoting objectivity and fairness in environmental reporting. The following points highlight the core principles that govern the content of ICIS EPDs:

- **Compliance with ISO 14020:** All EPDs must align with the guidelines set forth in ISO 14020, emphasising the need for verifiable, accurate, and non-misleading information.

- **Objective Presentation:** To avoid bias, EPDs should refrain from including product comparisons, ratings, or judgments, focusing instead on factual data.
- **Audience Consideration:** The content and structure of EPDs are tailored to be accessible and understandable by the intended audience, avoiding unnecessary technical complexity.

These principles underscore ICIS's commitment to upholding the integrity and objectivity of environmental declarations. By adhering to these guidelines, EPDs serve as a trustworthy source of environmental information, enabling stakeholders to make informed decisions based on reliable data.

12.2 LANGUAGE AND UNITS

ICIS emphasises the importance of broad accessibility and standardisation by requiring that EPDs are primarily published in English, with provisions for additional languages, provided an executive summary in English is included. Consistent use of the International System of Units (SI) across all EPDs ensures uniformity and clarity in the presentation of environmental data:

Language Accessibility: EPDs are primarily issued in English for global accessibility, with provisions for translations accompanied by an English executive summary to cater to a wider audience.

- **Consistency in Units:** The use of International System of Units (SI) is mandated for all EPDs, ensuring uniformity in the presentation of environmental data across various indicators.
- **Clarity in Data Presentation:** ICIS specifies clear formatting rules for numerical data, including the use of three significant figures and adherence to ISO 8601 standards for dates and times, facilitating unambiguous interpretation of environmental information.

The emphasis on language clarity and unit standardisation in ICIS EPDs ensures that environmental information is accessible and comprehensible to a global audience. This approach facilitates the wider dissemination and understanding of environmental data, contributing to the global effort towards sustainability and environmental stewardship.

12.3 INCLUSION OF MULTIPLE PRODUCTS

ICIS enables the inclusion of similar products from the same manufacturer within a single EPD, ensuring that the environmental impact information remains precise and comparable. This approach simplifies the documentation process for manufacturers with multiple similar products, enhancing the utility of EPDs for decision-making. Sector EPDs are also facilitated, offering aggregated environmental data for an entire industry sector, which is invaluable for understanding sector-wide impacts and performance:

- **Product variability:** products included in a single EPD must have environmental performance indicators that do not vary by more than 10% to ensure consistency and comparability.
- **Representative product selection:** a specific product must be selected as representative of the group, with a clear rationale for its selection provided within the EPD.

- **Sector EPD development:** guidelines for the creation of sector EPDs are established, detailing how average values are computed and ensuring transparency regarding the methodology and the contributing entities.

This inclusive approach allows for a broader representation of products within EPDs, providing stakeholders with comprehensive environmental information that reflects the diversity of products in the market.

12.4 VISUALS AND FORMAT

The presentation of EPDs is carefully structured to avoid any misleading environmental claims, with specific attention to the use of visuals. The EPD format is segmented into distinct sections, each designed to convey essential information effectively:

- **Cover page essentials:** the cover page is the EPD's forefront, presenting critical details such as product and program information, registration number, and compliance statements in a clear and accessible manner.
- **Program and product details:** sections dedicated to program information and product specifics offer insights into the EPD's verification process, the PCR applied, and comprehensive product descriptions, among other key details.
- **Material and environmental data:** the content declaration and environmental performance sections delve into the product's material composition, environmental impacts across life cycle stages, and adherence to EN 15804 and other regulatory standards.

The structured format of ICIS EPDs (www.climateintell.com) ensures that all necessary information is presented in a clear, logical, and accessible manner, aiding stakeholders in making informed decisions based on environmental performance data.

12.5 SUPPLEMENTARY SECTIONS

ICIS EPDs are designed to be comprehensive, incorporating additional sections that provide further clarity and context:

- **Guidance for pre-certified EPDs:** detailed instructions are provided for pre-certified EPDs, emphasising the need for transparency in the underlying LCA methodology and data sources.
- **Sector EPD specifications:** clear criteria are set for sector EPDs, including methodologies for average value determination and a list of contributing manufacturers, to ensure the representativeness and reliability of the data.
- **Documentation of updates:** any revisions or updates to an EPD are meticulously documented, offering a transparent record of how the product's environmental profile has evolved over time.

These supplementary sections enrich the EPD with valuable context, making it a more informative and useful tool for understanding the environmental aspects of products and sectors.

12.6 EXECUTIVE SUMMARY

For EPDs published in languages other than English, an executive summary in English is essential, providing a succinct overview of the most critical elements of the EPD:

- **Comprehensive summary:** the executive summary encapsulates key aspects of the EPD, including program details, product information, environmental performance metrics, and notable changes from previous versions, if any.

The inclusion of an executive summary ensures that the core information of an EPD is accessible to a global audience, furthering the reach and impact of the environmental data provided.

ICIS's commitment to robust, informative EPDs supports the dissemination of reliable environmental information, aiding stakeholders across various industries in making informed, sustainable choices.