PLASTIC FREE STANDARD MANAGEMENT SYSTEM

PFS-S-6

PLASTIC FREE CERTIFICATION

AB210077

eco sphere academy

PLASTIC FREE STANDARD

MANAGEMENT SYSTEM

ISSUE NUMBER	EDITION	ISSUE DATE	SCHEME OWNER
1.0	First issue	18.11.2019	Plastic Free Certification SBrl
2.0	Second issue	19.05.2020	Plastic Free Certification SBrl
3.0	Third issue	28.02.2021	Plastic Free Certification SBrl
4.0	Fourth issue	01.01.2023	Plastic Free Certification SBrl
5.0	Fifth issue	15.06.2023	Plastic Free Certification SBrl
6.0	Sixth issue	31.05.2024	Eco Sphere Academy APS

SUMMARY

1. INTRODUCTION

This Standard, named Plastic Free Standard - Management System (hereinafter referred to as PFS-S), represents a distinctive approach to certify an Organization's commitment to a virtuous path of responsible and environmentally sustainable consumption, aimed at breaking free from the unconscious and automatic use of single-use conventional plastics.

The PFS-S is certifiable by Certification Bodies accredited by the owner of the scheme amd aims to promote the reduction of the use of single-use plastics of fossil origin, through their reduction/elimination/replacement with more sustainable alternatives and with a lower CO_2 impact, such as durable packaging, reusable products, and compostable disposables.

It is an international and voluntary standard that establishes the requirements for the certification of Organizations adhering to a Plastic Free approach and does not intend to replace the legal or regulatory requirements of any country. It is the responsibility of each Organization to demonstrate compliance with all applicable laws and regulations.

The PFS-S outlines a well-defined scheme for the development of a system to reduce and eliminate single-use conventional plastic items throughout the Organization's production chain, involving, as appropriate, third-party actors in the supply chain. On one hand, it supports the transition to a Plastic Free environment in the production setting; on the other, it demonstrates such commitment.

The adoption of PFS-S brings numerous advantages for all parties involved. From an individual perspective, becoming a Plastic Free Organization provides a competitive advantage in terms of image, loyalty, and attractiveness. From a collective and community standpoint, the certification process generates clear positive externalities, such as the reduction of plastic pollution and the lowering of environmental costs.

1.1 Definitions

Audit:

The process of verifying an Organization's compliance with the PFS-S.

Auditor:

An individual possessing the skills and capabilities necessary to conduct an audit.

Biodegradable:

Organic material that breaks down into simpler substances through the enzymatic activity of microorganisms. A product is considered biodegradable when the total transformation of its organic components into inorganic

molecules occurs.

Certificate:
The document issued by the Certification Body to confirm that an Organization has met the requirements of the PFS-S.

Certification:
The procedure by which a certification body, based on an audit and evaluation of an Organization's competence, provides a written assurance that the Organization complies with the requirements of this standard.

Certification Body:
Independent body accredited and authorised to certify the conformity of Organizations against the Plastic Free Standard - Management System, through audit mechanisms, and to issue relevant certificates of conformity.

Compostable/Compostable Material:
Material that undergoes degradation by biological processes during composting and leaves no visible or toxic residues. The reference law for compostability is En 13432, dating back to 2002, which clearly lists all the characteristics that a particular material must have to be defined as compostable. The regulation states that a product must degrade by at least 90% in the presence of a carbon dioxide-rich environment within six months to be defined as compostable.

Conventional Plastic:
Any fossil-derived polymeric material from non-renewable sources. For example: Polyethylene terephthalate (PET), High-density polyethylene (HDPE), Polyvinyl chloride (PVC), Low-density polyethylene (LDPE), Polypropylene (PP), Polystyrene or Styrofoam (PS).

Corrective Action:
Action taken to eliminate the cause of a detected non-conformity and to prevent its recurrence.

Elimination:
Complete removal of the use of the item under examination from the Organization's production processes.

ESA:
Eco Sphere Academy Association, Scheme Owner of the PFS-S.

KPI:
Key Performance Indicators, indicators that monitor the Organization's performance over time.

LCA:

Life Cycle Assessment, an evaluation of the life cycle of a product system. LCA studies the environmental aspects and potential impacts throughout the product's life (from cradle to grave), from raw material acquisition to production, use, and disposal.

Single-use:

Any item intended for a single use before being disposed of as waste.

Non-conformity (NC):

Any failure to meet a requirement.

Organization:

A public or private entity that applies to an accredited Certification Body to obtain or renew Plastic Free Certification.

PA:

Plastic Assessment, the analysis of the presence of plastics, one of the phases of the Certification process.

Packaging:

Any material used for packaging, handling, and transporting products.

PFS-S:

Plastic Free Standard - Management System, this document. It is the regulation on which Certification is based.

Plastic:

Synthetic or semi-synthetic material mainly composed of high molecular weight organic polymers and can be molded in some stages of its transformation into finished products.

Procedure:

An agreed-upon method for performing an activity or process that is implemented and documented in the form of detailed instructions or a process description (e.g., a flowchart).

Product:

Anything manufactured or sold, including a material, a semi-finished/intermediate product, or a final product ready for sale.

PRP:

Plastic Reduction Plan, one of the phases of the Certification process.

PRPD:

Plastic Reduction Plan Deployment, the implementation of the plastic reduction plan, one of the phases of the Certification process.

Reduction:

The action of reducing, quantitatively decreasing the use of the item under examination.

Scheme Owner:

The Organization responsible for the development and maintenance of the PFS-S, owner of the logo, and manager of the labeling scheme.

Site:

A unit of a company, the physical location subjected to an audit and included in the audit report and certificate.

Standard:

Plastic Free Standard - Management System (PFS-S), this document. It is the regulation on which Certification is based.

Validation Body:

Subject pertaining to the accredited Certification Body, delegated to assess the audit reports and issue the relevant certificates of conformity.

1.2 Certification Scope

The PFS-S proposes a cyclical approach that allows Organizations to analyze their situation and progress on a path of improvement in reducing the use of single-use conventional plastics until their complete elimination. This includes taking action within their supply chain for products/services.

For certification purposes, the PFS-S considers the use of single-use plastics in one or more defined physical spaces. This includes all items for which a single use is intended before they are disposed of as waste. In the case of Organizations with more than one site, the Organization has the option to choose whether to proceed with a single certification process, requesting a single certificate covering all different sites, or to request a certification process for each site.

The PFS-S applies to Organizations of any type and size, whether public or private, excluding Organizations that produce and work with single-use conventional plastic items and those managing

plastic waste for purposes other than recycling. Additionally, the PFS considers the proper management of plastic waste, both single-use and durable.

Finally, a crucial aspect addressed by this standard is the communication of plastic-free practices that Organizations are required to undertake to contribute to raising awareness in society regarding environmental responsibility issues.

1.3 Preliminary Conditions of the Organization

The organization seeking to initiate the certification process must ensure that the preliminary conditions for adhering to the Plastic Free Standard - Management System are met.

These conditions are outlined below:

- Availability of at least one site where the certification process can be applied.
- Availability to identify and commit human resources responsible for the certification process.
- Availability of operational, instrumental, and economic resources sufficient to support the costs associated with the certification process.
- Willingness to explore more sustainable alternatives to single-use plastics.
- Implementation of proper management of plastic waste in accordance with applicable legislation.
- Commitment to inform staff, customers, and suppliers about the Organization's commitment to the Plastic Free process.

2. THE CERTIFICATION PROCESS

The Certification Process is delineated through various operational phases. The first phase entails a detailed analysis of the presence and types of single-use conventional plastics, leading to the creation of a comprehensive list of regularly used items at the site to be certified (Plastic Assessment - hereinafter PA). Concurrently, possibilities for reducing, eliminating, or replacing each item are evaluated, and reduction actions to be implemented within one year are defined. The definition of these actions constitutes the Plastic Reduction Plan (hereinafter PRP), representing the second certification phase.

Subsequently, the Organization proceeds with the implementation of the plan, realizing the third phase (Plastic Reduction Plan Deployment - PRPD). The reduction of each item specified in the PRP must be monitored over time. To this end, performance indicators (Key Performance Indicators - KPI) are identified, enabling the Organization to periodically record and evaluate data related to the usage of these items.

The PA, PRP, and the list of KPIs together form the Monitoring File (hereinafter FdM), an essential and necessary tool whose compilation is a prerequisite for the verification audit. Once the PA is drafted, the PRP is initiated, the PRPD is underway, and its developments are monitored through KPIs, the Organization can request the verification audit within a maximum of 9 months from the start of the certification process.

The verification audit is divided into the first phase audit and second phase audit (see section 6). The final report is submitted to the Certification Body authorized to certify based on this Standard.

The Organization is certifiable if two requirements are met:

- inclusion in the AP of at least 80% of the conventional plastic single-use items used in the spaces subject to certification and detected during the audit.
- reduction in the use of at least one conventional plastic single-use item, unless the Organization has already exhausted all opportunities for improvement.

The grade mechanism allows evidence of the achievement of further objectives, as specified in the relevant section.

2.1 *Plastic Assessment* (PA)

During the PA phase, the Organization assesses the level of use of single-use conventional plastic items. Specifically, a comprehensive list of each conventional plastic single-use item used in the certification site is compiled. For each item, the Organization identifies at least:

1. Product description and its use.
2. Product category (chosen from "tableware," "bottles," "food wraps," "garbage bags," "food containers," "non-food wraps and stretch films," "other single-use containers," "single-dose containers," "other").
3. Type of plastic (chosen from "PET," "HDPE," "PVC," "LDPE," "PP," "PS," "Other plastics").
4. Production process or place of use.
5. Average monthly consumption quantity.
6. Weight of a unit of product (for packaging, net of its content).
7. Type of supply: vendor purchase or mass retail purchase.

Distinction between vendor purchase and mass retail purchase should be understood with respect to the Organization's specific needs: vendor purchase:

- purchases from companies and/or individuals offering unique or difficult-to-replace goods and services due to contractual constraints, proven qualitative and quantitative needs, etc.
- mass retail purchase: purchases made independently by the Organization from businesses serving the retail sector (such as supermarkets, wholesalers, specialty stores).

8. Possibility or impossibility of reducing the item.

The decision to reduce/replace/eliminate the individual item is conditioned by an analysis of opportunities and criticalities that must consider:

- Type of supply.
- Market context within which the Organization operates, including reference operational standards.
- Applicable legislation.

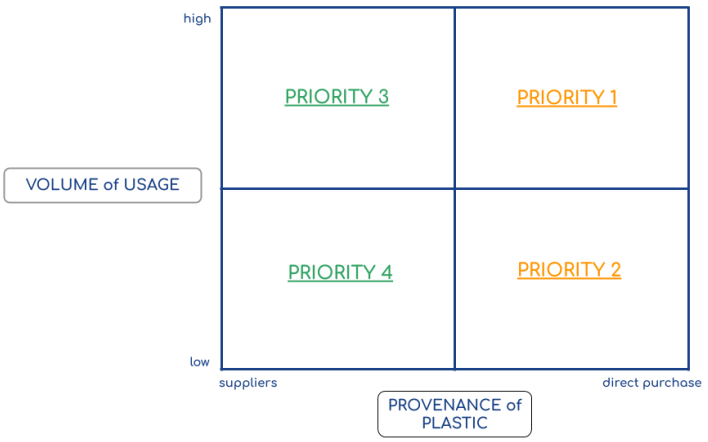
The use of conventional plastics derived from fossil sources is allowed in cases where they cannot be replaced in the short term due to the absence of more sustainable alternative solutions in the market, regulatory constraints, and proven operational needs. In these cases, the Organization is required to declare the impossibility of reducing the item and provide appropriate explanations and objective evidence demonstrating this situation.

2.2 *Plastic Reduction Plan* (PRP)

The Organization is required to define a 12-month action plan aimed at the ultimate goal of completely eliminating conventional plastics, both in internal production processes and throughout the external supply chain. The purpose of the PRP is to establish a strategic, rapid, and implementable path.

The Organization determines the priority actions to be included in the PRP through an analysis of significance, considering the matrix shown below. Plastic items acquired through mass retail purchase take precedence over those from suppliers. Additionally, items acquired in larger volumes should be treated with priority over those with smaller volumes. At this stage, items declared as impossible to reduce in the Plastic Assessment are not taken into consideration.

The Plastic Reduction Plan must always involve activities to reduce/replace/eliminate the presence of single-use conventional plastic items. In the absence of applicable improvement points, the Organization is not certifiable according to the Standard, except for Organizations meeting the requirements for grade A (see section 7.1).



The actions that can be implemented include:

- Rethinking production processes and products/services to eliminate the need for certain single-use items.
- Using durable and reusable products, consequently eliminating single-use items from the production chain.
- Replacing non-compostable single-use plastics with environmentally sustainable alternatives, namely items made from materials listed in the Plastic Free Materials Annex and other equivalent materials. Evidence of compostability characteristics in compliance with EN 13432:2002 must be provided for these products.

The Plastic Reduction Plan will consider the following elements:

1. The type of reduction action to be implemented, (to be chosen from the options described below).

In defining the reduction activities to be undertaken, the Organization must prioritize the types of

actions according to the numerical order in the list below. Only if the first action is not reasonably feasible should the next one be chosen. Within each type of action, solutions characterized by the best available Life Cycle Assessments (LCA) in literature and/or commissioned for specific and precise analyses must be prioritized.

A. Elimination of the item from the production and/or supply chain.
B. Replacement with a durable item.
C. Reuse of the item multiple times or replacement with single-use aluminum, paper, or other highly recyclable materials.
D. Replacement with a TÜV AUSTRIA certified COMPOST HOME single-use item.
E. Replacement with a EN 13432 certified (COMPOSTABLE) single-use item.
F. Replacement with single-use glass, tetrapack, or other materials with low recyclability; Recycling of the item for other purposes.

The Organization must be capable of demonstrating the impossibility of implementing the types of actions preceding the one that is planned and implemented. If none of the described action types are possible, it results in the impossibility of reducing the item, which must be managed as described in the previous paragraph.

2. Description of the alternative solution to be applied, with appropriate explanatory details and possible environmental impact assessments;
3. The expected expiration date of the planned action.
4. The target reduction objective expressed as a percentage (total elimination equals 100%).
5. Additional information such as how to integrate the action into business processes and resources to be used for replacement.

If the Organization is unable to carry out the actions outlined in the PRP, deviations should be highlighted in the periodic review, managed, and reported as non-conformities to the PFS-S.

2.3 *Plastic Reduction Plan Deployment* (PRPD)

The phase of Plastic Reduction Plan Deployment (hereinafter PRPD) is central to achieving the set objectives and coincides with the practical commitment to comply with the PFS-S. Therefore, the PRPD represents the tangible implementation of what is outlined in the Plastic Reduction Plan. In the event that the Organization identifies inconsistencies or results different from what is outlined in the PRP, it will manage such a situation as a non-conformity. In addition to actions aimed at reducing single-use conventional plastics, the PRPD includes actions related to the management of plastic waste.

2.3.1 Management of Plastic Waste

The management of plastic waste is one of the fundamental requirements for the proper implementation of the Plastic Free Standard - Management System. The correct management primarily depends on the context in which the Organization operates.

The Organization is required to:

- Gather information on the methods of collection, transportation, disposal, and recovery of plastic waste by the waste management authority operating in the territory where the Organization carries out its activities, with particular attention to different types of plastics.
- Establish an internal system for collecting plastic waste in accordance with subsequent management phases (collection, disposal methods, disposal times) and ensure that the system functions correctly.
- Provide adequate communication to its staff and suppliers regarding the methods of plastic waste management.
- Monitor the quantity of plastic waste generated over time.

2.4 Key Performance Indicators (KPIs)

KPIs are indicators aimed at monitoring the plastic reduction plan, assessing performance over time, and demonstrating the level of adherence to the Standard. KPIs enable the Organization to collect periodic numerical values related to the use of items involved in the reduction plan, track their acquisitions, and monitor the progress of reduction actions. They can be recorded on a monthly, bimonthly, or quarterly basis.

The minimum KPIs to be recorded include:

- The use of single-use conventional plastic items covered by the Reduction Plan to be implemented.
- The management of generated plastic waste.

KPIs serve as tools for information and managerial control, and it is essential that they are shared with internal staff involved in the certified processes. The Organization consistently reviews the KPIs whenever deemed necessary and at least once a year.

3. GOOD PRACTICES

The Organization has the option to supplement the necessary monitoring documentation with the reporting of best practices that it has implemented and intends to submit for evaluation.

The good practices that the Organization can report may fall into two categories:

- Reduction actions of conventional plastic items already implemented and completed by the Organization before the initiation of the certification process.
- Environmental sustainability actions not directly related to the use of single-use conventional plastic items.

For each good practice, the Organization must provide the following minimum information:

1. Title.
2. Detailed description.
3. Objective evidence of its implementation.

There is no obligation for the Organization to report good practices. During the evaluation, the Certification Body examines the proposed good practices. If deemed appropriate, relevant, and valuable, the good practices are taken into account in the assessment of the Organization.

The Certification Body also has the option to designate the status of good practice to other reduction actions that are correctly integrated into the PRP.

good practices, devoid of sensitive information, may be either made public or collected in a dedicated archive made available to the Scheme Owner, other accredited Certification Bodies, and certified or undergoing certification Organizations.

4. TRAINING

For the Organization to effectively manage the implementation of the PFS-S, it is essential that it shares the commitment undertaken in the Plastic Free journey internally. Specifically, the personnel involved in the certified business processes must be aware of the actions to reduce single-use conventional plastics, capable of recognizing plastic types, knowledgeable about the Standard, and able to identify situations of conformity and non-conformity with it, facilitating timely corrective action. Therefore, it is necessary for the Organization to provide dedicated training to its personnel, furnish appropriate objective evidence of its completion, and ensure its effectiveness.

5. COMMUNICATION

In order to contribute to the promotion of Plastic Free management, the Organization is required to communicate its commitment related to the application of this Standard. Specifically, the Organization undertakes informative actions directed towards its personnel, suppliers, customers, and community, utilizing any written or verbal communication system, provided that it adheres to the rules for using the logo and the contractual clauses signed.

Furthermore, it is required that the PA and the PRP are shared and communicated with internal staff.

6. NON-CONFORMITIES

Non-conformities refers to situations of deviation from what is specified in the PFS-S. Each identified non-conformity must be promptly addressed, and, where possible, resolved through timely updates to the PA and PRP.

In cases where immediate resolution is not possible, the Organization is required to conduct a comprehensive analysis of the causes of non-conformities, define the actions necessary for treatment/resolution, establish related timelines, and designate responsible individuals for these actions. The Organization must provide evidence of planned and implemented measures during audit activities.

Non-conformities are categorized as major or minor.

6.1 Major non-conformities

Major non-conformities are situations that affect the ability of the management system to achieve expected results. A non-conformity may be considered major if there is significant doubt about the effectiveness of control processes, or if a set of minor non-conformities associated with the same requirement or aspect highlights a systemic criticality. For each major non-conformity detected, a corrective action is required. Non-exhaustive examples of major non-conformities include:

- Items in use by the Organization not reported in the Plastic Assessment;
- Indication of type of supply incorrect;
- items included in the PRP and for which the impossibility of reduction is declared with non-exhaustive or not plausible reasons;
- Absence of planned reduction actions in the PRP, unless the Organization has already exhausted all opportunities for improvement;
- Inappropriate significance analysis and failure to respect the hierarchy of priorities;
- No reduction actions initiated in the PRPD;
- Indication of periodic values in the KPI list inconsistent with statements and evidence collected;
- Failure to meet deadlines for reduction actions in the current and, if relevant, previous PRP;
- Plastic waste management not in compliance with the relevant regulations;
- Unprepared staff on Plastic Free;
- No communication made on the PA and the current PRP;
- Violation of the directives mark defined in the document "Rules for the use of the Plastic Free Certification mark".

6.2 Minor non-conformities

Minor non-conformities are those situations that do not significantly affect the management system's ability to achieve the expected results and on which improvement action is recommended. Managing minor non-conformities contributes to the continuous improvement of the system.

7. AUDIT VERIFICATION

The verification process for obtaining or renewing the Plastic Free Management System certification is divided into two phases: the first phase audit and the second phase Audit.

7.1 First phase Audit

The first-phase audit aims to conduct an initial analysis of the Organization's processes and documentation to identify any non-conformities that require attention from the Organization through corrective actions, laying the groundwork for the second-phase audit.

7.1.1 Duration

The minimum duration of the first-phase audit will depend on the number of employees working at the site(s) subject to certification, as defined in the following table:

NUMBER OF EMPLOYEES	FIRST PHASE AUDIT DAYS
0-49	1
50-149	2
150-499	3
500-999	4
>999	to be customized

In the case of multiple audit days, the Certification Body may assign more than one auditor for the same Organization. The jointly agreed upon dates will be communicated via email and, barring exceptional cases, will be binding for both parties.

7.1.2 Operational Verification

The first-phase audit starts with the compliance verification of internal production processes within the premises subject to certification, the possible presence of single-use conventional plastics not covered in the Monitoring File, the knowledge of the staff regarding plastic-free issues, and other relevant aspects.

7.1.3 Documentary Verification

The auditor verifies the compliance of the Monitoring File and related attachments, documentation of training and communication processes.

7.1.4 Closing Meeting

The auditor presents the first phase audit Report (in the case of multiple auditors, it is conducted collectively), including a list of major and minor non-conformities, which is shared with the Organization. The Organization can then define a corresponding management plan and schedule corrective actions. The auditor and the Organization collaboratively determine the duration and date of the second-phase audit. The second-phase audit may also be conducted on the same day as the first-phase audit, provided that no major non-conformities have been identified and that both parties agree to this arrangement.

7.2 Management of corrective actions

Corrective actions must be timely, appropriate, and effective in addressing the non-conformities identified during the first phase audit. They should aim to resolve the underlying causes of non-conformities and prevent their recurrence. Additionally, corrective actions must be clearly and comprehensively documented, maintaining a dedicated register that monitors the corrective actions undertaken, deadlines, responsible parties, expected results, periodic reporting of their effectiveness, and any necessary changes or improvements during the process. In addition to facilitating a thorough review by the auditor during the second phase Audit, the corrective actions register contributes to ensuring that these actions are managed effectively.

7.3 Second phase Audit

The second-phase audit delves deeper into the analysis of processes and completes the conformity verification procedure. It must be conducted within a maximum of three months from the conclusion of the first phase audit.
Specifically, the second-phase audit is structured as follows:

7.3.1 Verification of corrective actions

The auditor further analyzes processes, assesses the effectiveness of corrective actions implemented in response to identified non-conformities, and collects relevant evidence.

7.3.2 Identification of Good Practices

The auditor gathers information regarding the possible presence of good practices.

7.3.3 Report Signing

The auditor compiles the second phase audit Report (in the case of multiple auditors, it is conducted collectively), which will be signed by both parties.
In the event of a dispute with the auditor, the client has the right to present counter-arguments regarding the notified non-conformities. The auditor is obliged to accurately report the content of such counter-arguments within the audit documentation, enabling the Certification Body to make its own assessments.

7.4 Audit Execution Methods

The audit can be conducted either on-site or remotely. In any case, the audit execution phases will be those previously indicated.
In the case of on-site audits, the auditor will physically present themselves at the agreed site.
Remote audits will be conducted through online video calls, using web platforms, software, or free applications. This method is permitted provided the following criteria are met:

- Data Accessibility: The organization must provide complete and transparent access to all documents and information requested by the auditor.

- Virtual Interviews: The organization's staff must be available for virtual interviews, videoconferences, and other forms of digital communication.
- Adequate Technology: Both parties must have access to adequate technology to ensure the quality and effectiveness of the remote audit.

Additionally, the Organization is required to provide the following additional documentation:

- A floor plan of the spaces subject to certification;
- A video showing comprehensively the spaces subject to certification, the plastic-free solutions implemented, and the management of plastic waste.

8. CERTIFICATION ISSUANCE

The Plastic Free Certificate is exclusively issued by Certification Bodies accredited by the Standard Owner. Based on the first phase and second phase audit Reports submitted by the auditor, the Validation Body of the Certification Body provides an irrevocable and non-reviewable judgment within a maximum of thirty days from the conclusion of the second phase Audit.

In the case of a positive outcome, the Certification Body assigns one of the grades to the Organization in accordance with the table in the following paragraph. In the event of a negative outcome, the Certification Body provides the relevant justifications, which will be communicated to the Organization.

8.1 Grades

The grades represent the degree of application of the PFS-S and are articulated based on the involvement of the Organization's suppliers. The requirements are described in the table below.

REQUIREMENTS	PLASTIC FREE certified E	PLASTIC FREE certified D	PLASTIC FREE certified C	PLASTIC FREE certified B	PLASTIC FREE certified A
	Grade E	**Grade D**	**Grade C**	**Grade B**	**Grade A**
- Inclusion in the PA of at least 80% of the single-use conventional plastics used in the spaces covered by the certification; - Reduction of at least 1 single-use conventional plastic;	✔	✔	✔	✔	✔
- Correct monitoring and valorisation of reductions; - Appropriate Plastic Free training and communication carried out; - Plastic Waste management in accordance with local regulations;		✔	✔	✔	✔
- Reduction of every single-use conventional plastic purchased from mass retail; - Reduction of at least 1 single-use conventional plastic purchased from suppliers;			✔	✔	✔
- Elimination of all single-use conventional plastics purchased from mass retail. - Reduction of every possible single-use conventional plastic purchased from suppliers.				✔	✔
- Elimination of all single-use conventional plastic throughout the entire supply chain; - Absence of Unresolved major non-conformities;					✔
good practices and non-conformities can increase or decrease the final grade.					

At any time, certification can be obtained at any grade. It is not mandatory to progress through the grade scale from letter E to letter A. Remaining in the same grade for a number of years exceeding those indicated in the table below is not allowed, except for achieving grade A, for which there is no limit on the number of years the Organization can maintain that level.

If the grade is not improved during the period specified in the table, the Organization will be assigned the grade of the lower level. In the event that the minimum grade, i.e., E, is reached or maintained for 2 years without any improvement, certification will be suspended in the third year.

GRADE	NUMBER OF YEARS
E	2
D	3
C	4
B	5
A	Illimitate

8.2 Certification duration

The certification is valid for a period of 365 days from the date of issuance of the Certificate, in the case of the first certification.

For subsequent years, the audit must be performed no earlier than the ninth month from the issue of the previous Certificate.

In cases where the first phase renewal audit is carried out before the expiry date of the previous certificate, we have a renewal in continuity and the new certificate will be valid for 365 calendar days from the expiry date of the previous certificate.

Annex 1

Normative References

This Standard refers to the regulatory references listed below. For undated references, the latest edition of the publication referred to is applicable.

- EN 13432: "Requirements for packaging recoverable through composting and biodegradation - Test scheme and criteria for the final acceptance of packaging," a harmonized standard of the European Committee for Standardization regarding the characteristics a material must possess to be defined as biodegradable or compostable. According to the standard, for material to be deemed compostable, it must biodegrade at least 90% within six months in the presence of a carbon dioxide-rich environment, within three months when in contact with organic materials, and the material's mass must be at least 90% comprised of fragments smaller than 2 mm. Additionally, the material must have low concentrations of toxic contents such as heavy metals, saline content, volatile solids, nitrogen, phosphorus, magnesium, and potassium.
- OK Compost Home, owned by TÜV AUSTRIA, guarantees decomposition in the home compost bin.
- EU Directive 2019/904 dated June 5, 2019, on reducing the impact of certain plastic products on the environment.
- United Nations Framework Convention on Climate Change (UNFCCC): Also known as the Rio Accords, an international environmental treaty produced by the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro in 1992. The treaty aims to reduce greenhouse gas emissions, the basis for global warming.
- Kyoto Protocol on Climate Change: The international agreement that sets precise objectives for cuts in greenhouse gas emissions, in effect since 2005, with 192 participating states.
- Paris Agreement: Signed on December 12, 2015, by 184 Member States of the United Nations Framework Convention on Climate Change (UNFCCC), with the goal of limiting the increase in the global average temperature to 1.5 °C.

Annex 2

Plastic Free Materials

Indicative and non-exhaustive list of Plastic Free materials admitted according to this certification.

Symbol (if relevant)	Material	Characteristics	Usage
	Mater-bi	Family of biopolymers deriving from plant sources, completely biodegradable and compostable according to the EN13432 standard. Max temperature 80°C	cutlery, plates and glasses coating, bags and packaging
	Paper and card-board FSC Natureflex Wood	Board made with fibres from responsibly managed forests (FSC) Natureflex: biopolymer derived from wood pulp (usually bamboo) Max temperature 100°C	glasses and plates (coated with Mater-bi coating) thermosealable transparent bags
	PLA CPLA BioFoam	Biopolymers derived from plant sources PLA: Max temperature 45°C CPLA: Max temperature 85°C BioFoam: Max temperature 45°C	glasses, trays, containers
	Cellulose pulp	Waste of fast-growing plants, especially sugar cane, bamboo or straw. Max temperature 100°C	plates, containers with lids, glasses
	Polibutirrato PBAT	Polymers obtained by polycondensation between butanediol (BDO), adipic acid (AA) and terephthalic acid (PTA). Maximum temperature 230°C	packaging per alimenti (cling wrap), di sacchi, shopper e sacchetti compostabili
	PHA	Polymers obtained by synthesis by fermentation inside genetically modified microorganisms, starting from sugars or lipids	glasses, cups and other containers
	Palm leaves	natural pressed palm leaves for cold and hot foods	plates, containers, trays
	Chaff	product deriving from the processing of cereals	containers
	Edible materials	materials made with edible products	containers for food

Etichette più comuni sui materiali monouso compostabili	

Mater-Bi®
It is a family of biopolymers deriving from plant sources, completely biodegradable and compostable according to the EN13432 standard.
It is developed and produced by Novamont (novamont.com).
Mater-Bi® (materbi.com) is milky in color and can withstand up to a maximum temperature of 80 ° C.
It is used for the production of cutlery or, in combination with cardboard, for plates and glasses. In the form of a film it is also used for the production of bags and packaging that wraps cutlery kits.

Ingeo"" (P.L.A.)
It is a family of biopolymers derived from plant sources, completely biodegradable and compostable according to the EN13432 standard.
It is produced by NatureWorks (www.natureworksllc.com).
The amorphous polymer is perfectly transparent and resists up to a maximum temperature of 45 ° C.
It is mostly used in thermoforming, to produce glasses and trays with aesthetic and mechanical characteristics similar to polystyrene but suitable only for cold drinks and foods.

Cellulose pulp
It is obtained from processing waste of fast-growing plants, especially sugar cane, bamboo or straw, and is therefore entirely made up of natural materials, as well as being completely biodegradable and compostable according to EN13432.
The pulp is available in white and non-bleached version and resists up to a maximum temperature of 100 ° C. Suitable for microwave and traditional oven. It is mainly used for the production of dishes and containers with a lid but it is also used for some types of glasses.

FSC + Mater-Bi® cardboard
It is a cardboard made with fibers from responsibly managed forests (fsc.org).
The internal side, in contact with food, has a Mater-Bi® coating which guarantees its resistance to liquids and its suitability for contact with food up to a maximum temperature of 95 ° C.

Chaff
The chaff, also called tailing, is a product deriving from the processing of cereals and consists of the whole of the bracts or glumellae that enclose the grain. The detachment takes place during the threshing in those cereals, such as wheat or rye, in which the bracts do not adhere to the caryopsis; in other cereals, such as rice, oats and spelled, which have more adherent bracts, they must be removed with a process called "husking". It is used for the creation of containers and vessels.

Palm leaf
The palm leaves that fall naturally from the trees are processed and pressed to create containers, plates and trays with the typical color of the wood, and resistant to greasy, hot and humid foods, 100% biodegradable and compostable.

Wood
Birch wood from FSC forests is naturally white and does not require bleaching.

Natureflex
Biopolymer derived from wood pulp (generally bamboo) and resists up to a maximum temperature of 100 ° C.

BioFoam®
BioFoam® is a type of polylactic acid (PLA), a foam material. BioFoam® comes from plants and is completely biodegradable and compostable. This polymer derives from the production of sugar cane and can be used as an alternative to polystyrene products (eg fishing boxes).

Edible (edible) materials
Bran, casein, algae, fruit, etc.

eco sphere academy

via F. Turati, 147-149
Giulianova (TE), Italia
64021
info@esasphere.org