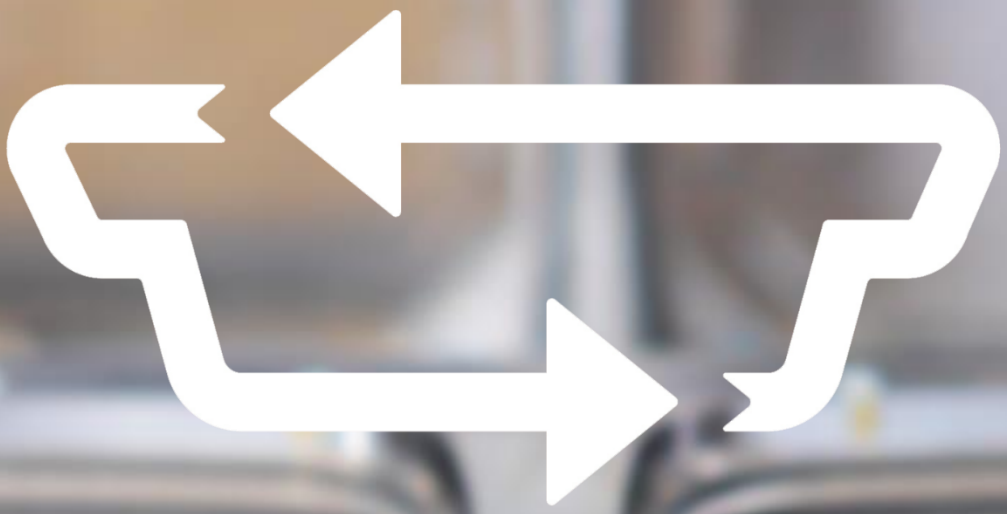
RETRAY



PROCEDURE
RETRAY CERTIFICATION

ED. DECEMBER 2023

THERMOFORMERS

ECOSENSE
FOUNDATION
RECYCLED & RECYCLABLE PET PACKAGING

PLASTIC SENSE FOUNDATION

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Foundation of State Competition by Ministerial Order of 02/21/2017; registration number 1871. Recognized the general interest of its purposes. Acceptance of Law 49/2002 on the tax regime of non-profit entities.

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INTRODUCTION

ECOSENSE FOUNDATION is a non-profit organization that promotes the use and recycling of thermoformed PET food packaging in line with the commitment to environmental care and initiatives related to circular economy policies.

RETRAY IS A CERTIFICATION SCHEME OF THE ECOSENSE FOUNDATION TO CONSOLIDATE A CIRCULAR ECONOMY MODEL IN THE VALUE CHAIN OF THERMOFORMED PET PACKAGING BY MEANS OF THE QUANTIFICATION OF RECYCLED MATERIAL CONTENT AND THE VERIFICATION OF ITS RECYCLABILITY.

This certification recognizes and disseminates the work of those companies that introduce, as a secondary raw material in their production processes of manufacture or use of sheet and/or thermoforming, both monolayer and multilayer, colorless transparent recycled PET from recycling processes in the tray-to-tray circuit approved by the Foundation, along with recycled PET from other sources.

RETRAY has two aspects: as a **process certification (RETRAY Process) and as a product certification (RETRAY product)** and, therefore, the same company can obtain more than one certificate, depending on the number of facilities and products it wants to certify. Specifically:

1. The **RETRAY Process** is given to the manufacturing processes of sheet, sheet + thermoformed body, thermoformed body or packaging.
2. **The RETRAY Product** certification is granted to specific products made of PET sheet, rigid thermoformed bodies (base and/or lid) or packaging manufactured in the facilities that have the previously detailed processes already certified.

The **objectives** of the RETRAY Process and RETRAY Product certifications are:

1. Increase the transparency of the PET sheet and PET thermoformed packaging industry by ensuring traceability in the reincorporation of waste generated throughout the entire value chain, from its manufacture (pre-consumer waste) to its use by end consumers (post-consumer waste).
2. Value the environmental performance of companies that ensure the recyclability of their products through eco-design and incorporating colorless transparent recycled raw materials from the tray-to-tray circuit into their production chain, along with recycled PET from other sources.

3. Contribute to the objectives established in the European legislative framework on packaging and plastic packaging waste and its transposition in the different member countries, especially with regard to promotion of a circular economy for plastics, the prevention of waste generation and the efficient management of waste
4. Close the economic flow by maintaining the material value of PET sheets and packaging, by reintroducing them into the production circuit as secondary raw materials, and by reducing the use of raw materials from non-renewable resources.
5. Provide a label that allows both consumers and agents throughout the value chain to identify those suppliers that meet the certification requirements in their processes and products.

The RETRAY Process and RETRAY Product certifications incorporate the requirements of the EN 15343 standard throughout its 7B and 7C sections.

This allows companies that want to use the certificates to prove **the percentage content of recycled plastic incorporated in the products manufactured over a certain period of analysis,**

Definition of "Thermoformed Sheet Format"

The RETRAY Product certification is obtained for "**Thermoformed Sheet Format**" defined this as one that is characterized by a certain design in terms of its composition and recycled content. Any variation in the composition, understood as all the materials and additives with which the sheet is manufactured expressed in percentage by weight (of each of material/additive) over the total, will lead to the generation of a new Format and, therefore, the need for additional certification.

This definition means that if, for example, several products to be certified have the same composition and only the dimensions and/or weights of the thermoformed sheets vary, it is only necessary to evaluate one of the formats, the result being extrapolated to the others, being considered as the same "Thermoformed Sheet Format".

Clarifications with examples for the determination of the number of Thermoformed Sheet Formats to certificate are included in Annex 1.

The company must communicate to the ECOSENSE Foundation (henceforth, **the Foundation**) the **list of Thermoformed Sheet Formats** that it is interested in certifying by filling in the form listed in **Annex 2. The company must complete as many forms as Thermoformed Sheet Formats they want to certify**, attaching their **technical data sheet for each of them and a self-declaration from the sheet supplier with the composition and additives that it incorporates.**

1. OBJECT

The purpose of this procedure is to establish the requirements that must be met by those companies engaged **in the manufacture of rigid thermoformed bodies that, while not being sheet manufacturers,** wish to obtain an **accrediting RETRAY Process and/or RETRAY product certificate**, as defined in the introductory section. A **Certification Body authorized** by the Foundation for the RETRAY scheme according to the conditions established in the **General Regulations** of the aforementioned scheme shall issue both certificates.

Therefore, this procedure shall be taken as **a reference document for establishing the criteria for conducting audits by authorized Certification Entities**.

In this sense, a **Certification Body accredited for the ISO/IEC 17065 standard in the RETRAY scheme** by an Accreditation Body that is member of EA (European Cooperation for Accreditation) or IAF (International Accreditation Forum), which has signed mutual recognition agreements, must carry out the verification process of compliance with requirements.

2. REFERENCES

For its elaboration this procedure has taken into account the ECOSENSE-PS-RPM-BAN initial Procedure for Thermoformers, as well as the normative and procedural references that are set out below:

- EN 15343: 2007. Recycled Plastics. Traceability and conformity assessment of plastics recycling and recycled content
- EN 15347:2007. Plastics. Recycled Plastics. Characterization of plastic waste.
- EN 15348:2014. Plastics. Recycled Plastics. Characterization of recycled polyethylene terephthalate (PET)
- ISO 14021:2016. Environmental labels and declarations. Self-declared environmental claims (Type II environmental labeling)

- ISO 9001 Auditing Practices Group. Guidance on: Approach to Demonstration of Traceability* of Measurement Result. International Organization for Standardization. December 2009.
- Joint BIPM, OIML, ILAC and ISO declaration on metrological traceability. Nov. 2018.
- ISO 2859-10:2006: Introduction to the ISO 2859 Standards series on sampling for inspection by attributes.
- ISO 2859-4:2002: Sampling procedures for inspection by attributes. Part 4: procedures for the evaluation of the declared quality levels.

3. AUDIT PROCESS AND OBTAINING CERTIFICATES

Before starting the certification process, the company must notify the Foundation of its intention to obtain the certification or certifications (as the case may be).

3.1. RETRAY Process

A complete audit will be carried out for each of the production centers of a company where all the production processes for thermoformed PET packaging are carried out. The policy of 1 production center = 1 audit = 1 certificate shall be followed.

However, it is possible that a company that has several production centers does not have to undergo an audit of each and every one of them. In this sense, a multi-site **unified audit** is possible as long as the organization's production centers:

(i) carry out homogeneous production processes for the manufacture of sheet or sheet + thermoforming and
(ii) have a single centralized raw material purchasing process.

If the two conditions set out are not met, it shall be necessary for the company to undergo an audit process for each installation by the Certification Body, with the consequent need to obtain the RETRAY certificate for each production center in a differentiated way.

The **requirements to be verified in a multi-site unified audit** shall be the following:

Jointly:

- 7.A.1 sections b), c), d), e), f) and h)
- 7.A.2 (all destinations)
- 7.B. Requirements related to the calculation of the recycled content of products manufactured during an analysis period, if the case.

The **requirements to be verified in each production center** shall be:

- 7.A.1 section g), regarding the 3 traceability verifications. It may be carried out randomly among all the company's centers that are being audited.
- 7.A.2. Destination 1, Recycling: waste storage point ("Punto Ecosense / Punto RETRAY")
- 7.C. Requirements related to the calculation of the percentage of recycled material in products.
- 7.D, on the taking of samples of those products that wish to be certified under RETRAY Product, if the case.

Once the Certification Body has carried out the audit and the result is favorable, it shall issue an **audit report** and provide a copy to both the company and the Foundation. If the company decides to audit 78 and/or 7C requirements, within the audit report it shall be detailed, both for the process and for the product formats, where applicable if appropriate:

- Percentage of recycled content in the calculation period.
- Percentage of recycled content in the calculation period from the tray-to-tray circuit.
- Percentage of recycled content of post-consumer origin (for product formats optionally until 31st December 2025 and mandatory as of 1st January 2026). Quantity of non-recycled plastic (expressed in kilos)

The Foundation, once the report has been verified and carried out the additional checks it deems appropriate, shall provide **the certificate signed by the Certification Body and the Foundation** (in which the percentage of recycled content in the calculation period will be reflected, if the case) **and authorize the company to use the "RETRAY Process" label by signing the corresponding agreement** listing the economic conditions and the requirements for rights of use.

3.2. RETRAY Product

The company must communicate to the Certification Body the **list of Thermoformed Sheet Formats** that it is interested in certifying by completing **Annex 2** and attaching for each of them its **technical data sheet and, in case of auditing requirement 7D, self-declaration of the sheet supplier with the composition and additives that it incorporates.**

This prior information is essential for proper planning and sizing of the audit work and, therefore, the company must provide it in advance. Once the information is analyzed, the Certification Body and the company shall agree on the economic conditions for the audit.

Once the Certification Body has carried out the audit and the result is favorable, it shall issue an **interim audit report**, upon receipt of the favorable results of **the recyclability verification tests** carried out by a **Test Laboratory** for RETRAY Product certification (if the case), to then issue the **final audit report**. The Certification Body shall provide a copy of the interim report, as well as the final one, both to the company and to the Foundation.

The Foundation, once the definitive report has been verified and carried out the additional checks it deems appropriate, shall provide **the certificate signed by the Certification Body and the Foundation and authorize the company to use the "RETRAY Product" label by signing the corresponding agreement between the Foundation and the company,** listing the economic conditions and the requirements for rights of use.

4. AUDIT PLANNING

The Certification Body shall schedule the audit and document it in a plan to be sent to the company in advance of the date agreed between both parties to carry out the audit.

Previously, in the case of the **RETRAY Product** certification, the Certification Body shall carry out a **preliminary analysis** to determine the scope and duration of the audit. For this, the company must provide a **list of all the products that it wishes to certify, following the indications established in section 3.2.**

5. PERFORMANCE OF THE AUDIT, OBTAINING RESULTS AND ACTION PLAN

The Certification Body shall carry out the audit based on the requirements established in this procedure. To do so, it shall carry out all the investigations and examinations it deems necessary. These will take place both in person [1] at the facilities of the company (requirements related to traceability, percentage of recycled content, if applicable, and control of production processes) and in the office (requirements related to recyclability).

To carry out the audit, those representatives that the company considers necessary for a correct dialogue and attention to the information demands of the auditor must be present.

Once the audit has been carried out, the Certification Body shall provide a report with the results obtained. Non-compliances (non-conformities) and opportunities for improvement may appear in the report. The company must correct the non-conformities to obtain the corresponding certificate.

In case the Certification Body detects breaches of the requirements established in this procedure the following shall be acted upon:

- In case of **non-compliance** of the **requirements** related to section 7.A ,7. B (if applicable) and 7.C, relating to both **raw material traceability control system,** and **the production system traceability control system** established to verify the **content** percentage of recycled material incorporated: the Certification Body must verify the correction of the non-conformities, re-performing the checks deemed necessary, including, if necessary, new calculations of the percentage of recycled content.
- In the event of **non-compliance** with the **requirements** related to **the recyclability criteria** established in section 7.D (if applicable): the recyclability verification tests must be repeated (the pertinent changes in the design or composition of the product must be carried out previously).

Opportunities for improvement shall constitute observations that the company may take into account to minimize the possibility of non-compliances arising in the future.

[1] The face-to-face audit at the company's facilities may be carried out remotely under extraordinary circumstances that prevent the auditor from travel and as long as the viability of the remote audit is determined by the Certification Body.

6. AUDIT FREQUENCY

As it is stated in **the section 7 of the General Regulations of the RETRAY certification scheme,** the validity of the RETRAY certificates, both Process and Product, is three (3) years and the maintenance of the certification throughout this period is subject to the company having passed an annual **follow-up audit** whose frequency and scope, regarding operations and compliance with the requirements established in the procedures, it will be the same as that of the initial audit to obtain the certificate and the audit for its renewal with the following exceptions:

a) If before the end of the year for carrying out the follow-up audit there is a decrease of more than 5% in the percentage content of recycled material in a product format certified with requirement 7.C, the company must bring the date forward for the follow-up audit to continue using the RETRAY Product brand. In the event that what occurs is an increase in the percentage content of recycled material, the company will decide if it wishes to advance the audit or wait until the end of the annual validity of the RETRAY Product certificate to carry it out.

b) If before the end of the year for carrying out the follow-up audit, a variation occurs in the composition of the certified product format with requirement 7.D, understood as any variation in the formulation that affects compliance with the recyclability guidelines, the company must bring the follow-up audit date forward if it wants to continue using the RETRAY Product brand.

c) In the case of follow-up audits and renewal of requirement 7.D., it will not be necessary to repeat the laboratory tests as long as these two conditions are met:

1. The Foundation determines that there have been no substantial changes to the recyclability guidelines used in the initial certification of the product format.

2. The Certification Body verifies during the audit of this requirement that there has been no variation in the composition of the certified product format, understood as any variation in the formulation that affects compliance with the recyclability guidelines.

The annual follow-up audit by the Certification Body must be carried out within a maximum period of 3 months after one year since the last audit date.

The **renewal** of the certifications will be carried out on a triennial basis as long as the companies have made the corresponding request to the Certification Body when the end of the validity of the certificates approaches to undergo the corresponding **renewal audit** which must be carried out the last day of validity of the certificate at the latest.

7. REQUIREMENTS

The requirements that must be met are made up of four types of requirements (demands) that are summarized below and developed in detail later:

7.A) Requirements related to **traceability of recycled raw materials and waste management.** They shall be applicable to obtain the **RETRAY Process** certification.

7.B) Requirements related to the traceability of the production system to verify **the percentage content of recycled plastic incorporated in the products manufactured throughout a certain period of analysis. These requirements are optional** for obtaining the RETRAY Process certificate and the Certification Body shall verify then only in case the company so indicates.

7.C) Requirements related to the traceability of the production system to verify **the percent of recycled material content incorporated in the products** (each Thermoformed Sheet Format to be certified). They shall be applicable to obtain the **RETRAY Product certification, in addition to the RETRAY Process requirement**.

7.D) Requirements related to **compliance with the recyclability guidelines** of the products (each Thermoformed Sheet Format to be certified). **These requirements are optional** for obtaining the RETRAY Product certificate and the Certification Body shall verify then only in case the company so indicates. This requirement can be audited individually, without the need to have obtained the RETRAY Process (requirement 7A) or RETRAY Product (requirement 7C) certification.

Therefore, a company that wishes to obtain the RETRAY Product certificate must obtain, simultaneously or previously, the RETRAY Process certificate for the production center where the Thermoformed Sheet Format to certify is produced.

The company must keep the records and documents proving compliance with these requirements **for at least 3 years**.

Type of requirement that must be met	RETRAY certification	
	Process	Product
A) Traceability of recycled raw materials and waste management	✓	✓
B) Percentage of recycled plastic incorporated into products in a given period	Optional	Optional
C) Percentage of recycled material incorporated in products		✓
D) Recyclability Guidelines		Optional*

Summary table of the types of requirements to be met depending on the type of certification

**If the company only wants to evaluate the recyclability of one or more Product Formats, it is not necessary to have previously obtained the RETRAY Process Certification (requirement 7A) or RETRAY Product (requirement 7C).*

7.A) Requirements related to the traceability of recycled raw materials and waste management

7.A.1 Traceability of recycled raw materials

The company must comply with the following requirements:

a) The company must have a **traceability system that guarantees the existence of records** through which the batch and the sheet supplier can be identified with which the thermoformed products (base and/or lid) are manufactured. For practical purposes, the traceability system shall basically consist of a control mechanism (digital or physical) "upstream" or "downstream" through which the incorporation of colorless transparent recycled material from the tray-to-tray circuit must be demonstrated.

b) There is at least one **sheet producer** in possession of a RETRAY Process certificate or a current ECOSENSE certificate that operates as a **supplier,** and which identifies the sheet batches supplied by it (either through its delivery notes or invoices).

c) The company, through its production parts (or the records through which it documents the productive activities carried out), maintains **the identification of the product batches** (the sheet supplied by a company in possession of a RETRAY Process certificate or a current ECOSENSE certificate) used in the thermoforming of its products.

d) It uses a **batching system for its thermoformed products** through the production reports themselves (or the records through which it documents the productive activities carried out).

e) **It identifies the batches of manufactured products supplied to its customers** through their product delivery notes, invoices or through their stock control records.

Batching will not be necessary as long as, through other alternative means of identification (associated manufacturing part or product code, among others), the manufactured product can be traced to the raw materials (the PET sheet containing recycled polymers transparent and colorless from the tray-to-tray circuit) with which it has been produced.

f) The company must provide, for each of the thermoformed products manufactured by it in which recycled material has been used, a **technical data sheet** in which at least the following information must be identified:

- Unambiguous product identification
- Determination of product dimensions.
- **Product weight specification**.
- Specification of the **guaranteed percentage of <u>minimum</u> recycled content** incorporated in the product or specification of the weight of recycled content contained in the product. Optionally, the specification of the percentage of recycled content from the tray-to-tray circuit may be specified in the data sheet.

The Certification Body must carry out a random check on some of the manufactured products in which colorless transparent recycled PET from the tray-to-tray circuit has been used as raw material to verify that the percentage of recycled content of the product corresponds to the percentage declared in the technical data sheet (or certificate of recycled material content). For this, it shall carry out the pertinent checks of data contained in the production records of the organization (delivery notes, production reports or control software, among others).

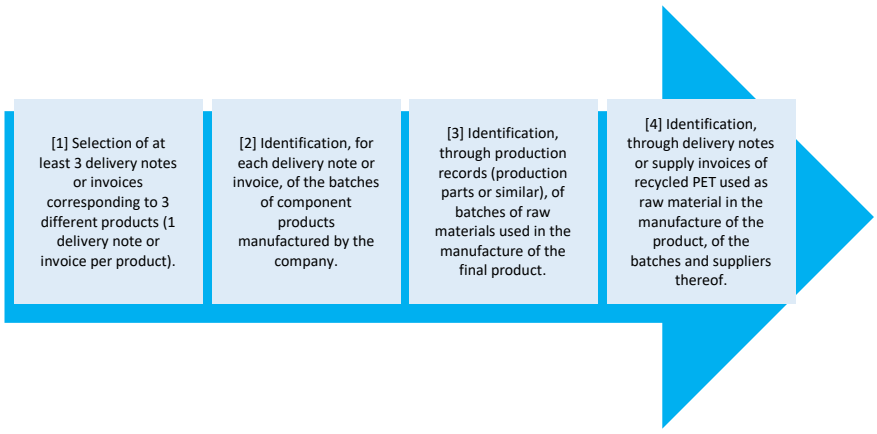
g) It has an **adequate traceability control** that must be accredited. For that, the Certification Body shall carry out at least 3 satisfactory verifications based on the delivery note or final product dispatch invoice, the batch/s of intervening raw material/s (supplied by a company that produces sheets in possession of a RETRAY Process certificate or a current ECOSENSE certificate) in the manufacture of final products. The traceability exercises can be carried out both upstream (starting from the delivery notes or invoices for the shipment of final products) and downstream (starting from the delivery note for receipt of raw materials). In the event that the company does not have a minimum of 3 delivery notes or invoices corresponding to different products, the Certification Body shall carry out the maximum number of possible checks that allows the productive singularity of the entity.

h) It has records provided by the sheet producer in possession of a RETRAY Process certificate or an ECOSENSE certificate in force attesting to the **suitability of the PET sheet that contains recycled material to remain in contact with food**, in accordance with Commission Regulation (EU) 2022/1616 of 15 September 2022 on recycled plastic materials and articles intended to come into contact with foods or regulations that replace, modify or add it, when applicable.

Any type of certificate issued by the company that produces the sheet will be considered an accrediting record. The certificate must refer, as a minimum, to:

- The **address of the production center** where the food sheet is manufactured.
- The type of material / product supplied by the sheet manufacturing company.

Graphically, as a summary, the system that will be used to carry out the verification of this first requirement will be the one shown below:



Explanatory note on companies with a double profile (Laminator + Thermoformer)

In those thermoforming companies that additionally develop processes for the manufacture of PET sheets, the criteria established in section 7 A.1. of the Procedure for the RETRAY Certification of Laminators and Laminators + Thermoformers shall apply.

In any case, the auditing process of the requirements related to the traceability of the production system may be based on traceability exercises carried out, both on the sheet manufacturing process and on the manufacturing process of thermoformed products.

7.A.2. Waste management

The company must identify the destination or destinations, which may be complementary and not exclusive, for the management of its production scraps:

Destination 1. Recycling by a recycling company approved by the Foundation for the certification scheme,

Destination 2. Reuse by the company itself.

Destination 3. Withdrawn by an authorized waste manager when, exceptionally, neither of the two previous destinations are viable.

The requirements that the company must meet in each case are detailed below:

Destination 1. RECYCLING BY AN APPROVED RECYCLING COMPANY

- To avoid mixing with other types of waste, the company must have an area, space or container called " **RETRAY Point**" for the specific storage of scraps that must meet the following conditions:
    - Preferably, it has a press or compactor that is used to shape the residual polymer "bundles" that the company send to the approved recycler.
    - If it does not have a press or compactor, it must have at least a container that allows its storage in bulk or any other system that allows its palletization.
    - The company must identify the area or container where these scraps are stored, as well as the "packages" or bags that conform to them, with the following emblem:

RETRAY

Those companies that already have an **"ECOSENSE Point"** (according to previous versions of this procedure) may maintain their name with the following emblem until they proceed to update it:

This **" RETRAY Point" or "ECOSENSE Point"** is not compulsory if the company has a waste manager approved by the foundation.

- The company must keep a **copy of the authorization of a recycling company** approved by the Foundation for the certification scheme, **as a manager of plastic waste for, at least, the LER codes 150102, 150106, 191204 and 200139.**
- Additionally, the company must keep the following **supporting documents showing the removal of residual scraps** based on the three possible ways for their transport to the approved recycler:
    - Direct transfer to the facilities of the approved recycler.
    - Transfer to an intermediate manager.
    - Removed by a sheet supplier company in possession of a RETRAY Process certificate or a current ECOSENSE certificate that is responsible for delivering them to the facilities of a recycling company approved by the Foundation.

If the transporter transfers them directly to the facilities of the approved recycler:

i. Authorization of the transporter to carry out the transfers of residual polymers from the company's facilities to those of the approved recycler (only in those cases in which the company itself hires the transporter).
ii. Delivery notes or consignment notes certifying the completion of at least one withdrawal by the transporter.

iii. Proof of entry of the waste into the facilities of an approved recycling company (certificate issued by it, delivery note, invoice or consignment note stamped by the recipient).

If the transporter transfers them to a waste manager who later sends them to the facilities of an approved recycler:

i. Authorization of the transporter to carry out the transfers of residual polymers from the company's facilities to those of the approved manager (only in those cases in which the company itself hires the transporter).
ii. Delivery notes or consignment notes certifying the completion of at least one withdrawal by the transporter.
iii. The authorization of the intermediate waste manager.

iv. Proof of entry of the waste into the facilities of an approved recycling company (certificate issued by it, delivery note, invoice or consignment note stamped by the recipient). The delivery notes from the intermediate manager to the approved recycler must expressly include the address of the installation of origin of the waste from the sheet manufacturing company.

v. As mentioned in the first point, if the waste manager is approved by the foundation, the company is not obliged to have a " **RETRAY Point" or "ECOSENSE Point".**

If the residual polymers are delivered to a sheet supplier in possession of a RETRAY Process certificate or a current ECOSENSE certificate, or that it acts as an intermediary in the waste management between the packer and a recycling company approved by the Foundation:

i. Authorization from the carrier to carry out the transfers of residual polymers (only in those cases in which the company itself hires the carrier).
ii. Proof of entry of the waste into the facilities of a sheet supplier company in possession of a RETRAY Process certificate or a current ECOSENSE certificate (certificate issued by it, or delivery note, or invoice or consignment note stamped by the receiver).

In the event that the sheet supplier company is NOT authorized as a waste management company, it will then be necessary to have a copy

of the **proof of entry of the waste** into the facilities of a recycling company approved by the Foundation, as a manager of plastic waste for, at least, LER 150102, 150106, 191204 and 200139. The delivery notes from the intermediary company to the approved recycler must expressly include the address of the facility where the company's waste comes from.

Destination 2. REUSE BY THE TCOMPANY ITSELF

- The requirements of this section are mandatory for those companies that reuse, in whole or in part, **the residual scraps of plastic polymers generated in a year, in such a way that they become raw material for sheets for the manufacture of thermoformed PET products** (bases and/or lids).
- For this, the company, through its own production reports (or the records through which it documents the productive activities carried out), must demonstrate, in a traceable manner, the incorporation of the residual scraps of plastic polymers to their products. This practice must be demonstrated as sustained over time, for which **demonstrative records** of it must be kept for at least 6 months prior to the audit.
- All those **residual losses of plastic polymers that have not been reintroduced into the production process of the company as raw material**, must be managed through any of these alternatives:
    - **Destination 1**, **Recycling by an approved recycler** (all the requirements described in the aforementioned section being applicable).
    - The **sale** of residual scraps to other companies for use as a raw material (the residual scraps shipments must be justified by invoices or delivery notes), with a **maximum percentage of 20%** of the residual scraps of plastic polymers generated in one year.
    - The **removal** of scraps and/or thermoformed products **by** a sheet **supplier company** in possession of a RETRAY Process certificate or a current ECOSENSE certificate, whose destination is the **reuse** by the **supplier company itself.**
- In any case, the company must maintain a **statistical control that allows it to compute the quantities reused internally as raw material, those sent to customers and those withdrawn by a supplier of sheets** in possession of a current RETRAY Process certificate or ECOSENSE certificate**.**

- The companies that take advantage of the reuse of residual scraps **generate disposable plastic waste in specific quantities of these two types:**
    - Amorphous remains derived from the set-up of the extruders
    - Residual scraps contaminated with chemicals or substances that make their recovery by an approved recycler unfeasible.

  In both cases, an authorized manager must carry out the management of these types of waste. The company must keep its authorization.

Destination 3. WITHDRAWAL BY AN AUTHORIZED MANAGER

- The removal of residual scraps by an authorized waste manager, **whose destination is NOT to be recycled by an approved recycler**, shall be a **destination exceptionally accepted** when the quality of the waste makes recycling unfeasible.
- The residual scraps shall be considered as non-recyclable, and therefore their recycling is not feasible, when they **do not meet** the conditions applicable to the "Thermoformed bases" of the **GUIDELINES TO GUARANTEE THE RECYCLABILITY OF THERMOFORMED PET PACKAGING** in force that are published in the section **"PET THERMOFORM"** on the Foundation´s website.
- In this sense, **non-recyclable residual scraps must not exceed 50% of the total annual PET waste, both multilayer and monolayer, generated by the production center** subject to audit for certification. This requirement shall be subject to review in the renewal of the certification, being the cause of loss of the same in case of non-compliance.
- To verify this, the company must provide:

    1) A **statement** detailing the quantities of all multilayer and/or monolayer polymer waste:
        - Accepted by an approved recycler for recycling, in accordance with the provisions of this procedure.
        - Reused by the company itself, in accordance with the provisions of this procedure,
        - Removed by an authorized waste manager, whose final destination is not the facilities of a recycler approved by the Foundation.

    The **amounts** must **refer to the last closed calendar year**. The information on recyclable scraps must be contrasted with the data provided by approved recyclers.

2) The **delivery notes or consignment** notes certifying each item withdrawn.

*For **non-recyclable scraps** delivered to an authorized manager:*

- Copy of authorization from the transporter to carry out the transfers of residual polymers (only in those cases in which the company itself hires the transporter)
- The authorization of the authorized waste manager
- Proof of entry of the waste into the authorized manager's facilities.

7.B) Requirements concerning the calculation of the recycled content of the products manufactured during a period of analysis
(optional)

The Certification Body shall determine, through the examination of the different types of records set out below, the percentage of recycled plastic raw materials (PET) becoming part of the final products generated by the company throughout a determined analysis period. For the calculation of the aforementioned percentage, the information provided by the respective suppliers for each of the types of raw materials shall be taken into account.

The **analysis period** covering these calculations shall be the one corresponding to the **last closed calendar year**.

The mathematical formula to be used shall be the following:

$$X(\%) = \left[\frac{\left[\frac{X_1}{100} \times A_1\right] + \left[\frac{X_2}{100} \times A_2\right] + \left[\frac{X_3}{100} \times A_3\right] + \ldots + \left[\frac{X_n}{100} \times A_n\right]}{\sum A_{1 \to n}}\right] \times 100$$

Where:

X (%) = percentage of recycled content during the analysis period. The nature of the recycled plastic raw materials may come from both the tray-to-tray circuit and other types of recycled PET.

X_n = percentage of recycled content of each of the raw material formats (sheets) used to manufacture the final products. This percentage shall be given by the sheet supplier through the corresponding technical data sheet and have a certificate guaranteeing the recycled origin of the material, issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector. Any product which recycled content does not have an accredited certification shall be considered to contain 0% recycled content, that is, all material is virgin for calculation purposes.

A_n = amount of raw material (sheet) of a given format (expressed in kg or ton) used to manufacture the final products during the analysis period. Each format of raw material (sheet) will have a certain value of "X".

In the event that the company acquires or imports already thermoformed products, these will be treated as one more format (An), with the value of X being that provided by the supplier through its technical data sheet or certificate of recycled content and calculating the value of A according to the formula expressed below.

The Certification Body shall request the **certificate of recycled content of imported products** (if applicable) issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector, if applicable. If the recycled content is not certified by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector, the Certification Body shall consider that the raw material contains 0% recycled content, that is. the material is virgin for calculation purposes.

The calculation of the **amount of non-recycled plastic** contained in the products shall be the result of applying the formula $NR = \sum A_{1\to n} - \left[\frac{\sum A_{1\to n} \times X}{100}\right]$. The value of "NR" shall be provided by the Certification Body together with the value of "X" as the final result of the audit.

Calculation of factor A

The following formula shall be applied for the calculation of the values of A for each of the sheet formats (A_1, A_2, A_3, etc.):

$$A_n = A_C + A_{SI} - A_{SF}$$

Where:

$\mathbf{A_n}$ = amount of raw material (sheet) of a given format (format "n") used to manufacture the final products during the analysis period.

$\mathbf{A_C}$ = amount of raw material (sheet) of the format in question acquired during the analysis period.

$\mathbf{A_{SI}}$ = amount of raw material (sheet) of the format in question in stock at the beginning of the analysis period

$\mathbf{A_{SF}}$ = amount of raw material (sheet) of the format in question in stock at the end of the analysis period.

To quantify the factor A_C, the Certification Body shall take into account the information regarding quantities indicated in certificates issued by suppliers for this purpose and that includes a quantification of the amount of raw material (sheets) supplied during the analysis period. The responsible person in the supplier company must sign and stamp these and provide a list of delivery notes supplied that include, at least, the following information for each of the deliveries made:

- Delivery note number.
- delivery note issue date
- type of product supplied (identification of the type of sheet)
- quantity of material supplied (**expressed in kilograms or tons**).

In addition to being in non-editable format (PDF), the company must provide the certificates in an editable format (Excel). The latter will not have to be signed or sealed since it has the ultimate purpose of serving as a tool for the calculations by the Certification Body.

In the case of raw materials acquired from suppliers, the Certification Body shall request the contrasting documents, carry out the data cross-checks and the checks it deems appropriate in order to ensure the veracity of the information provided.

To quantify the factors A_{SI} and A_{SF}, the information shall be extracted from the company's production control software. If the company does not have this kind of software, the company must carry out two inventories in the analysis period: one dated January 1 and other dated December 31.

To carry out the indicated calculations, the Certification Body shall request the contrasting documents, carry out the data cross-checks and the checks it deems appropriate in order to ensure the veracity of the information provided.

7.C) Requirements related to the calculation of the products' percentage of recycled material

The requirements established in this section are intended to determine the percentage of recycled content (both exclusively from the tray-to-tray circuit and in global terms, as well as post-consumer and post-industrial origins) existing in a Thermoformed Sheet Format.

Currently there is no reliable technology for an analytical determination of the recycled content in a product. Consequently, the company must provide information on the nature of the raw materials used in the manufacture of a product (recycled raw materials or virgin raw materials), as well as their identification and traceability throughout the entire production process, so that the Certification Body calculates the percentage of recycled content of a Thermoformed Sheet Format.

For practical purposes, the recycled content traceability system shall basically consist of a control mechanism (digital or physical) that demonstrates:

a) The **quantity of** material from **sheet** producers in possession of a current RETRAY Process certificate or ECOSENSE certificate that act as suppliers and that identify the batches of product supplied (either through their delivery notes or invoices).

b) The amount of material from sheet manufacturers companies whose origin can be determined (post-consumer or post-industrial)

c) In relation to the Thermoformed Sheet Formats to be certified: the **amount of recycled material incorporated** in the supply batches of the sheet used as raw material is provided through the corresponding **certificates of recycled content** issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector that the sheet producers acting as suppliers must provide. These certificates must refer to the % of recycled content which origin is post-consumer material and the % of recycled content which origin is post-industrial material. If a certificate does not establish this differentiation, all recycled material contained in the raw material (sheet) shall be considered of post-industrial origin.

d) **Proportion of recycled material incorporated into the Thermoformed Sheet Formats** to be certified: the company must demonstrate through its production reports (or the records through which it documents the productive activities carried out), the percentage composition by weight of each Thermoformed Sheet Formats to be certified. For this, it is essential to have the information required in point b). During the audit, the absence of **certificates of the content of recycled material** incorporated corresponding to a specific raw material (certificates issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector) shall consider that the material is virgin for calculation purposes.

e) **The Certification Body shall evaluate the proportion of recycled content** of each of the Thermoformed sheet formats to be certified for this purpose, the company shall choose between these two options:

- Option 1: request that the Certification Entity itself calculate the percentage of recycled content, using the methodology set out below.

- Option 2: carry out the calculation using either its own methodology that must be verified by the Certification Entity, or the calculation methodology set out below. In both cases, the Certification Entity will verify the results obtained by the company.

Calculation methodology:

1) **Determination of the weight of the sheet used to manufacture the thermoformed product to be certified.** For this, the Certification Body shall use the information contained in the production records of the company.

2) **Determination of the weight of the recycled content of the sheet used to manufacture the thermoformed product**. Since the proportion of recycled material is considered a constant for the entire sheet used in the thermoforming of the product (base and/or lid), the Certification Body shall use the information in the corresponding **certificates of recycled material content** (issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector) provided by the sheet suppliers.

   The information in the corresponding data sheets (or certificate of recycled material content) must distinguish:

   - The weights of recycled raw materials from the tray-to-tray circuit (that is, with the thermoformed packaging origin) from recycled PET suppliers approved by the Foundation (*A1*).

- The weights of raw materials of a recycled nature from suppliers of recycled PET with origin DIFFERENT from thermoformed packaging (*A2*).

3) Application of the following **formula** to calculate the percentage of recycled content ("X") of the thermoformed product:

$$X(\%) = \frac{A}{P} \times 100$$

Where:

X(%): percentage of recycled content of the thermoformed product.
A: sum of the weight of raw materials of a recycled nature of the sheet used in the manufacture of the thermoformed product ($A = A1 + A2$)
P: weight of the sheet used in the manufacture of the thermoformed product.

NOTE: regarding "A" factor, it will only be considered raw materials from post-consumer in that proportion that suppliers can accredit based on what is indicated in their corresponding certificates in force under EN 15343 or RETRAY Product. These certificates shall be issued by a Certification Body accredited by a National Accreditation Body that is a signatory of the multilateral mutual recognition agreements. If the aforementioned certificates do not explicitly mention the % recycled content of post-consumer origin, all the material (in the proportion indicated by the certificate) shall be considered post-industrial.

f) **The Certification Body shall determine the proportion of recycled content of each of the thermoformed products** expressing the result as a percentage, without specifying the decimal places of the calculation. Since a **minimum recycled content percentage statement** is pursued, calculations determining a percentage recycled content expressed in decimal numbers shall be rounded down to the nearest whole number. For example, a result of 68.89% recycled content in a thermoformed product shall be rounded to 68%.

g) **The equipment used to determine weights** (reception scales for raw materials, weighing scales for ingredients in the production area, weighing scales for final products, etc.) shall meet the following requirements:

- The scales used must have:

- A calibration certificate issued by a laboratory accredited by a national body that is a signatory to the EA or ILAC mutual recognition agreements, or by a national laboratory that is a signatory to the ARM-CIPM (Mutual Recognition Agreement of the International Committee for Weights and Measures) or institutes designated by them, or failing that.
- An internal calibration complying at all times with the applicable sections of the ISO/IEC 17025 standard.

- The calibration of the scales must be carried out with a minimum annual frequency.

h) **The determination of the % recycled content with post-consumer and post-industrial origin will be optional until December 2025.** In all audits carried out from 1st January 2026, the Certification Body will verify or calculate the proportion of recycled content referred to each of those two origins of raw materials. When the certificates of the suppliers of recycled material do not discriminate between post-consumer and post-industrial origins, the criterion of considering all that material as post-industrial by default shall be applied.

7.D) Requirements related to recyclability guidelines (optional)

The requirements that must be met by each Thermoformed Sheet Format to be certified are included in the **GUIDELINES TO GUARANTEE THE RECYCLABILITY OF PET THERMOFORMED PACKAGING** hereinafter Guidelines, which are in-force on the date of sampling carried out in the audit to obtain the RETRAY certificate. These Guidelines are available on the section "PET THERMOFORM" on the Foundation's website .

A Test Laboratory shall carry out the verification of compliance with the Recyclability Guidelines based on what is established in section 3.2 of this procedure.

The Certification Body shall take samples of those Thermoformed products (base and/or lids) to be certified as a RETRAY Product, following the **methodology** established in **Annex 3** of this procedure. The Certification Body shall be responsible for sending the samples to the Test Laboratory.

In case the company has a previous **favorable Recyclability Report** of the same Thermoformed Sheet Format to certify that:

- includes the test results to verify the recyclability guidelines by a Test Laboratory
- and has been issued by the Foundation less than a year from the date the audit for the RETRAY certification was performed,

the Management Committee of the certification scheme shall evaluate it and, where appropriate, validate it for compliance with this requirement.

Declared Quality Level (DQL) and extrapolation of recyclability results

Once the Certification Body sends the samples of the Thermoformed products to the Test Laboratory and the Laboratory obtains the results of the tests, the Laboratory shall issue an assessment about whether or not the samples comply with the Guidelines.

Regarding the aforementioned recyclability tests and their relationship with obtaining the RETRAY Product certificate, the only acceptable quality level shall be 100% compliance with the guidelines for each Thermoformed Sheet Format. Therefore, this shall be the Declared Quality Level (DQL) by the company for any thermoformed product. Consequently, in the event that the results of the tests do not conclude compliance with the entirety of the Guidelines, it shall be understood that the DQL has been contradicted and, therefore, the Thermoformed Sheet Format shall not be considered recyclable in accordance with that established in this procedure. Any exception to the previous DQL must be included in the **Test Protocol to Verify Compliance with the Recyclability Guidelines for the RETRAY Certification** approved by the Foundation (separate document to this Procedure).

Annex 1. Determination of the number of Thermoformed sheet formats to certify (examples)

In order to differentiate between a Sheet or Thermoformed Sheet Format, it is necessary to consider the composition of the packaging and the amount of recycled content.

Certified	Format 1 Thermoformed Sheet

CASE 1	Thermoformed Sheet A	Thermoformed Sheet B	Thermoformed Sheet C
Shape	Circular	Rectangular	Square
Diameter length width	15 cm	15 x 7 cm	15 x 15 cm
Material reference	APET/PE 400	APET 400	APET 500
Thickness	400 microns	400 microns	500 microns
Weight	18 gr	18 gr	22 gr
Recycled content (%)	20	20	30

In CASE 1 it is necessary to certify three formats of sheet or thermoformed sheet. The first format is due to the fact that the Base A composition (material reference) is different from the Base B and C, even though it has the same percentage of recycled content as the Base B. The second and third format is because, although Bases B and C have the same composition (Material Reference), their percentage recycled content is different. This also makes it necessary to assess compliance with the recyclability guidelines for all three formats.

Certified	Format 1 Thermoformed Sheet	Format Thermoformed Sheet

CASE 2	Thermoformed Sheet B	Thermoformed Sheet C
Shape	Circular	Square
Diameter length width	15 cm	15 x 15 cm
Material reference	APET 400	APET 500
Thickness	400 microns	500 microns
Weight	15 gr	20 gr
Recycled content (%)	25	25

In CASE 2 it is necessary to certify only one format of sheet or thermoformed sheet. This is because both Bases A and C have the same "APET" composition (Material Reference), and the same percentage of recycled content. Thus, only one of the bases would need to be assessed for compliance with the recyclability guidelines.

Annex 2. Format sheet of the thermoformed product to be certified

THERMOFORMED PRODUCT	
Type of product/s	☐ Base ☐ Lid
Product designation/s according to data sheet[1] of the thermoformer	[Designation]
Sheet Supplier/s	[Name of supplier company]
Supplier/sdata sheet reference	[Reference]
% minimum recycled content declared by supplier[2]	[%]
Material reference [3]	[]

(1) A data sheet and self-declaration of the sheet supplier must be provided with the composition and additives that the thermoformed product incorporates.
(2) A supplier's declaration must be provided, in the event that such information does not appear in the sheet's data sheet.
(3) During the audit, a record certifying the determination of the weight of the product/s must be provided.

Annex 3. Methodology for taking samples, identification, handling and custody of the products to be certified

1. REFERENCE STANDARDS

- ISO 2859-10:2006: Introduction to the ISO 2859 Standards series on sampling for inspection by attributes.
- ISO 2859-4:2002: Sampling procedures for inspection by attributes. Part 4: procedures for the evaluation of the declared quality levels.

2. OBJECTIVE OF SAMPLING

The objective of the sampling is the random and representative taking of a certain number of portions of each of the Thermoformed Sheet Formats to be certified, in such a way that the result of the recyclability tests carried out with these items shall be considered for extrapolation to the thermoformed products (base and/ or lid) of this type placed on the market by the company.

3. SAMPLING METHODOLOGY

The sampling methodology set out below does not guarantee the absence of a certain level of uncertainty (no sampling evaluation procedure does), but it does limit it. In this sense, and based on the reference standards, **the number of samples that must be taken for each Thermoformed Sheet Format shall be 13**.

The selection of the samples shall be made on the basis of a simple random sampling and on products that are, at the time of the audit, either being produced or already stored in the facilities of the company. In addition, it is recommended that the sample be composed of elements belonging to the largest possible number of product batches.

In order to carry out a correct identification, handling and custody, the samples of each Thermoformed Sheet Format must be stored in the same box that must be identified, so that when it arrives at the Laboratory, the Thermoformed Sheet format shall be traced perfectly. To do this, the Certification Body must:

1. Put the 13 samples in a cardboard box with a suitable structure and size so that the samples do not result broken or deformed during transport.
2. Enter in this same box a copy of the documents provided by the company as indicated in section 3.2. of this procedure, specifically: the product technical sheet and a declaration from the suppliers with the composition and additives that each sheet incorporates.
3. Close the box with packing tape and identify the shipping address of the Test Laboratory, that must be notified of the shipment of the samples previously.

HISTORY OF CHANGES IN THE PROCEDURE

Version	Section	Description of the change
June 2022	3.1.	Unified audit
June 2022	3.1.	Content of the Audit report
June 2022	6.1.	Withdrawal of the RETRAY Process certificate
June 2022	6.1.	Elimination of the annual verification
June 2022	7.B.	Certificate of recycled content in imported products issued by an accredited certification body or, failing this, an entity participating in a recognized certification scheme within the sector
June 2022	7.C.f)	Scales must have calibration certificate issued by issued by a laboratory accredited by a National Accreditation Body that is a signatory of the multilateral mutual recognition agreements of EA or ILAC
September 2022	-	ECOSENSE FOUNDATION new name
September 2022	1	Accreditation of Certification Entities
September 2022	-	International standard references (ISO)
September 2022	3.1	Unified audit
September 2022	7.A.1.g)	Regulation of recycled plastic materials to be in contact with food
September 2022	7.B	Accreditation certificate of recycled content
September 2022	7.C	Scale requirement
September 2022	-	Delete reference to authorized laboratory
September 2022	Annex 4	Sampling methodology
November 2022	-	Use of the terms “must” and “shall” along the document
November 2022	7.A.2	Destination 3: removal of “This requirement will be subject to review in the annual verification and biennial renewal”
November 2022	7D	Become optional
December 2022	-	Review of the terms will /shall
February 2023	7.A.1	Correction of error in the numbering of requirements to be verified in a multi-site audit

February 2023	3	Correction of error in the numbering of the annex to **GUIDELINES TO GUARANTEE THE RECYCLABILITY OF THERMOFORMED PET PACKAGING**
December 2023	INTRODUCTION	The text is restructured to eliminate the transition section from ECOSENSE to RETRAY given that by December 2023 all companies that had ECOSENSE certification will have renewed RETRAY. The text of the section on the definition of "Thermoformed Sheet Format" is also updated to make it clearer. The reference to "Sheet Format" is removed from the title of this last section as it is a typo.
December 2023	3.1)	It is included that the audit report must incorporate the percentage of recycled content of post-consumer origin and until when (date) this requirement will be optional.
December 2023	6. AUDIT FREQUENCY	The text is updated to be consistent with what is included in the updated section 7 of the General Regulation.
December 2023	7. REQUIREMENTS	In response to market demand, the possibility of auditing requirement 7D, for evaluating recyclability, is included individually without the need to have obtained the RETRAY Process (requirement 7A) or RETRAY Product (requirement 7C) certification.
December 2023	7.A.1) Point a) y g)	The possibility of carrying out the traceability exercise both "upstream" and "downstream" is included, at the discretion of the Certification Body and depending on the versatility of the traceability control system of the audited company, in order to verify that an approved recycler is involved in the manufacturing of the products as a raw material supplier.
December 2023	7.A.1) Point f)	It is included that, optionally, the technical sheet may detail the specification of the percentage of recycled content coming from the tray-to-tray circuit.
December 2023	7.A.2) Destination 1	The possibility of not having a "RETRAY Point or ECOSENSE Point" is included if the waste is removed by a manager approved by the Foundation. The name of this point must be "RETRAY Point" and can only be "ECOSENSE Point" for those companies that has it already identified in this way according to the previous version of the procedure.

December 2023	7.A.2) Destination 3 y 7.D	The reference to Annex 1 of the Guidelines is changed to the reference to the current ones published on the Foundation's website.
December 2023	7.C	The necessary changes are made throughout the section to include the calculation of the percentage of recycled content of post-consumer origin and the calculation of the percentage of total recycled content (post-consumer + post-industrial). Point h) is added establishing this requirement as optional until December 2025.
December 2023	7.C, point e)	Two options are provided to the company for the Certification Body to verify the percentage of recycled content.
December 2023	Annexes	The text of Annex 1 is updated to make it clearer and Annex 2 with the Guidelines is removed.

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