

RecyClass Unwrapped

Boosting the transparent uptake of recycled plastic

Moderated by Alexander Reitz, **PreZero**

6th July 2022

RecyClass

LEGISLATIVE FRAMEWORK

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RecyClass | THE FOCUS ON PLASTICS

Circular Economy Action Plan, 2015

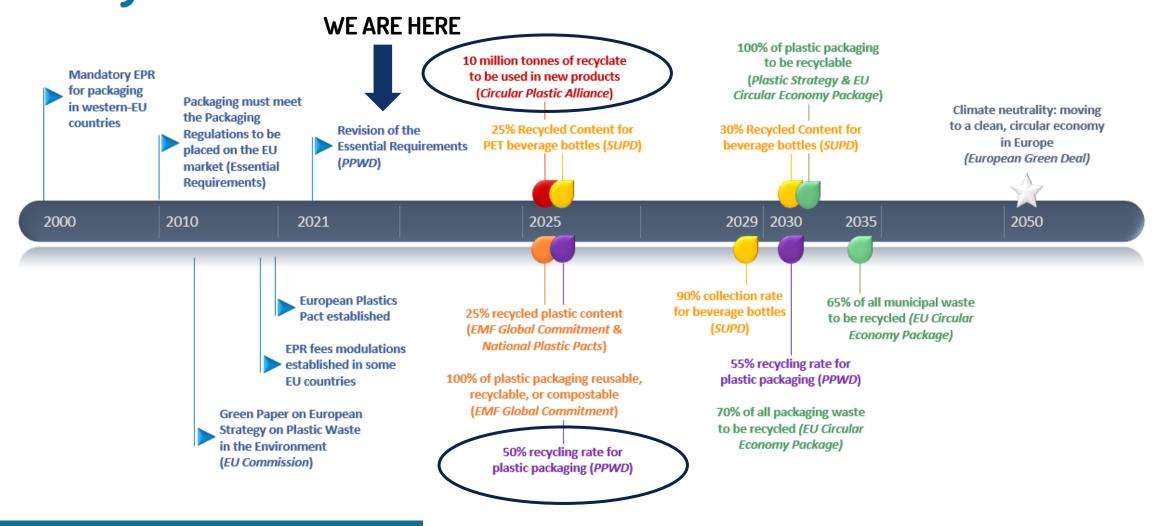
Plastics Strategy, 2018

Green Deal, 2019

New Circular Economy Action Plan, 2020

RECYCLING, MANDATORY RECYCLED CONTENT, TRACEABILITY
TANGIBLE TARGETS FOR PRODUCTS OTHER THAN PLASTIC PACKAGING

RecyClass | THE CIRCULARITY JOURNEY of PACKAGING



RecyClass | LEGISLATIVE DRIVES

PPWD (2025-2030):

Design for recycling, the methodology to assess "recyclability"

Essential requirements and mandatory recycled content

Recycled content on the product level, claims and traceability

SUPD (2025-2030):

Mandatory recycled content (PET first then all beverage bottles)

On average, Member State level (to be confirmed, could be aligned with PPWD)

SPI (Ecodesign):

Ecodesign requirements for products (not limited to packaging) to be placed on the market, recycled content listed. No timeline nor target, specific per product.

RecyClass | ECONOMIC DRIVES

- National taxes based on plastic packaging
- Plastics (packaging) taxes, set on the amount of non-recycled plastic packaging from the overall amount placed on the market each year.
- Upcoming measures **targeting plastic manufacturing** using recycled plastics (EU Taxonomy, CBAM), fiscal incentives (custom duties, financial reliefs, investment opportunities, etc.) when industry practices are deemed sustainable.
- **Eco-modulation** of the EPRs fees based on criteria such as presence of recycled plastics.

RecyClass | FUTURE LEGISLATIVE TRENDS

- **EEE, TEXTILES, BUILDING AND CONSTRUCTION, AUTOMOTIVE** are only few of the next industry sectors the EU legislation will create links with the circular economy.
- Recyclability requirements and recycled content targets for plastics will be introduced in the next decade in those sectors generating the most waste.
- Design for recycling becomes in this context a pillar for innovative products being placed on the market (SPI).
- Certification for recycled content in packaging represents the first step from which to implement reliability of claims in other end-applications for recyclates.

RecyClass | MARKET DEVELOPMENTS



Public interest in recycled content - Reassure consumers, provide trust to end-users offering certified claims.



Support corporate sustainability claims about recycled content targets.



Show transparency - information about the waste origin and source.



Circular Plastics Alliance – record and certify your use of recycled plastics towards the **10 million tonnes target**.

RecyClass | THE MISSING PIECE OF THE PUZZLE: Certification

- ✓ EU Policies and national policies shall be aligned in order to ensure that a Circular Economy for plastics is harmoniously developed across the Member States.
- ✓ Without standardization and certification of the waste management of plastics, fragmentation of policies and measures will follow.

RecyClass understood the role certification will play in the next years, and the support it can provide across the value-chain of plastics to introduce a transparent and reliable system.

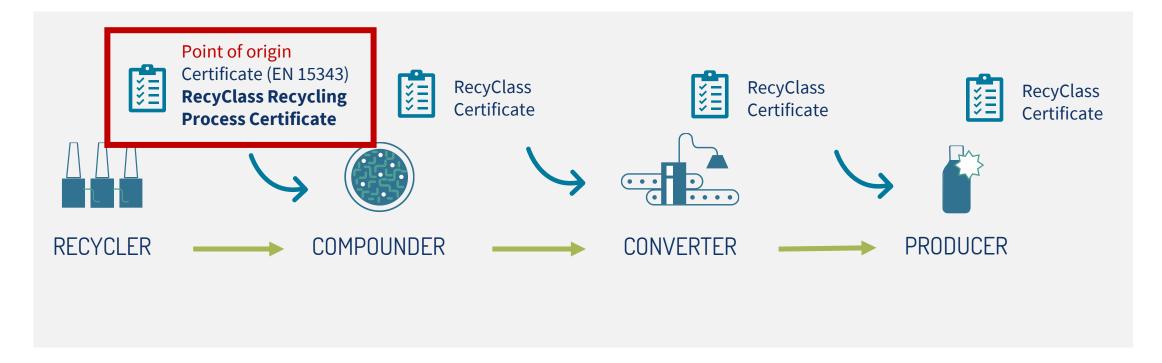
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RECYCLED PLASTICS CERTIFICATIONS

Mireia Boada, <u>mireia.boada@plasticsrecyclers.eu</u> Project Manager, Plastics Recyclers Europe

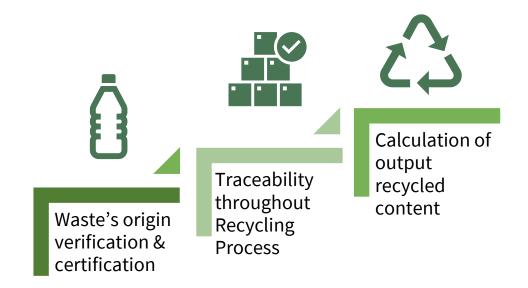
RecyClass | FOCUS AND SCOPE

- Plastics in <u>products</u> via an independent thirdparty audit. Certification is granted to a process/es linked to a product or group of products.
- Audit Scheme verifies the traceability of recycled material in different process steps throughout the whole chain of custody of the recycled material.



Recyclass New scheme for recyclers: RECYCLING PROCESS CERTIFICATION

- Recognition of plastic *Recycling Processes* operating according to EN 15343 standard.
- Recyclers' contribution to a trusted and transparent waste management of plastics focusing on **traceability**, transparency about the origin of the waste (covering both pre-consumer and post-consumer origin) and environmental performance.
 - ☐ Increased trust in the plastics value chain actors for a continuous increase of the use of recycled plastics.



RecyClass NEW SCHEME FOR RECYCLERS: RECYCLING PROCESS CERTIFICATION



SELF-DECLARATION OF ORIGIN OF WASTE INPUT

Downstream users declaring origin of material must not be permitted. Origin of the waste must be verified in case of Certification. Actual recycling must be verified for input plastic waste.



CALCULATION OF RECYCLED CONTENT

Recycled content based on input plastic waste calculation must refer to real percentages with physical traceability. Deduction of share of recycled plastics due to additives use, etc. must be considered.

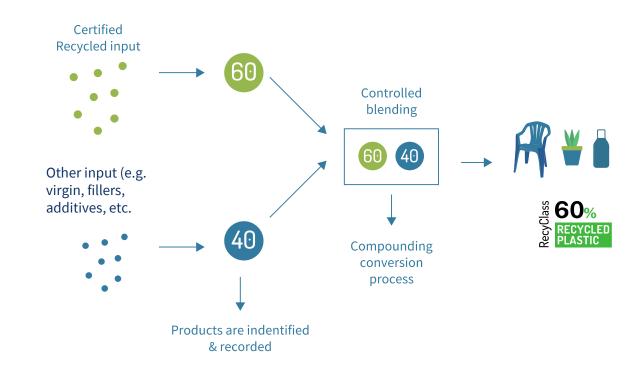


ENVIRONMENTAL IMPACT OF RECYCLING PROCESS

Environmental impact of recycling process must be considered in the whole system, also in case of internal processing and recycled plastic in other processes.

RecyClass | CONTROLLED BLENDING CHAIN OF

- Certification follows a **controlled blending approch** as a chain of custody model as described in ISO/IEC 22095:2020.
- The certification relates to recycled plastics when mixed with other materials or substances resulting in a **known** proportion of recycled content of plastics in output products.
- Focus on the **physical presence** of recycled plastics in the output.



RecyClass | CHALLENGES AND RISKS

Market differentiation from other audit schemes in the market:



CONTROLLED BLENDING MODEL: NO FREE ALLOCATION OF RECYCLED CONTENT

Recycled content calculation must refer to real percentages, not credit systems between products, production lines, plants, etc.



AVOIDS SELF-DECLARATION OF ORIGIN OF WASTE

Downstream users declaring origin of material must not be permitted. Origin of the waste must be verified in case of Certification.

RecyClass | AUDIT FOCUS





SECTION 2 - SUPPLIER EVALUATION



SECTION 3 - INPUT REQUIREMENTS



SECTION 4 - STOCK
MANAGEMENT



SECTION 5 - PRODUCTION PROCESS



SECTION 8 - SUBCONTRACTING







SECTION 6 - OUTPUT COMPOSITION

SECTION 7 - OUTPUT REQUIREMENTS

RecyClass | 2022 DEVELOPMENTS

CONFORMITY ASSESSMENT SCHEME APPROVED BY THE EUROPEAN CO-OPERATION FOR ACCREDITATION

- RecyClass CAS positively evaluated by EA according to ISO 17065.
- Recognised certification bodies to operate under accreditation within transition period of 2 years.

ALIGNMENT WITH **CPA AUDIT FRAMEWORK**

- Version 2.1 of the Audit Scheme has been adapted to be compliant with the CPA Audit Framework requirements.
- Addition of an Annex to report the data for each data point.
- To be used as a verification of use of recycled plastics in a site/process.

RecyClass Recycled Plastics Traceability Certification ready for accreditation



RecyClass Conformity Assessment Scheme positively evaluated by the European cooperation for Accreditation

With the positive evaluation by the European co-operation: Recycled Plastics Traceability Certification becomes the go want to comply with the standard EN 15343:2007 and to st The scheme verifies and certifies the origin, as well as the beyond packaging, virtually any plastic products in line wit developments.

"It is a clear signal to all the actors of the value chain who a credible scheme to certify the circularity of their plastic pro-Chairman of RecyClass, "This positive evaluation will bring and give confidence to both downstream and end-users. We tool will constitute major support for the companies willing on the use of recycled plastics" he added.

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8. ANNEX I: CIRCULAR PLASTICS ALLIANCE

The following Annex verifies the tonnages to be reported to a CPA compliant Data Collector to count towards the monitoring of recycling and uptake of recyclates in the EU.

This Annex applies only to converters following the CPA definition

The following data points were evaluated and verified for the period XX The following data is compliant with Traceability Level)

8.1 CONVERTER'S TOTAL INPUT

Specify the Converter's Total Input value and the period assessed below to be declared

Assessed period	Polymer type	(EU+UK (specify country) or non-EU)*	Type of material (Pre- consumer/ Post- consumer)**	Source of material (sector)**	Tonnage (t)
TOTAL					

Detail how the calculation was done to obtain the value and verify it is plausible

Check if any Converter's Input was supplied by a trader. If this is the case, keep in mind that traders and comp are subject to the same information obligation as recyclers (according to either Traceability level 1 or 2).

If the plant has received any material which has been refused that is recorded. That material cannot be included in the

8.2 CONVERTER'S DUTPUT

Specify the Converter's Total Output value and the period assessed below to be declare

RecyClass | Recognized Certification Bodies

Certificates are issued by recognised Certification Bodies only















































RecyClass | CERTIFICATION PROCEDURE



RecyClass | RESULTS & BENEFITS



RECYCLED PLASTICS CERTIFICATION

- Process certification.
- % of recycled plastics in products.
- Reliability of traceability and origin of recycled plastics endorsed by RecyClass.
- Use of the **RecyClass** mark.
- Exposure in the RecyClass website as a certified company.

Figure 3. Recyclass Recycled Plastics Traceaiblity logo - Example 100% recycled plastics









LOGOS WITH ADDITIONAL INFORMATION

RecyClass Recycled Plastics logo - Example use of 35% of pre-consumer recycled plastics









*35% pre-consumer origin

*35% pre-consumer origin

RecyClass PLASTICS FUTURE IS CIRCULAR



Recyclass certification: perspective from food packaging manufacturer

Dr. Samuel Pardo Senior Innovation Manager

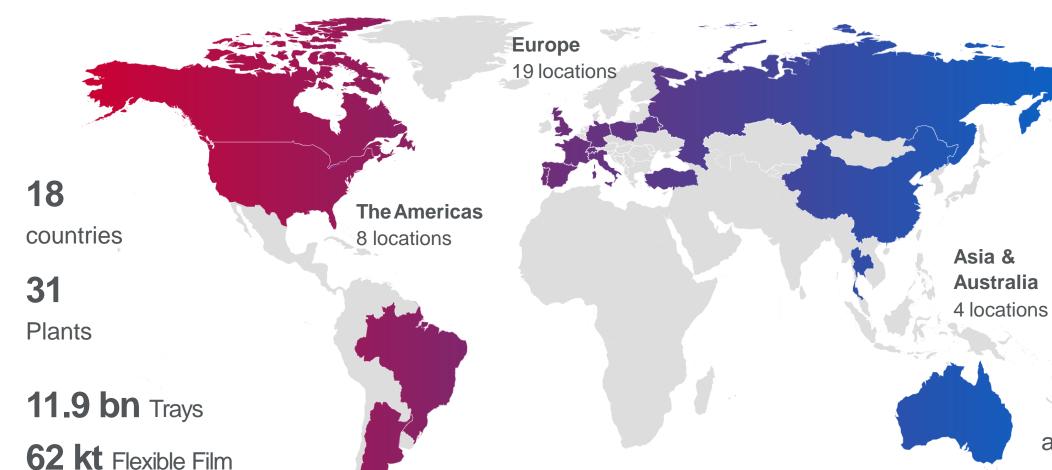
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Global footprint

595 kt Rigid Film





Australia

5,900

employees

~€2 bn

annual revenue

1,270

trademarks and patents





Our three objectives



Close the Loop

- Use more recycled material
- Make all our packaging recyclable
- Close the packaging loop



Work Smarter

- Zero waste to landfill
- No incineration without energy recovery
- Increase energy efficiency by 17%
- Scope 1&2 50% emissions reduction
- Scope 3 20% emissions reduction

Act Responsibly

- Become more diverse
- Engage employees
- Make a difference in our communities

Close the Loop

kp

Our company goals

Target I

Use more recycled material

Target II

Make our packaging designed for recyclability

Target III

Close the packaging loop

Close the loop

External drivers



European Green Deal and Circular Economy Action Plan 2.0

increase the recycling of plastics, boost recycled content and reduce the use of virgin materials

SUP Directive & ME regulations

mandatory minimum recycled content, i.e. France, Spain, Italy, Germany, etc.

Taxes on virgin and bonus on recycled content use

Require external body certification by tax authorities, i.e. Spain, Italy, UK, France





Food contact origin traceability

actual and upcoming food contact legislation for recycled plastics

Recycled content targets

accurately and consistently measured across Member States

Commercial claims

transparency and consistency across the whole value chain to guarantee credibility

What we need: value chain collaboration and transparency



Ecomodulation/Taxes offering **incentives** for products incorporating certified recycled content

Packers & Retailers have to request for closing the loop by using RC and request certification

Converters have to set **targets** around RC and verify their consumption

Recyclers have to become certified and use certified feedstock

Final consumer has to be educated to understand the value of recycled content and recyclability

Sorting must provide high efficiency and trustable data. **Watermarks** or other **identification** alternatives must be implemented

Separate collection or post-selection: Food/non-food, Mono/multi, Colors

Bales specifications to facilitate standardization / transparency Chain of custody

Major challenge: consistent quality so we can implement targets and recipes by product to guarantee minimum recycled content at every time

What Recyclass provides



EN 15343 the claimed material as recycled content adheres to the definition of recycled content ISO 14021

Recycled material has been reprocessed from recovered (reclaimed) material by means of a manufacturing product into a component for incorporation into a product

Recovered (reclaimed) material is the one that have been otherwise been disposed of as a waste or used for energy recovery, but has instead been collected and recovered (reclaimed) as a material input in lieu of new primary material, for a recycling or a manufacturing process

Post-consumer material is generated by households or by commercial, industrial and institutional facilities in their role as endusers of the products which can no longer be used for its intended purpose. This includes returns of material from the distribution chain

Pre-consumer material is diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it

- Chain of custody approach to track material from source to product
- Guarantees that pre-consumer reclaim not claimed as recycled content and fulfilling the requirements for conformity assessment described in ISO 17065
- Being evaluated by the European Co-operation for Accreditation via the Spanish Accreditation Body ENAC

Alternatives: mass balance



Mass balance: INDIRECT

In – process – out

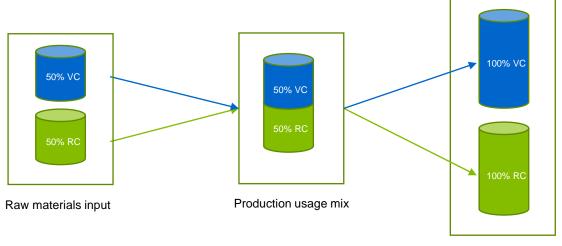
% recycled output = % recycled input – conversion losses

Based on material weight

Usually annual timeframe

Product level categorization

Can be batch/group level recorded and claims adjusted as desired



Claims

Alternatives: mass balance



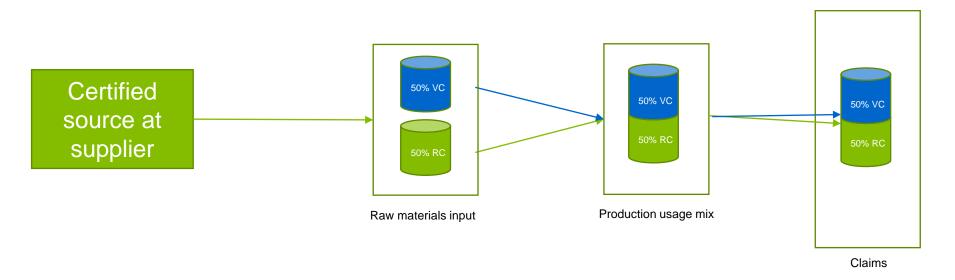
Chain of custody: DIRECT

Recycled material tracker and certified at all stages

Eucerplast certified recyclers guarantees bales origin upstream

Along supply chain

Recycled content guaranteed in final product



Certification process



Waste managerBales traceability

Recycler

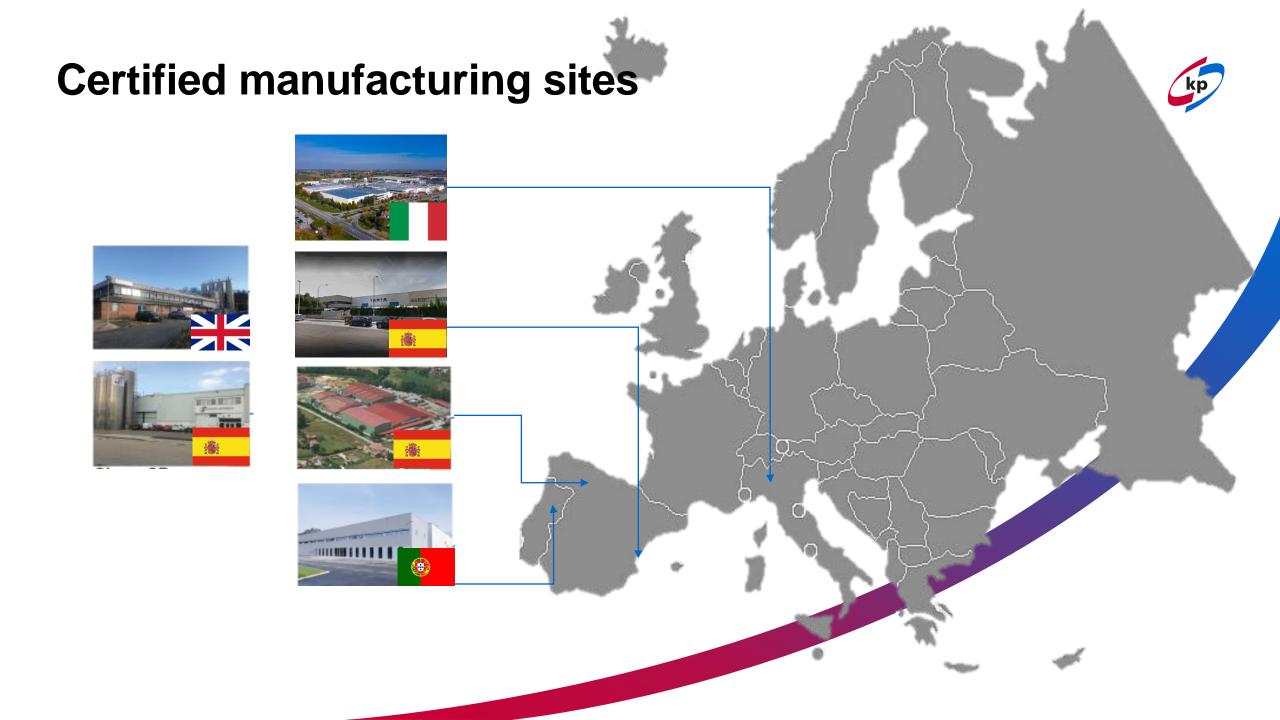
Eucerplast

Packaging convertor

- Suppliers Eucerplast documentation
- Segregation
- Define BOMs
- Verify material usage in each batch – show evidences
- Double check on plant global consumption

Packers/retailers

Receives certification by product group/family/category



Certified products





kp Elite®

- Recyclable and containing recycled content
- Improved clarity
- Best strength-weight ratio
- Sealing system to avoid leakages



kp Monoseal

- Lower sealing temperatures
- Reduced sealing time
- Monomaterial
- Lightweight



kp Eternal[™]

- Recyclable monomterial made from bottles and trays
- Suitable for wide range of shrink film
- Improved clarity
- Strenght

Certified content products





Infia fruit punnets

- 25% energy savings
- 25% faster pre-cooling stopping ripening
- Lower carbon footprint
- Avoid film perforation need



Infia side ventilation

- 25% energy savings
- 25% faster pre-cooling stopping ripening
- Lower carbon footprint
- Avoid film perforation need



Smartcycle

- Contains 35 to 100% postconsumer rPET
- Fully recyclable
- High performance PET film
- Certified and traceable recyclate

Thank you





Questions & Answers

Use the Q&A box in the top-right corner of your screen



Thank you for participating!

Save the date! 7 September