



RecyClass

FOR BEGINNERS

WHAT IS RECYCLASS?
Get to know the basics.

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PLASTIC FUTURE
IS CIRCULAR



SCIENCE BASED

TRANSPARENT



**BUILT ON EXPERT
KNOWLEDGE**

**LEADING
HARMONISATION**



**VALUE-CHAIN
COLLABORATION**



RecyClass

Advancing plastic packaging **recyclability** & harmonizing the approach for calculation and traceability of **recycled plastic**.

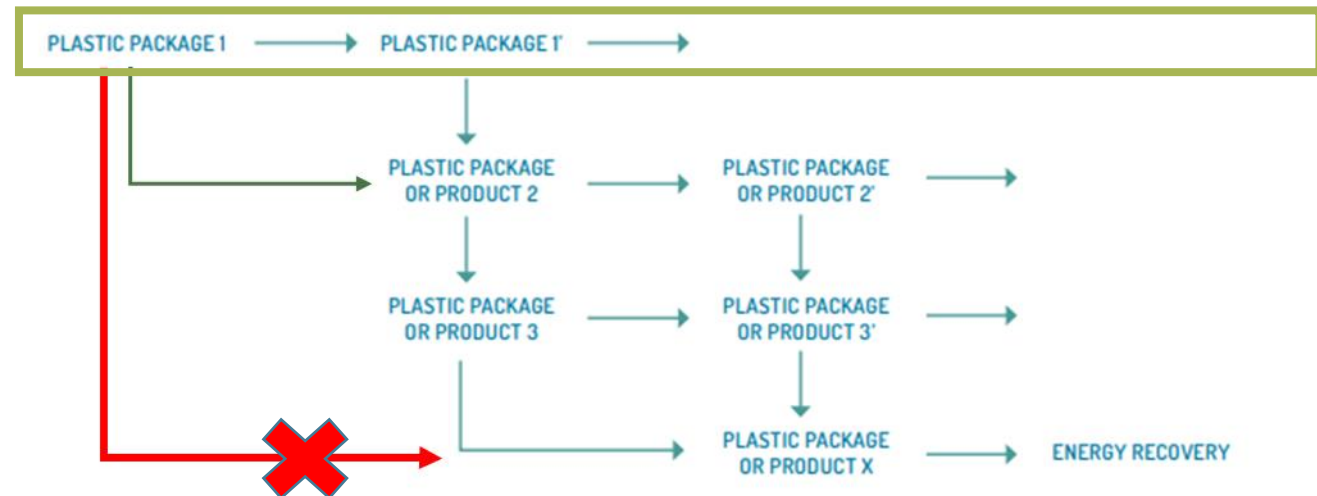
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WHAT WE STAND FOR

PLASTIC CIRCULARITY

A circular economy is one that is restorative and regenerative by design and **aims to keep products, components and materials at their highest utility and value at all times.**

1. Design with **closed loop** in mind whenever feasible.
2. Prefer **multiple step cascaded loop** to **open loop**.



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RECYCLABILITY

- ✓ Testing Protocols
- ✓ DfR Guidelines
- ✓ Recyclability Methodology
- ✓ Online-Tool
- ✓ Recyclability Certifications & associated claims/logos

RECYCLED CONTENT

- ✓ Recycled Plastics calculation (controlled blending approach)
- ✓ Recycled Plastics Traceability Certification & associated claims/logos

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A graphic consisting of three curved arrows forming a circular loop, pointing clockwise. The arrows are a lighter shade of teal than the background.

RECYCLABILITY:
Design matters!

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WHAT MAKES A PRODUCT RECYCLABLE ?



The plastic packaging must be **made with plastic that is collected** for recycling, has market value and/or is supported by a legislatively mandated program.



The plastic packaging must be **sorted & aggregated into defined streams** for recycling processes.



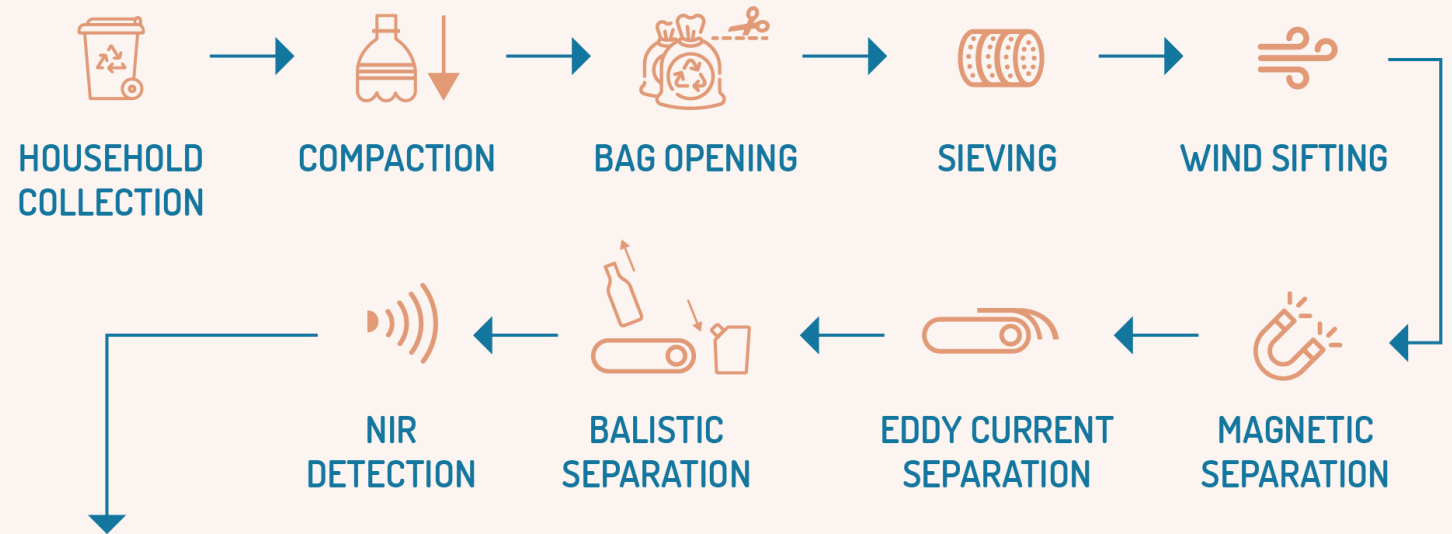
The plastic packaging **must be processed & reclaimed/recycled** with commercial recycling processes.



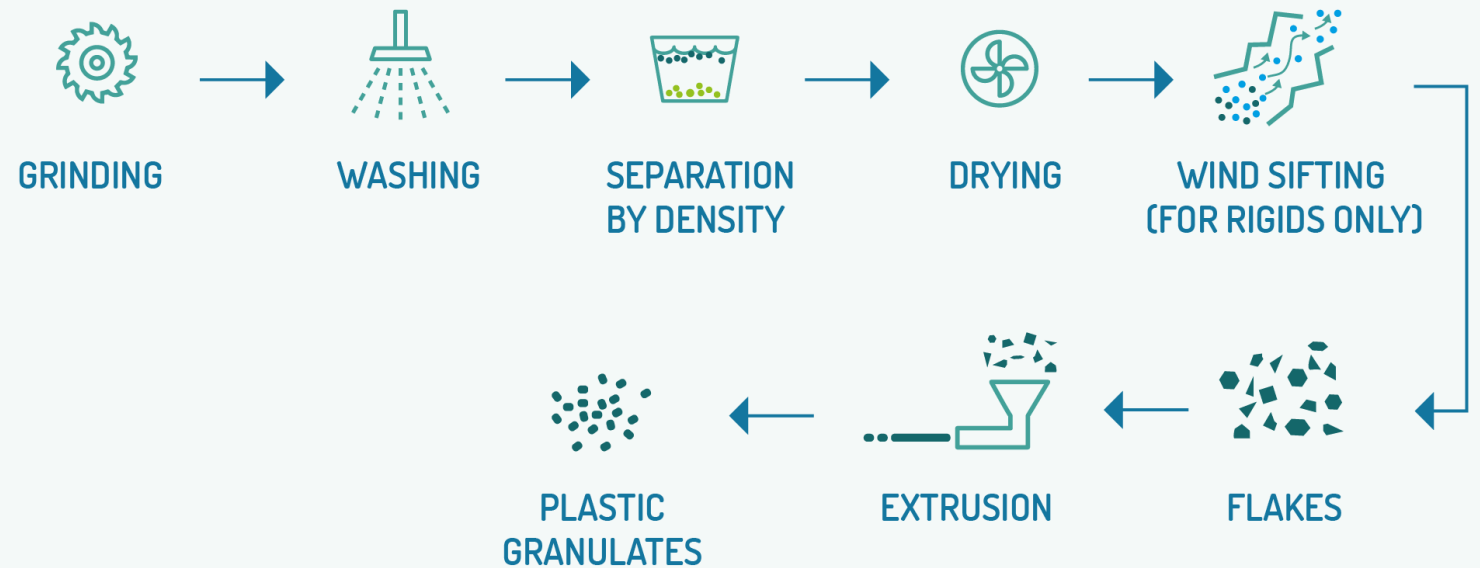
The recycled plastic becomes a raw material that **is used in the production of new plastic products.**

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SORTING PROCESS

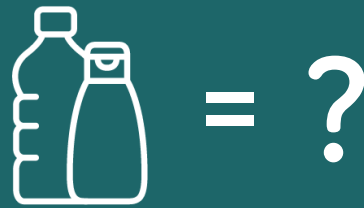


RECYCLING PROCESS



RecyClass | HOW DOES RECYCLASS WORK ?

TESTING PROTOCOLS



- **Lab testing** of innovative plastic packaging vs control material
- Comparison of properties
- **Technology/Product Approval**

DESIGN FOR RECYCLING GUIDELINES

RecyClass PE TRANSPARENT FLEXIBLE FILMS for Household and Commercial Packaging		
YES - FULL COMPATIBILITY	CONDITIONAL - LIMITED COMPATIBILITY	NO - LOW COMPATIBILITY
A-B	B-C	D-E-F
Material Polyethylene (PE) in its various forms (HDPE, LDPE, LLDPE, MDPE, etc.) is generally compatible with the recycling process.	Material Polypropylene (PP) is generally compatible with the recycling process, but its use is limited by the presence of other materials in the package.	Material Polystyrene (PS), Polyvinyl Chloride (PVC), and other non-PE materials are generally not compatible with the recycling process.
Design The design of the package should be simple and avoid complex shapes, colors, and textures that may hinder the recycling process.	Design The design of the package should be simple and avoid complex shapes, colors, and textures that may hinder the recycling process.	Design The design of the package should be simple and avoid complex shapes, colors, and textures that may hinder the recycling process.
Printing The use of pigments and dyes should be limited, and the printing process should be compatible with the recycling process.	Printing The use of pigments and dyes should be limited, and the printing process should be compatible with the recycling process.	Printing The use of pigments and dyes should be limited, and the printing process should be compatible with the recycling process.
Labels Labels should be made of a material compatible with the recycling process and should be easy to remove.	Labels Labels should be made of a material compatible with the recycling process and should be easy to remove.	Labels Labels should be made of a material compatible with the recycling process and should be easy to remove.
Other The package should be designed to be easy to handle and transport, and should be compatible with the recycling process.	Other The package should be designed to be easy to handle and transport, and should be compatible with the recycling process.	Other The package should be designed to be easy to handle and transport, and should be compatible with the recycling process.

- Design guide & recommendations for plastic packaging
- Design for Recycling (DfR) Guidelines transposed in the tool
- Assessing **overall recyclability** of a finished package

RECYCLABILITY ASSESSMENTS



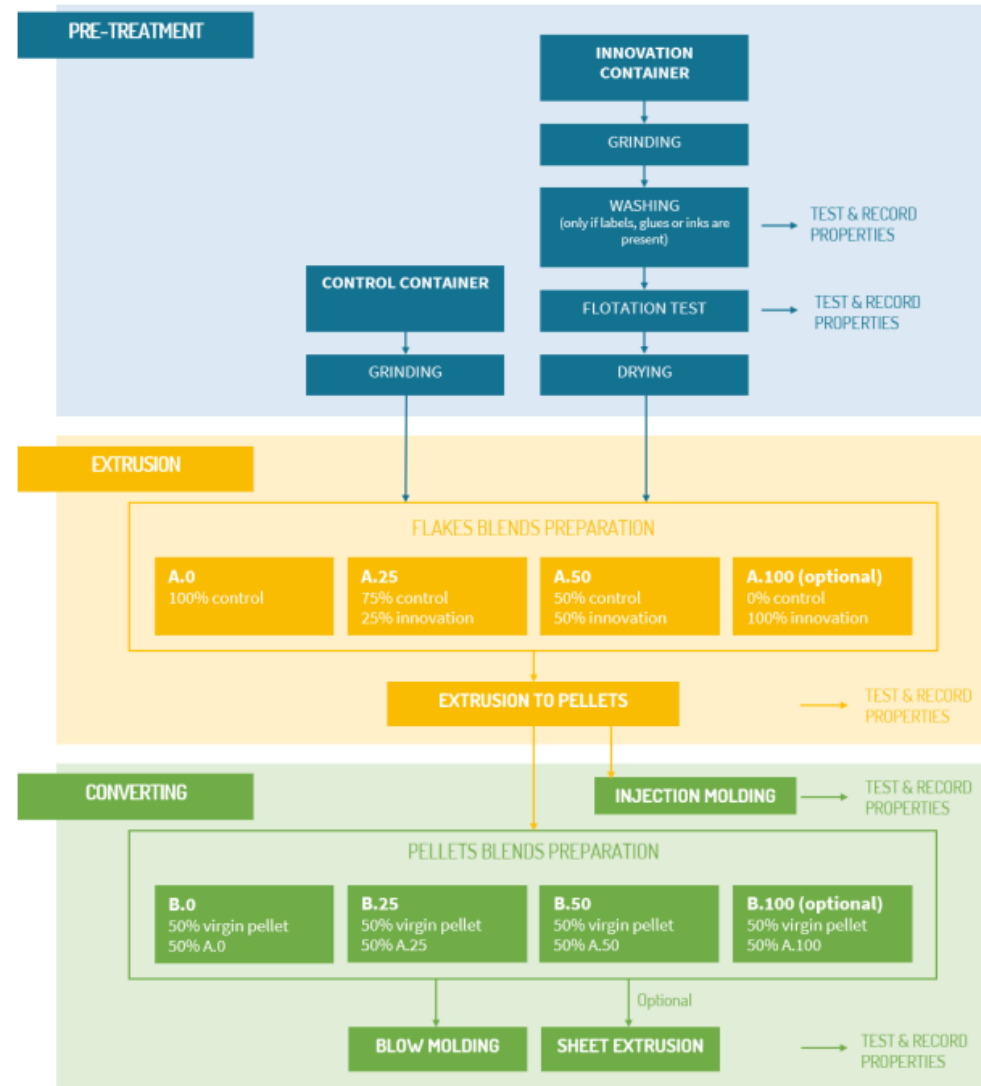
- Recyclability Self-Assessment with the RecyClass **Online Tool**
- RecyClass Team support
- **Recyclability Certification**

RecyClass | TESTING PROTOCOLS

Packaging solutions and/or innovations covered by the Protocols include among others: *resins, coating and barrier materials, mineral fillers/additives, closure systems, liners, seals and valves, labels and sleeves, adhesives, and inks.*



[See all the protocols online](#)



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DESIGN FOR RECYCLING GUIDELINES

FULL COMPATIBILITY

Green column gathers the preferred design features, that guarantee the best recyclability and quality of the recycle.

LIMITED COMPATIBILITY

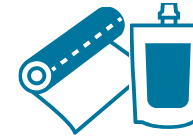
Yellow column lists the second choices for each packaging features, that have been tested, known, or supposed to slightly impact the recycling and/or the quality of the recycle.

LOW COMPATIBILITY

Red column classifies the detrimental and disqualifying features that should be avoided when designing a packaging, as strongly impacting the recycling and/or the quality of the recycle.



PET bottles (clear/light blue and colored)



PE films (colored and natural)



Clear PET trays



PP films (colored and natural)



HDPE containers & tubes (colored and transparent)



PS colored containers



PP containers & tubes (colored and transparent)



Crates and Pallets



EPS fish boxes



EPS white goods

WHAT IS THE RECYCLASS ONLINE TOOL?

- Ranks the recyclability of plastic packaging
- Evaluates packaging recyclability given the existing recycling streams
- Gives precise indications on critical points to be improved

RECYCLABILITY CLASSES



CLASS A

The packaging does not pose any recyclability issues and the recycled plastics can potentially feed a closed-loop scheme to be used in the same quality application.



CLASS B

The packaging has some minor recyclability issues that slightly affect the quality of the recycled plastic generated. However, majority of recycled plastics from this packaging can still potentially feed a closed loop.



CLASS C

The packaging presents some recyclability issues that affect the quality of the recycled plastics or lead to material losses during recycling. In the first case the recycled plastic could be used in a cascade open-loop scheme, whereas in the latter case the plastic could potentially feed a closed loop scheme.



CLASS D

The packaging has significant design issues that highly affect its recyclability or imply large material losses. In both cases the recycled plastic can only be fed into low-value applications (i.e. the packaging will be downcycled).



CLASS E

The packaging has major design issues that jeopardize its recyclability or imply severe material losses. The packaging is not considered recyclable and can only be used in incineration with energy recovery.



CLASS F

The package is not recyclable at all, either because of fundamental design issues or a lack of specific infrastructure for collection, sorting and recycling in EU28+2.

RecyClass | RECYCLABILITY CERTIFICATION: FOR FINAL PACKAGE

DESIGN FOR RECYCLING ASSESSMENT



- Qualitative Assessment: **ranking from A to F**
- Valid for the **EU market**
- Based on the **European plastic waste streams**
- Packaging design, sorting behaviour, end-markets included

RECYCLABILITY RATE ASSESSMENT



- Quantitative Assessment: **% of recyclable content, in addition to class ranking**
- **Country-specific**
- Based on the **local collection and availability of infrastructures**
- Packaging design, sorting behaviour, end-markets included



Detailed information online

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RECYCLED PLASTIC:
Traceability.
Transparency. Trust.

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WHY RECYCLED PLASTIC?



- **Good Design for Recycling** is a key element in a **higher uptake of recycled plastics** in new products.
- RecyClass provides a transparent and reliable **methodology to calculate and monitor the quantities of recycled plastics used in final products.**



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



Support corporate sustainability claims about recycled content targets.



Circular Plastics Alliance – record and certify your use of recycled plastics towards the 10 M t target.



Show transparency - information about the waste origin and source.



Demonstrate compliance with legislation (B2B) – increasing regulation; address use of claims by a third-party verification.

- National Implementation of the **Plastic tax** (EN 15343:2007)
- **Single Use Plastics Directive** - target of 25% recycled plastics in bottles by 2025 (PET) and 2030 (beverage bottles).
- **Eco-modulation** of the EPRs fees based on criteria such as presence of recycled plastics.

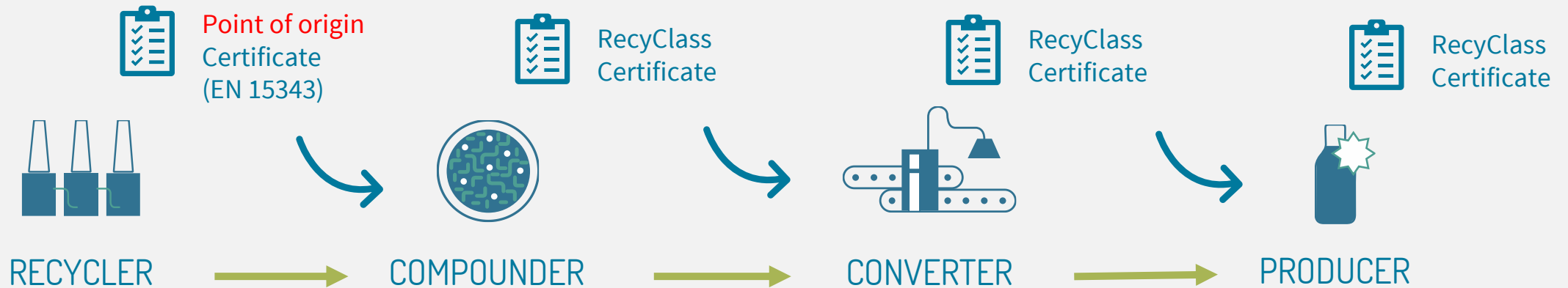
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2.

RECYCLASS RECYCLED
PLASTICS TRACEABILITY
CERTIFICATION

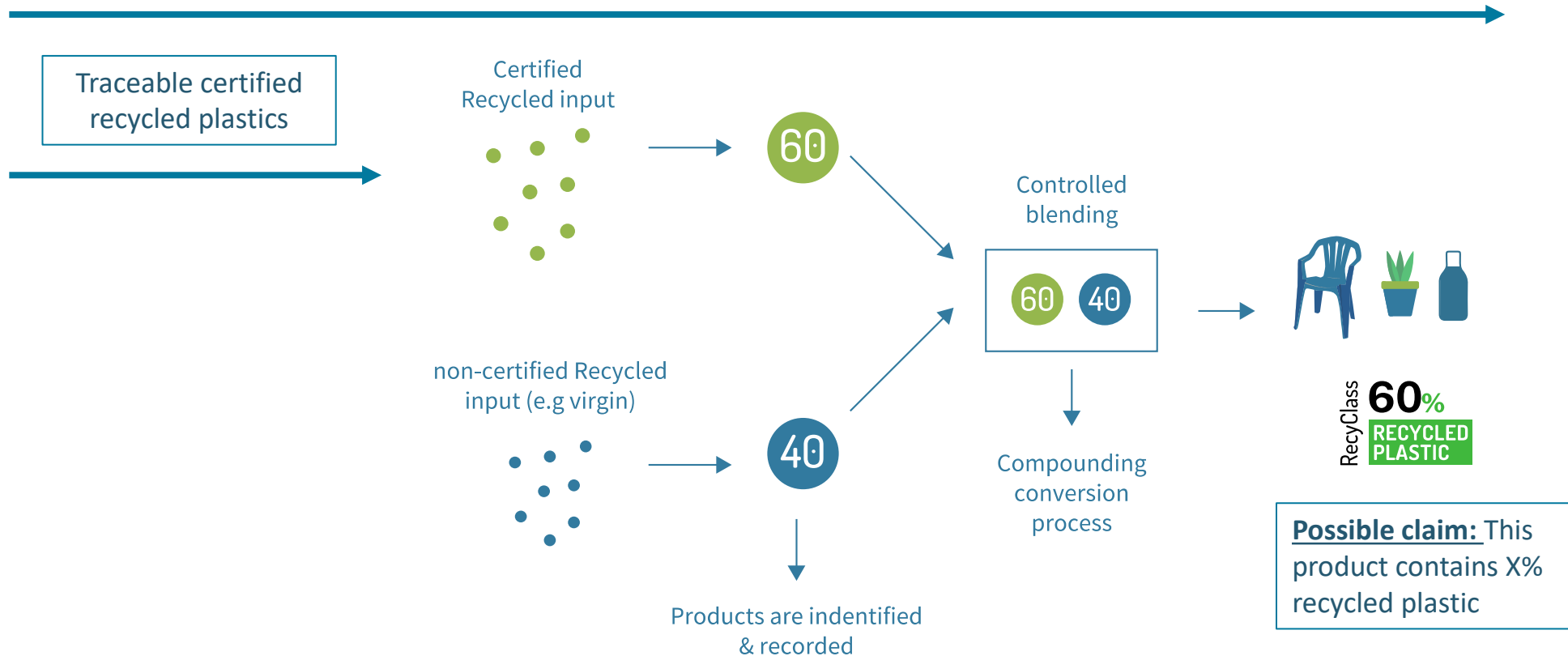
RecyClass | FOCUS AND SCOPE

➔ Certification **recognises the use of recycled plastics in products** via an independent third party audit.
Based on **ISO 22095:2020** and **EN 15343:2007**.



RecyClass | RECYCLED CONTENT CALCULATION

Physical traceability of recycled plastics can be verified in the documentation per batch.



RecyClass | RESULTS & BENEFITS

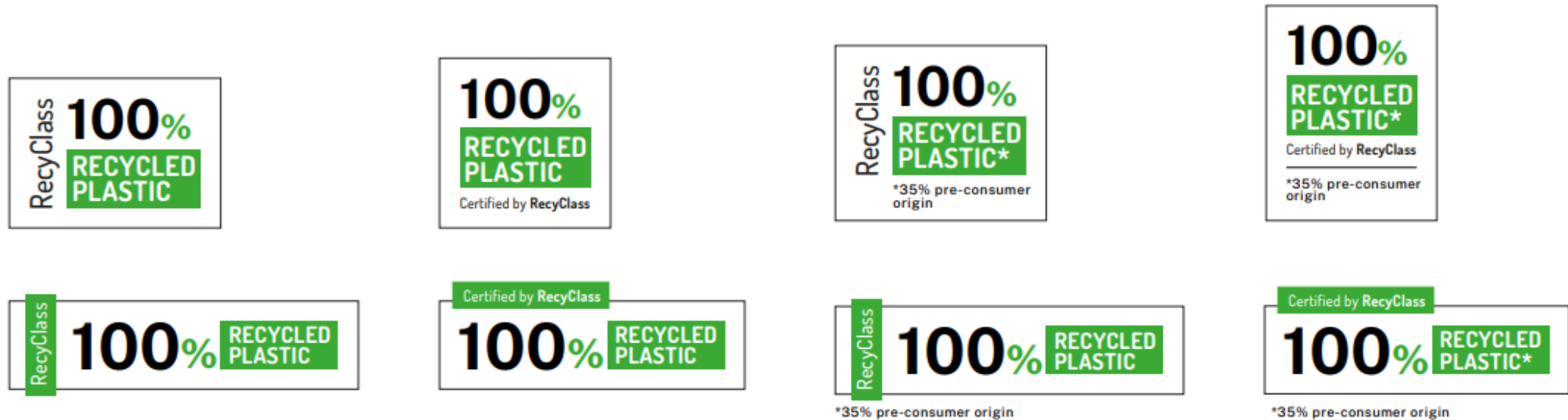
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RECYCLED PLASTICS CERTIFICATION

- Process certification → Covers groups of products under 1 certificate;
- Reliability of traceability and origin of recycled plastics endorsed by RecyClass;
- Claims of % of recycled plastics in products;
- Exposure in the RecyClass website as a certified company.

RecyClass | CERTIFICATION MARK

Figure 3. RecyClass Recycled Plastics Traceability logo - Example 100% recycled plastics



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CERTIFICATION FOR RELIABLE CLAIMS

- Robust, transparent and public methodology for the calculation of recyclability and recycled plastics offer the opportunity to make claims which are understandable and pertinent to the products.
- RecyClass created a guidance on how to use claims based on the different Schemes.
- Certification offers attestation of conformity providing a higher degree of assurance.





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Questions & Answers

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

GET IN TOUCH WITH US!

info@recyclclass.eu

www.recyclclass.eu



Media partner:





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Thank you for participating!

Save the date

11 May: RecyClass Methodology – Recyclability 101
& more sessions to come!

GET IN TOUCH WITH US!

info@recyclclass.eu
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Recycling Magazine free download:

