



RecyClass Unwrapped

Recyclability of personal care packaging

Moderated by
Gilles Swyngedauw | Innovation & Sustainability Vice
President | Albéa Group

*Moving towards circular
plastic packaging
for cosmetics*

*RecyClass Unwrapped Webinar – 23/06/2021
Fabrizio Di Gregorio – PRE Technical Director
fabrizio.digregorio@plasticsrecyclers.eu*



Multimaterial

Multi-component dispenser

Extensive use of embellishment

Product residues



Extensive use of black

Small in size

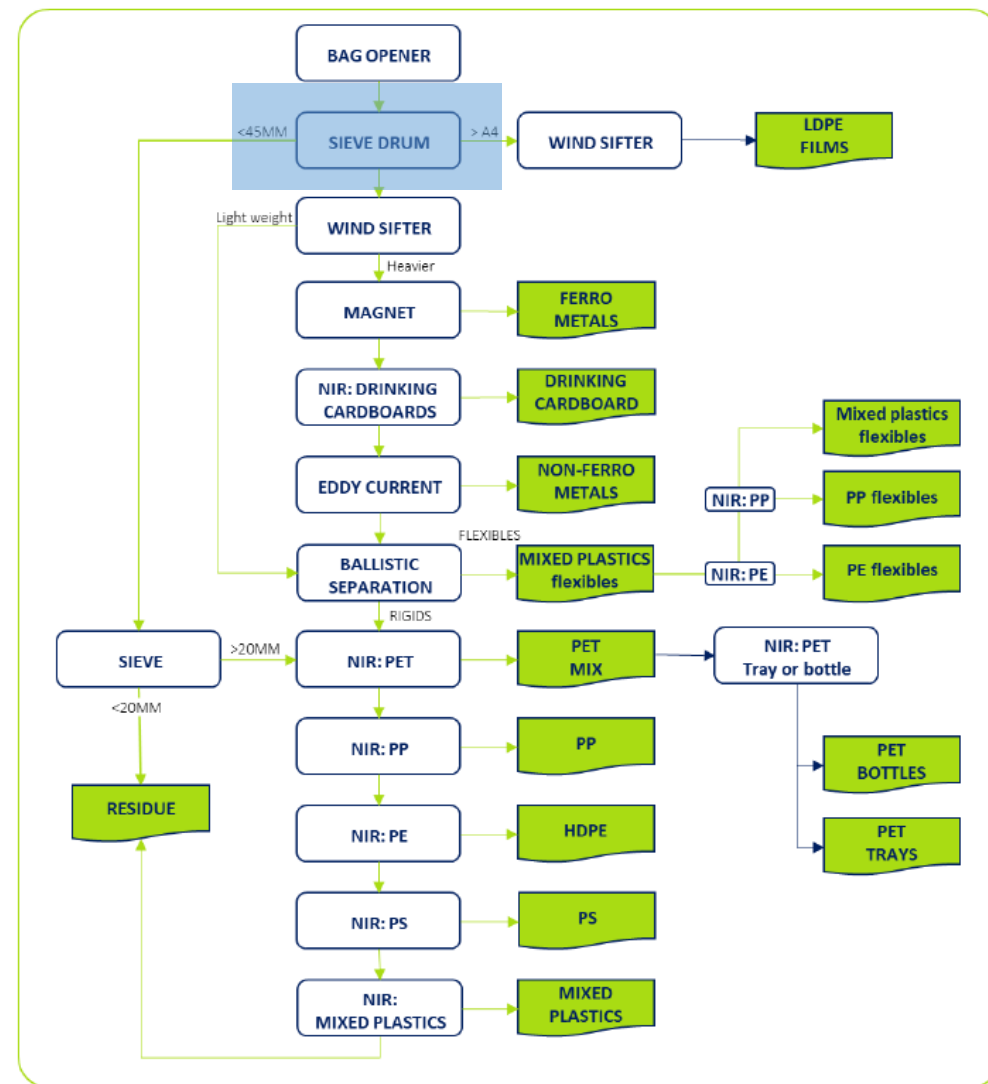
Round shape, very rigid and hard to compact

Sorting starts with a sieve drum

Small size packaging: technical limits



RecyClass Sorting Protocol



RecyClass

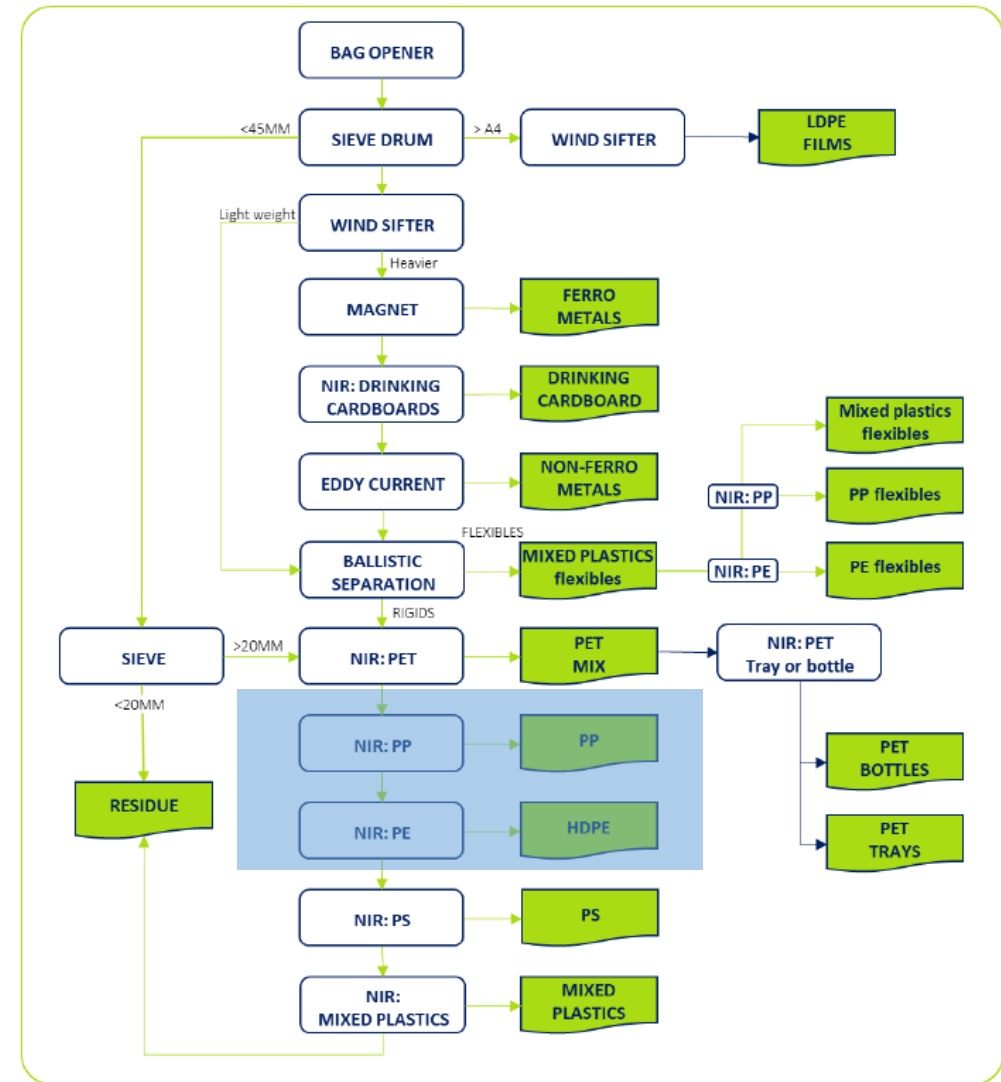
Sorting: NIR detection

Round shape, very rigid and hard to compact

Several tubes tested and sorted in the HDPE or PP streams with bottles



RecyClass Sorting Protocol



	YES - FULL COMPATIBILITY	CONDITIONAL - LIMITED COMPATIBILITY	NO - LOW COMPATIBILITY
CLASS RANKING*	A-B	B-C	D-E-F
DESCRIPTION (Test Protocol)	Materials that passed the testing protocols with no negative impact OR materials that have not been tested (yet), but are known to be acceptable in PE recycling	Materials that passed the testing protocols if certain conditions are met OR materials that have not been tested (yet), but pose a low risk of interfering with PE recycling	Materials that failed the testing protocols OR materials that have not been tested (yet), but pose a high risk of interfering with PE recycling
CONTAINER**	HDPE; Multilayer HDPE with other PE (LLDPE, LDPE, MDPE)		Multilayers HDPE with PLA; PVC; PS; PET; PETG
MATERIAL COMPOSITION	A when PE content is > 95%; B when PE content is > 90%	C when PE content is > 70%	D when PE content is > 50%; E when PE content is > 30%; F when PE content is < 30%
COLOURS	All colours	Black inner layer and dark colours (NIR-detectable)	Non NIR-detectable colours
SIZE		Items compacted < 5 cm	Items compacted < 2 cm
PRODUCT RESIDUES (Easy to Empty index)	A if the index is < 5%; B if the index is < 10%	C if the index is < 15%	D if the index is < 20%; E < if the index is 25%; F if the index is > 25%
BARRIER	EVOH < 6.0%wt + PE-g-MAH tie layers with MAH > 0,1%wt and EVOH:tie layers ratio ≤ 2; Enkase (fluorination)	EVOH > 6.0%wt + PE-g-MAH tie layers with MAH > 0,1%wt and EVOH:tie layers ratio ≤ 2; EVOH < 1% with any other tie layers	EVOH > 1% with any other tie layers; PA; PVDC; Aluminium
ADDITIVES	Additives that are unavoidable in processing (stabilizers, antioxidants, lubricants, nucleating agents, peroxides) and density remains < 0,97 g/cm ³	Mineral fillers (CaCO ₃ , talc) not increasing density more than 0,97 g/cm ³	Additives changing the material density > 1 g/cm ³ ; Flame-retardant additives, plasticizers; Bio-/oxo-/photodegradable additives
CLOSURE SYSTEM	HDPE; LDPE; LLDPE; MDPE	PP; PET; PETG; PLA; PS (all with a density > 1 g/cm ³); PP; TPE-PP;	Non-PO and/or foams with density < 1 g/cm ³ ; Aluminium; Metal; PVC
LINERS, SEALS AND VALVES	HDPE; LDPE; LLDPE; MDPE; TPE-PE	PET, PETG, PLA, PS (all with a density > 1 g/cm ³); Removable aluminium lidding; Removable silicon with a density > 1 g/cm ³	Non-PO and/or foams with density < 1 g/cm ³ ; Any other TPE; Aluminium; Metal; Foiled paper; PVC
LABELS	Labels in HDPE, LDPE, LLDPE, MDPE (all with density < 1 g/cm ³)* * with a print and/or barrier that does not hinder the recognition of the underlying PE-polymer	Labels in PP (with density < 1 g/cm ³)*; Labels in PET, PETG, PLA, PS (all with density > 1 g/cm ³)*; Labels in Paper without fibreless*; PO-foamed labels* * with a size, a print and/or barrier that does not hinder the recognition of the underlying PE-polymer: - Indication label size on containers > 500 ml: < 70% coverage - Indication label size on containers ≤ 500 ml: < 50% coverage	Labels that hinder the recognition of the PE; Labels in non PO-materials with density < 1 g/cm ³ ; Paper labels with fibreless during recycling process; Aluminium; Metallised labels; PVC
SLEEVES	Sleeves in HDPE, LDPE, LLDPE, MDPE (all with density < 1 g/cm ³)* * with a print and/or barrier that does not hinder the recognition of the underlying PE-polymer	Sleeves in PP (with density < 1 g/cm ³)*; Sleeves in PET, PETG, PLA, PS (all with density > 1 g/cm ³)* * with a size, a print and/or barrier that does not hinder the recognition of the underlying PE-polymer: - Indication sleeve size on containers > 500 ml: < 70% coverage - Indication sleeve size on containers ≤ 500 ml: < 50% coverage	Sleeves that hinder the recognition of the PE; Sleeves in non PO-materials with density < 1 g/cm ³ ; Aluminium; Metallised sleeves; Heavily inked sleeves; PVC
ADHESIVES FOR LABELS	Water soluble or water releasable adhesive (@ less than 40°C)	Pressure sensitive labels	Non water soluble or non water releasable adhesives
INKS	Non toxic following the EuPIA Guidelines		Inks that bleed; Toxic or hazardous inks
DIRECT PRINTING	Laser marked; Production or best-before date	Any other direct printing	
OTHER COMPONENTS	HDPE, LDPE, LLDPE, MDPE	PP; PET; PETG; PLA; PS all with density > 1 g/cm ³	Aluminium; PVC; Glass components; Foams with density < 1 g/cm ³
RECYCLED CONTENT	No change in the recyclability assessment. A separate 'Recycled Content Traceability Certification' based on a Chain of Custody approach is available with RecyClass		

* Class ranking resulting from the RecyClass assessment. B class is reported two times because of the 90-95% amount of PE in the packaging or because of slight incompatibilities in the design.

** Polymer resin can be either fossil- or bio-based.

Material composition

CLASS RANKING*	YES - FULL COMPATIBILITY
DESCRIPTION (Test Protocol)	A-B Materials that passed the testing protocols with no negative impact OR materials that have not been tested (yet), but are known to be acceptable in PE recycling
CONTAINER**	HDPE; Multilayer HDPE with other PE (LLDPE, LDPE, MDPE)
MATERIAL COMPOSITION	A when PE content is > 95%; B when PE content is > 90%
COLOURS	All colours
SIZE	
PRODUCT RESIDUES (Easy to Empty index)	A if the index is < 5%; B if the index is < 10%

Monomaterial solutions are preferred: ensure the package is designed with at least 90% in one polymer.

Limit Product Residues: ensure consumers can empty the package to limit residues

Limit the amount of barrier where necessary (functional packaging) and use grafted MAH tie layers.

Closures Guidance

CLOSURE SYSTEM	HDPE; LDPE; LLDPE; MDPE	PP; PET; PETG; PLA; PS (all with a density > 1 g/cm ³).
LINERS, SEALS AND VALVES	HDPE; LDPE; LLDPE; MDPE; TPE-PE	PP; TPE-PP; PET, PETG, PLA, PS (all with a density > 1 g/cm ³); Removable aluminium lidding; Removable silicon with a density > 1 g/cm ³

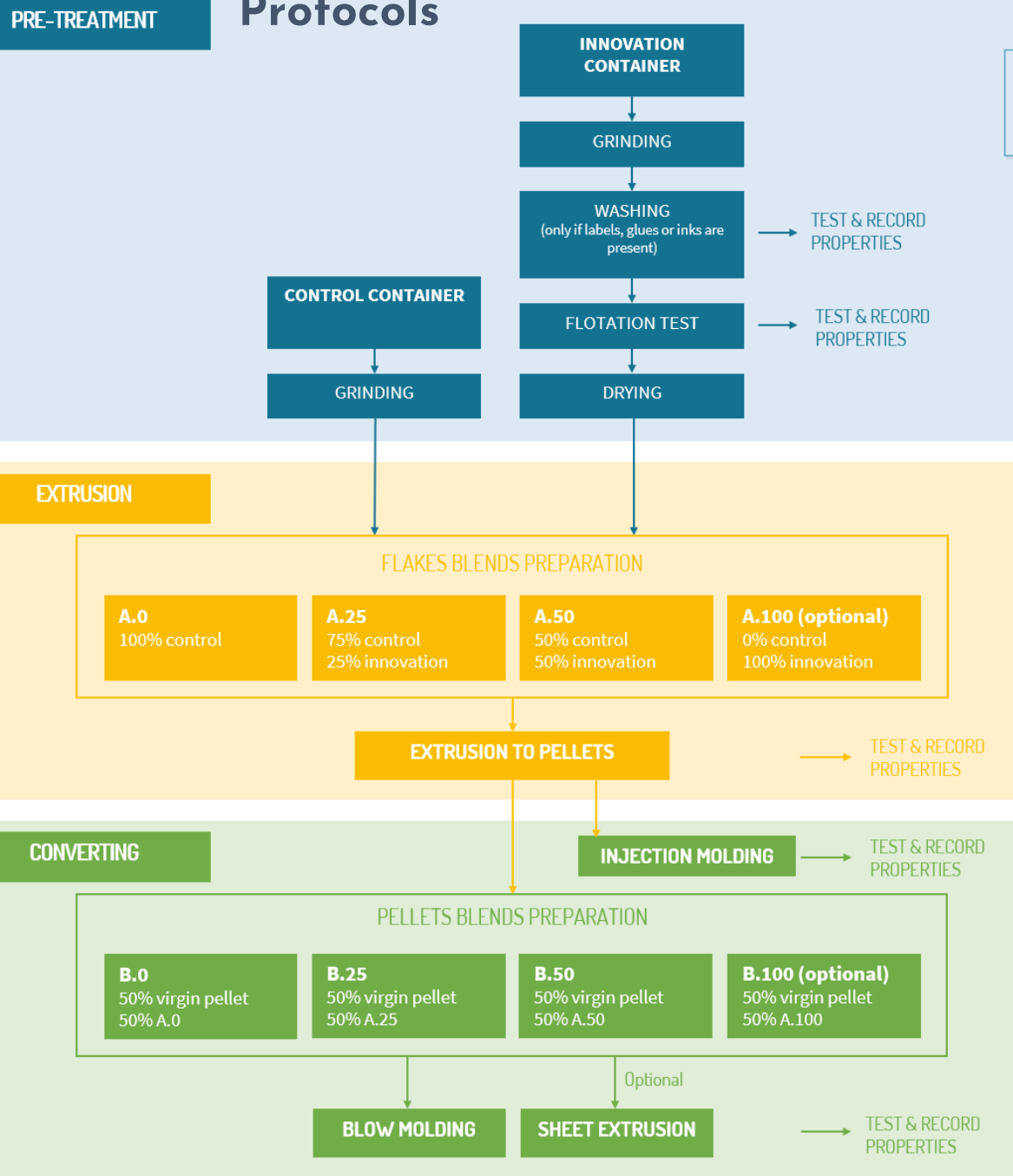
- ✓ Use PE cap on HDPE package and PP cap on PP package
- ✓ In case of complex closures always prefer polyolefin and maximize the PE concentration for HDPE and PP for PP package
- ✓ Prefer TPE-PO and SEBS-based to silicone or any other TPE options

Decorations Guidance

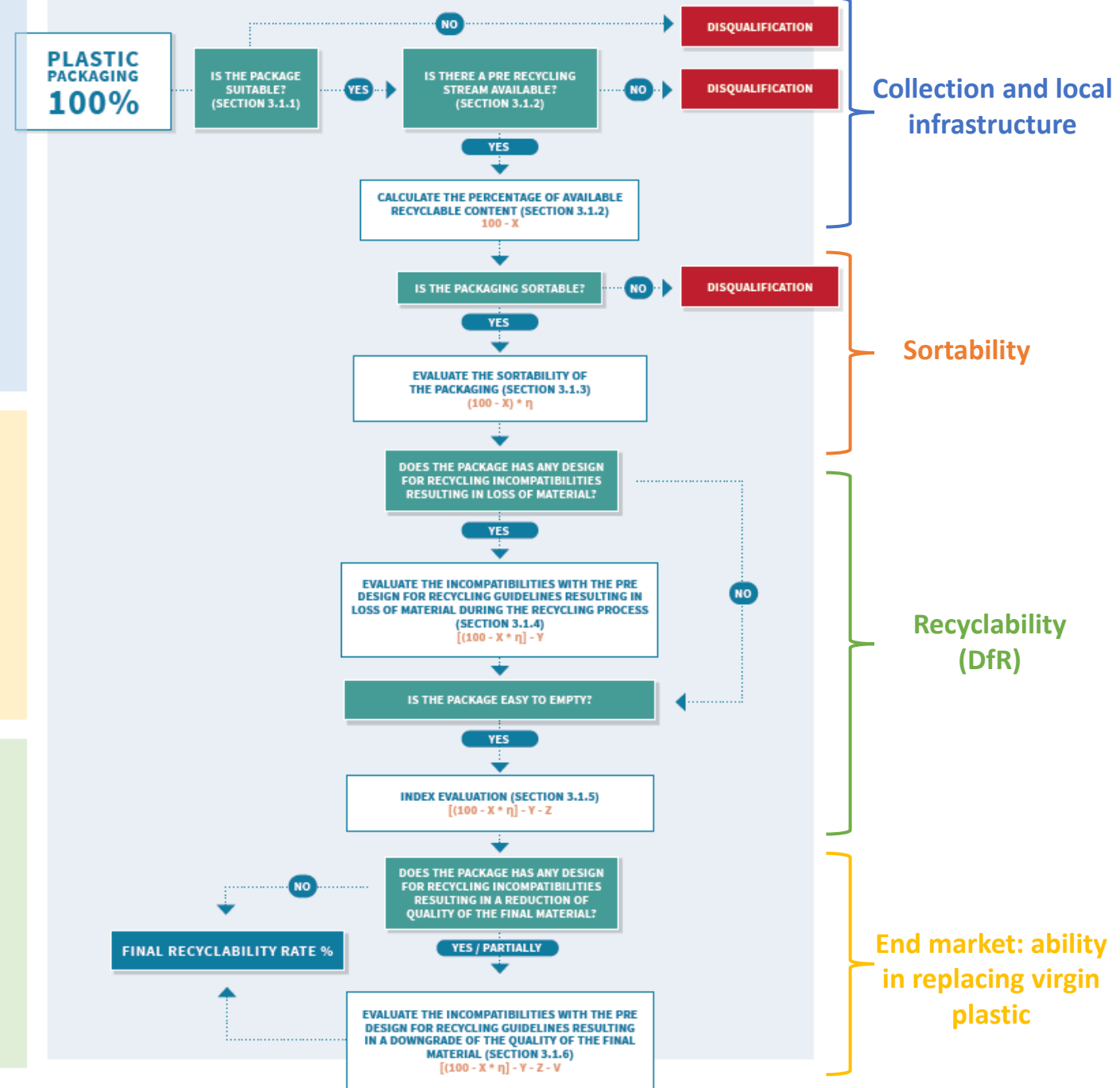
LABELS	<p>Labels in HDPE, LDPE, LLDPE, MDPE (all with density $< 1 \text{ g/cm}^3$)*</p> <p><i>* with a print and/or barrier that does not hinder the recognition of the underlying PE-polymer</i></p>	<p>Labels in PP (with density $< 1 \text{ g/cm}^3$)*; Labels in PET, PETG, PLA, PS (all with density $> 1 \text{ g/cm}^3$)*; Labels in Paper without fibreloss*; PO-foamed labels*</p> <p><i>* with a size, a print and/or barrier that does not hinder the recognition of the underlying PE-polymer:</i></p> <ul style="list-style-type: none">- Indication label size on containers $> 500 \text{ ml}$: $< 70\%$ coverage- Indication label size on containers $\leq 500 \text{ ml}$: $< 50\%$ coverage
SLEEVES	<p>Sleeves in HDPE, LDPE, LLDPE, MDPE (all with density $< 1 \text{ g/cm}^3$)*</p> <p><i>* with a print and/or barrier that does not hinder the recognition of the underlying PE-polymer</i></p>	<p>Sleeves in PP (with density $< 1 \text{ g/cm}^3$)*; Sleeves in PET, PETG, PLA, PS (all with density $> 1 \text{ g/cm}^3$)*</p> <p><i>* with a size, a print and/or barrier that does not hinder the recognition of the underlying PE-polymer:</i></p> <ul style="list-style-type: none">- Indication sleeve size on containers $> 500 \text{ ml}$: $< 70\%$ coverage- Indication sleeve size on containers $\leq 500 \text{ ml}$: $< 50\%$ coverage
ADHESIVES FOR LABELS	<p>Water soluble or water releasable adhesive (@ less than 40°C)</p>	<p>Pressure sensitive labels</p>
INKS	<p>Non toxic following the EuPIA Guidelines</p>	
DIRECT PRINTING	<p>Laser marked; Production or best-before date</p>	<p>Any other direct printing</p>

- ✓ Prefer PE labels/sleeves on HDPE packaging and PP on PP packaging
- ✓ Test the compatibility of your adhesive for labels with RecyClass Quick Test Protocols
- ✓ Follow the size recommendations in case of different material (Sorting test)
- ✓ Reduce the use of printing as much as possible (both on the labels and in case of direct printing)

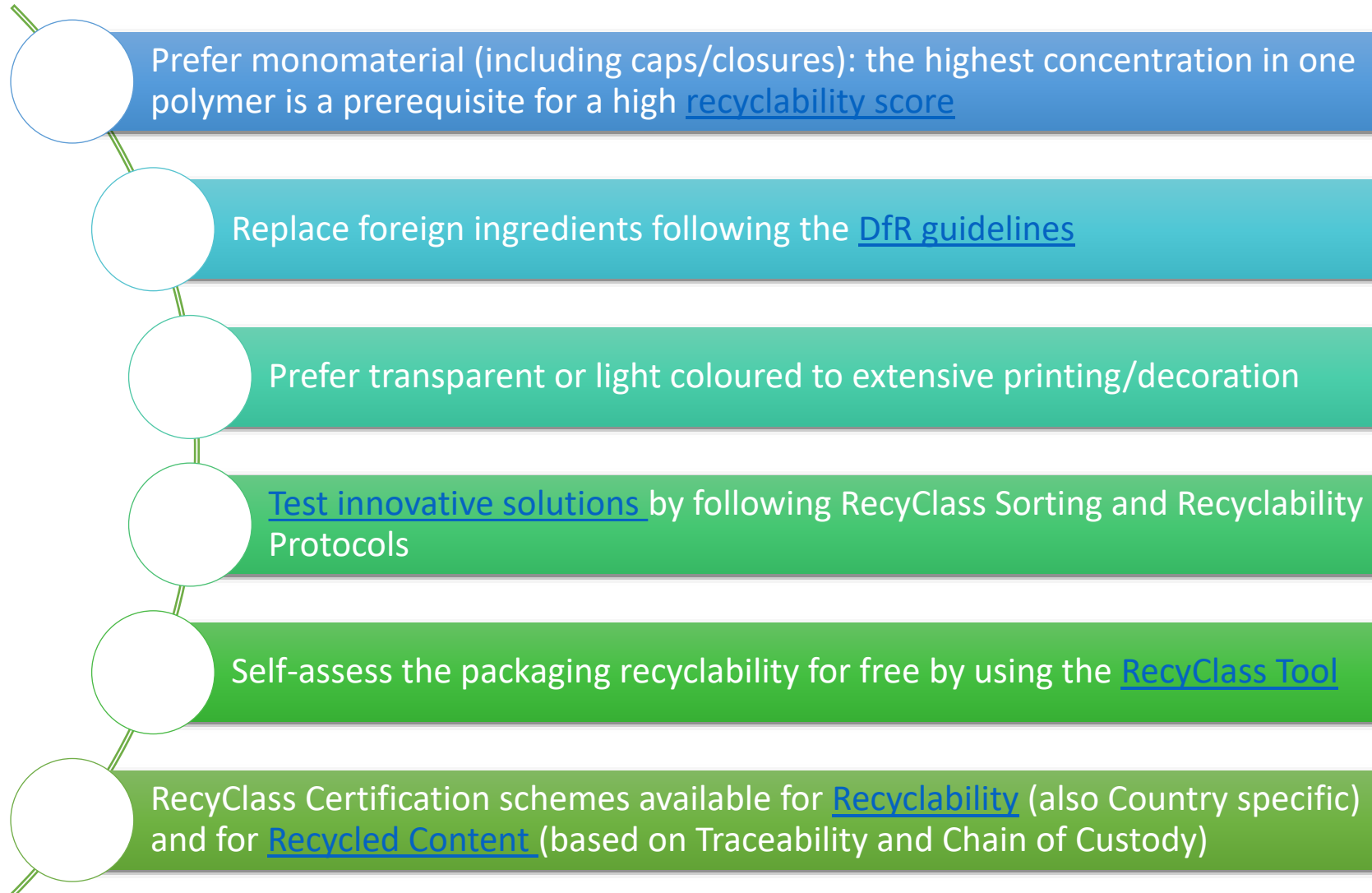
Recyclability Evaluation Protocols



Recyclability Certification



Key design advice



The background of the entire image is a dense, blue-tinted collage of various plastic waste items, including bottles, caps, and containers. In the center, there is a large, solid orange circle that serves as a backdrop for the text.

Join the
RecyClass
Community!

Thank you
RecyClass

www.recyclclass.eu

info@recyclclass.eu

RecyClass

recyclability evaluation of POLYFOIL™ MMB barrier tubes



RecyClass Unwrapped

Recyclability of personal care packaging

NEOPAC
THE TUBE

NEOPAC AG since 1890



**6 Production Sites
Worldwide**



**Global
Markets**

**~1.1 bil. Tubes
~300 mio. Tins**

**20 mio. € R&D and
Sustainability**

Family Owned Group

100% Renewable Energy

Modern Packaging Producer

Existing product range



Innovative new product designs



NEOPAC
THE TUBE

EPR Fees
Eco Design
Regulations Renewable Energy Recycled Content Product Safety
Price Design Guidelines
Mono Material Functionality Product Design
Tubes customer convenience HDPE
Carbon Footprint Reduction
Renewable Feedstock Material Reduction Esthetics
Efficiency Innovation Customer Needs Recyclable

NEOPAC ECO DESIGN



	 Recycling Friendly	 Recycled Content	 Renewable Resources	 Reduced Material	 Product Safety
Concept	We provide tube packaging ready for recycling; body, shoulder and caps are made of a single material family, with or without high barrier.	Our RECYCLED tubes contain up to 70% of recycled material, with up to 64% PCR proportion.	Our bioplastic solutions offer a much lower carbon footprint compared to conventional plastic tubes.	The less material used for a tube, the less the environmental impact measured in terms of carbon footprint.	Composite materials have the advantage of providing incomparable protection of the product content with relatively little use of materials.



Eco Benefits

- >95% HDPE optimized mono material structure, including HDPE closure
- MDO-PE based barrier technology enables minimal foreign material content
- Fully compatible with existing HDPE recycling stream
- Reduced material
- Incorporation of PCR Material
- Significant CO₂ footprint reduction

Estetical Advantages

- Polyfoil technology for 360° decoration
- Metallized high end look possible
- High quality haptics
- Compatible with all common tube decoration methods



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Technical Aspects

- Product safety
- High barrier
- Extended shelf life
- Excellent Product compatibility
- Easy processability on existing hot air tube fillers
- Pharma and food grade compliant
- Adhesive laminated structure

Design for Recycling Guidelines List

PET

PE

PP

PTTs

PS

Crates & Pallets

 Natural PE-HD Containers and Tubes

 Natural PE Flexible Films

 Coloured PE-HD Containers and Tubes

 Coloured PE Flexible Films

Self assessment tool

RecyClass

HDPE COLOURED CONTAINERS AND TUBES

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ADDITIVES	Additives that are unavoidable in processing (stabilizers, antioxidants, lubricants, nucleating agents, peroxides) and density remains < 0.97 g/cm ³	Mineral fillers (CaCO ₃ , talc) not increasing density more than 0.97 g/cm ³	Additives changing the material density > 1 g/cm ³ ; Flame-retardant additives, plasticizers; Bio-/eco-/photodegradable additives
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DIRECT PRINTING	Laser marked; Production or best-before date	Any other direct printing	
OTHER COMPONENTS	HDPE, LDPE, LLDPE, MDPE	PP; PET; PETG; PLA; PS all with density > 1 g/cm ³	Aluminium; PVC; Glass components; Foams with density < 1 g/cm ³
RECYCLED CONTENT			

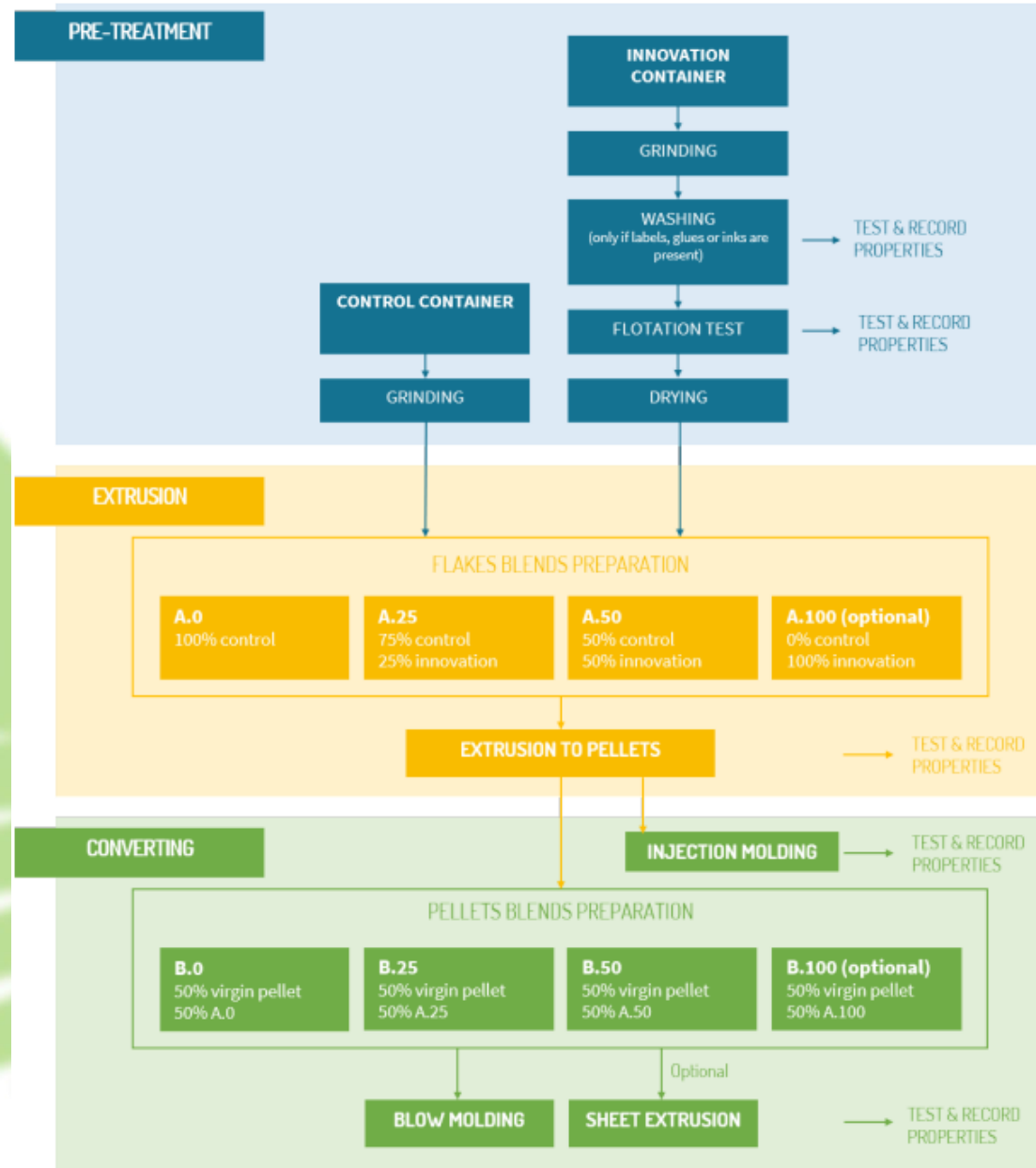
No change in the recyclability assessment. A separate 'Recycled Content Traceability Certification' based on a Chain of Custody approach is available with RecyClass

Last update - February 2021

* Class ranking resulting from the RecyClass assessment. B class is reported two times because of the 90-95% amount of PE in the packaging or because of slight incompatibilities in the design.
** Polymer resin can be either fossil- or bio-based.

Technology Approval

Figure1: Methodology Diagram

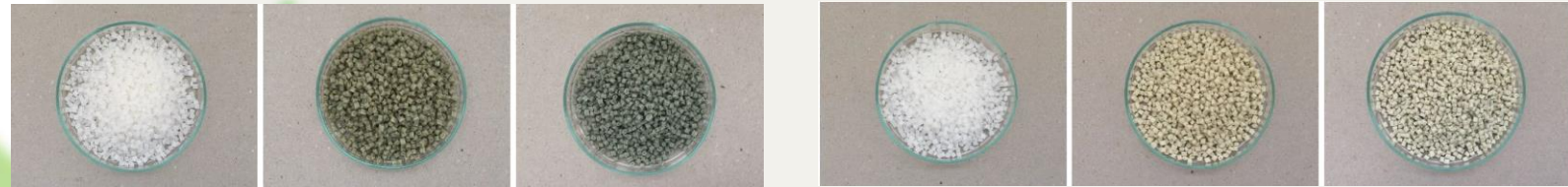


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RecyClass



Pellets Characterization	A.0	A.25	A.50
Weight fraction of innovation	0%	25%	50%
Weight fraction of control material Hostalen ACP6031 D	100%	75%	50%



PF525/623



PF542/642



Bottles Conversion	B.0	B.25	B.50
Weight fraction of blends A.0-A.50	50% A.0	50% A.25	50% A.50
Weight fraction of control material	50%	50%	50%
Weight fraction of innovation material	0%	12.5%	25%



1. **Suitability:** 100% suitable
2. **PRE Stream availability:** HDPE coloured Containers
3. **Packaging Composition:** >95% HDPE tested without HDPE closure (Class A)
4. **Sortability:** clear NIR detection as HDPE, no interference by the incorporated metallisation, ballistic sorting into rigid stream, no ferro magnetic components. Sorting efficiency >70% (Class A)
5. **DfR incompatibilities:** no removable incompatibilities. The amount of direct printing is below the threshold. **-1 Class** due to metallisation (Class B)
6. **Easy to Empty index:** not tested on semi-finished packaging. Assumption <5% (Class A)
7. **Reach Compliance:** no substances of Very High Concerns (SVHCs) (Class A)



1. **Suitability:** 100% suitable
2. **PRE Stream availability:** HDPE coloured Containers
3. **Packaging Composition:** >95% HDPE incl. HDPE closure (Class A)
4. **Sortability:** clear NIR detection as HDPE, ballistic sorting into rigid stream, no ferro magnetic components. Sorting efficiency >70% (Class A)
5. **DfR incompatibilities:** no removable incompatibilities. The amount of direct printing is below the threshold. (Class A)
6. **Easy to Empty index:** not tested on semi-finished packaging. Assumption <5% (Class A)
7. **Reach Compliance:** not containing any substances of Very High Concerns (SVHCs) according to Echa. (Class A)



Technology Approval & Letter of compatibility PF525/623



c/o Plastics Recyclers Europe
Avenue de Broqueville 12
1150 Brussels, Brussels

Phone: +32 2 315 24 60
info@recyclclass.eu
www.recyclclass.eu

Neopac

RECYCLASS TECHNOLOGY APPROVAL

Brussels, 3 December 2020



LETTER OF COMPATIBILITY

DESIGN for RECYCLING



SUEZ.Circpack® assessed the recyclability of the semi-finished-product described underneath. The analysis was done conform the RecyClass guidelines and methodology. Based on the results of our judgement we are confident to grant you this letter of compatibility.

Please be aware that changes in design, print, used materials and/or the effect of product-content or residue, might change the outcome of the assessment of a final packaging. We advise you to have the final/complete product packaging certified.

GRANTED TO:

Neopac
Burgdorfstrasse 22
3672 Oberdiessbach
Switzerland

PACKAGING:

MMB Polyfoil Barrier Tube
MMB 525_623

Result

We confirm that the semi-finished product we have assessed, is compatible with readily available sorting & recycling technologies commonly used at industrial scale in the recycling sector in Europe. As an intermediate result, we have established that this semi-finished product is sorted into the HDPE-fraction. The RecyClass recyclability of this semi-finished product is calculated as class B.

Disclaimer

At this stage, the use of the RecyClass logo is prohibited. The use of any claims on the recyclability of the semi-finished product are not supported by RecyClass. To use the logo and/or to have RecyClass endorsement, you must submit the final packaging for certification. Indeed, it is the final packaging (including its decorative elements and product-residue) that will enter the recycling system.

This letter of compatibility is valid until 22/02/2024, three years after the release of the audit report.

This letter is based on
Evaluation Report n° 015-neo-sz

Date : 22/02/2021

V.J. Mooij
Director of SUEZ.circpack®

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First Technology Approval

- Adhesive based laminate
- MDO barrier technology
- Thin film metallisation

fully compatible with
HDPE coloured stream

Letter of Compatibility for Semi finished Product

- Class B

Product Approval & Letter of compatibility PF542/642

The RecyClass MMB
 'Polyfoil® MMB
 containers.

The product is a
 and direct print
 with more than
 based, solvent f

According to
 Kunststofftechn
 HDPE container
 coloured HDPE

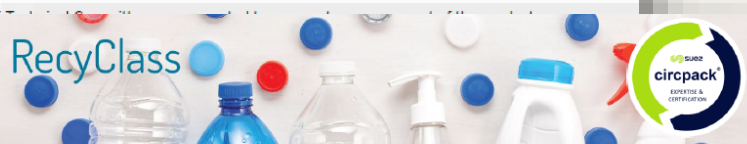
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 is designed und

- a) The tub
- b) The ma
- layers, g
- c) The lam
- d) The der
- e) The cap
- f) Applied
- possibl
- and pri

i.

ii.

iii.



LETTER OF COMPATIBILITY DESIGN for RECYCLING



SUEZ.Circpack® assessed the recyclability of the semi-finished-product described underneath. The analysis was done conform the RecyClass guidelines and methodology. Based on the results of our judgement we are confident to grant you this letter of compatibility.

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GRANTED TO:
 Neopac
 Burgdorfstrasse 22
 3672 Oberdiessbach
 Switzerland

PACKAGING:
 MMB Polyfoil Barrier Tube
 MMB 542_642

Result We confirm that the semi-finished product we have assessed, is compatible with readily available sorting & recycling technologies commonly used at industrial scale in the recycling sector in Europe. As an intermediate result, we have established that this semi-finished product is sorted into the HDPE-fraction. The RecyClass recyclability of this semi-finished product is calculated as class A.

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This letter of compatibility is valid until 22/02/2024, three years after the release of the audit report.

This letter is based on
 Evaluation Report n° 014-neo-sz

Date : 22/02/2021

V.J. Mooij
 Director of SUEZ.circpack®

First Product Approval
 - Adhesive based laminate
 - MDO barrier technology
 - HDPE closure included
fully compatible with HDPE coloured stream

Letter of Compatibility
 for Semi finished Product
 - Class **A**

Contact



Thank you for your attention



Peter Bossert

Materialentwicklung /
Material Development

NEOPAC
THE TUBE

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3672 Oberdiessbach | Switzerland

T +41 31 770 12 89

Peter.Bossert@neopac.com | www.neopac.com



THE SUSTAINABILITY JOURNEY IN COSMETICS

RECYCLASS UNWRAPPED

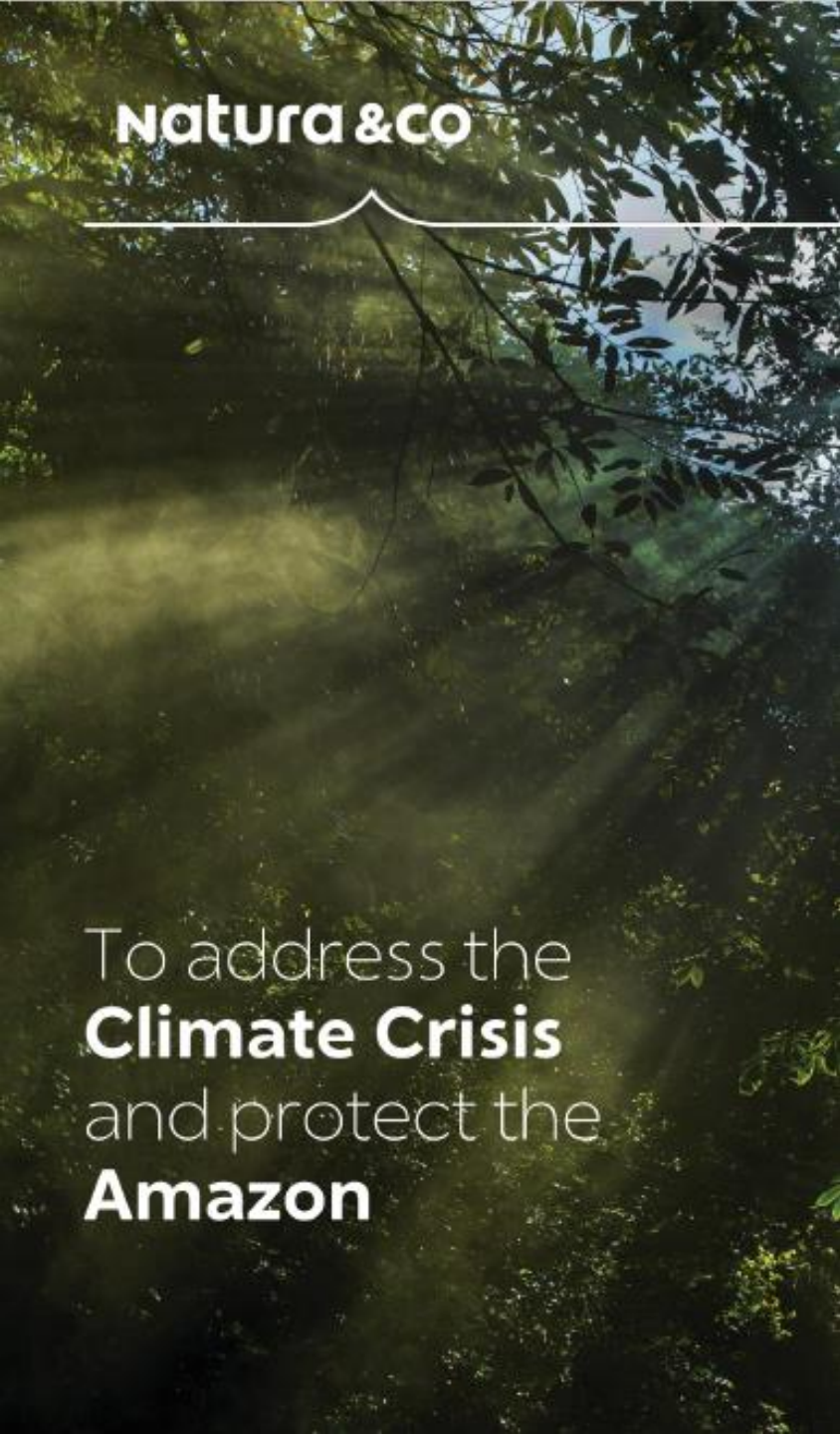
AVON

AVON



Aēsop®

natura & co



Natura &co

To address the
Climate Crisis
and protect the
Amazon



To defend
Human Rights
and be
Human-Kind

Sustainability Vision 2030
Commitment to Life



To embrace
Circularity
and
Regeneration

To embrace
Circularity
and
Regeneration



**Full Circularity of
Packaging**



Formula Circularity



Regenerative Solutions

NATURA & CO. PACKAGING SUSTAINABILITY TARGETS



100%

Recyclable, Reusable or
Compostable Packaging



50%

Of all plastics used to
be of recycled content



20%

Less Packaging Material
in Weight

A person with dark hair, wearing a dark long-sleeved shirt and blue jeans, stands with their back to the camera. They are carrying a large, grey and black plaid backpack. They are standing on the shoulder of a paved road that curves into the distance. The scene is set at sunset or sunrise, with a warm, golden light illuminating the landscape. In the background, there are rolling hills, some trees, and a green road sign with a white arrow pointing right. The sky is a mix of orange and dark blue.

Our
JOURNEY
has already started



We are a
BEAUTY
company

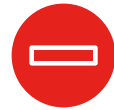
We design
BEAUTIFUL
products



HOW to keep
designing
BEAUTIFUL
products
FOR RECYCLING?



We have carbon black packaging



Masterbatch: packaging not detected by NIR Sensors.

We have small size packaging



Main material: PET Clear



Size: need infrastructure development for proper size sorting in all locations

We have multi-material packaging



Main material: not recyclable



Material combination: plastics, metal and glass in the same packaging



We have small size AND multi-material packaging



Main material: combination of polyolefins



Brush: material selection is important!



Size and Shape: small size, round and hard to compact

We have small size AND multi-material packaging



Main material: not recyclable (and black!)



Different parts: how to design them for recycling?



Size and Shape: small size, round and hard to compact

We have products with pumps



**Spray, Serum and Foaming
Pumps**

Lotion Pumps, various formulas viscosities

We have ready to recycle packaging...
...but need infrastructure development.



We have innovative packaging...

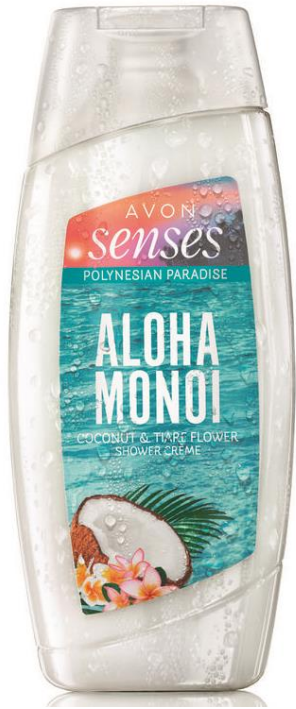
...but they're not recyclable (yet!)



Sampling is how consumers try our products...
...but they use multi-material flexibles



Decoration is KEY for beauty companies!



High Coverage Labels



**Full Hotstamping
Deco**



**Metal Caps on Plastic
Bottles**

Decoration is KEY for beauty companies!



Colored PET bottles

RecyClass

RecyClass



**Guidelines and
Online Tool**



**Technical
Committees**



Product Certification



Guidelines and Online Tool



Technical Committees



Product Certification

CLASS RANKING*

DESCRIPTION
(Test Protocol)

BOTTLE**

MATERIAL COMPOSITION

COLOURS

SIZE

PRODUCT RESIDUES
(Easy to Empty index)

BARRIER

ADDITIVES

CLOSURE SYSTEM

LINERS, SEALS AND VALVES

LABELS

SLEEVES

TAMPER EVIDENCE WRAP

ADHESIVES FOR LABELS

INKS

DIRECT PRINTING

OTHER COMPONENTS

RECYCLED CONTENT

YES - FULL COMPATIBILITY

A-B

Materials that passed the testing protocols with no negative impact OR materials that have not been tested (yet), but are known to be acceptable in PET recycling

PET

A when PET content is > 95%; B when PET content is > 90%

Transparent clear; Transparent light blue

A if the index is < 5%; B if the index is < 10%

SiOx plasma coating

PE (with density <1 g/cm³); PP (with density <1 g/cm³)

PE; PE + EVA; PP; foamed PET (all with a density < 1 g/cm³)

Labels in PE; PP; OPP; EPS; foamed PET (all with density <1 g/cm³), with a size that does not hinder* the recognition of the underlying PET-polymer

*Indication label size of bottles > 500 ml < 70% coverage
*Indication label size of bottles < 500 ml < 50% coverage

Sleeves in PE; PP; OPP; EPS; foamed PET; LDPE (all with density <1 g/cm³), with a size that does not hinder* the recognition of the underlying PET-polymer

*Indication sleeve size of bottles > 500 ml < 70% coverage
*Indication sleeve size of bottles < 500 ml < 50% coverage

PE; PP; OPP; EPS; Foamed PET (all with density <1 g/cm³)

Alkali/water soluble and alkali/water releasable adhesive at 60-80°C without reactivation

Non-toxic (according to EUPA guidelines)

Laser marked print

Base cap, handles or other components which are separated by grinding and float/sink - all with density <1 g/cm³

Unpigmented PET

CONDITIONAL - LIMITED COMPATIBILITY

B-C

Materials that passed the testing protocols if certain conditions are met OR materials that have not been tested (yet), but pose a low risk of interfering with PET recycling

C when PET content is > 70%

C if the index is < 15%

Carbon plasma-coating; PA-MXD6 multilayer with <5wt% PA-MXD6 and no tie layers; PSA multilayer; PTN alloy

UV stabilisers; Acetaldehyde (AA) blockers; Optical brighteners; Oxygen scavengers

Silicone with density <0.95g/cm³

Lightly metallized labels; Paper labels without fiberlosses

Full sleeves translucent for IR detection in PE; PP; OPP; EPS; foamed PET; LDPE; all with density <1 g/cm³

INTERIM: Twin-perforated sleeves for household and personal care conform guidelines by EPBP

Hot-melts; Pressure-sensitive labels

Production or expiry date

NO - LOW COMPATIBILITY

D-E-F

Materials that failed the testing protocols OR materials that have not been tested (yet), but pose a high risk of interfering with PET recycling

PLA; PVC; PS; PETG

D when PET content is > 50%; E when PET content is > 30%; F when PET content is < 30%

Other transparent colours; Opaque; Fluorescence; Metallic

< 4 cm (compacted); > 5 liter content

D if the index is < 20%; E < if the index is 25%; F if the index is > 25%

PA-MXD6 multilayer with >4wt% PA-MXD6 or with tie layers; Monolayer PA-MXD6 blend; EVOH

Bio-/exo-(photodegradable additives; Nanocomposites

Materials and blends with density >1 g/cm³ (e.g. highly filled PE, metals,...); Non-detaching or welded closures

Materials with density >1 g/cm³ (e.g. PVC, silicone, metals)

Labels which hinder the recognition of the underlying PET-polymer (e.g. too large, metallized, heavily inked); Labels with density >1 g/cm³ (e.g. PVC; PS; PET; PETG; PLA); Metallized labels; Non-detaching or welded labels; Paper labels with fiberlosses; Foamed PETG labels (even with density <1 g/cm³); PET labels with washable inks

Sleeves which hinder the recognition of the underlying PET-polymer (e.g. too large, metallized, heavily inked); Sleeves with density >1 g/cm³ (e.g. PVC; PS; PET; PETG); Foamed PETG sleeves (even with density <1 g/cm³); PET sleeves with washable inks

Materials with density >1 g/cm³ (e.g. metal; PVC; PS; PET; PETG); Metallized materials; Foamed PETG (even with density <1 g/cm³); PET with washable inks

Non-soluble in water or alkaline at 60-80°C; Non-releasable in water or alkaline at 60-80°C

Inks that bleed; Toxic or hazardous inks; Metallic inks

Any other direct printing

Materials with density >1 g/cm³ (e.g. metal, RFID tags); Non detaching or welded components

Coloured PET

TRANSPARENT CLEAR & LIGHT-BLUE PET BOTTLES

No change in the recyclability assessment. A separate 'Recycled Content Traceability Certification' based on a Chain of Custody approach is available with RecyClass

Last update - February 2021

MacBook Pro



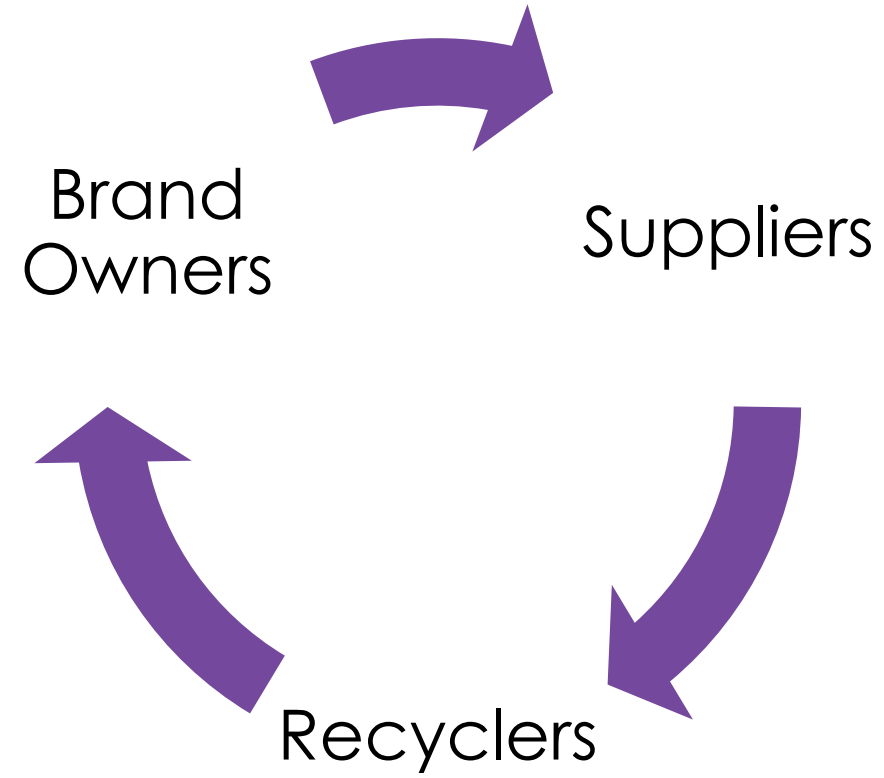
Guidelines and Online
Tool



Technical Committees



Product Certification





Guidelines and Online
Tool



Technical Committees



Product Certification



Recyclability
assessment

conform the RecyClass methodology

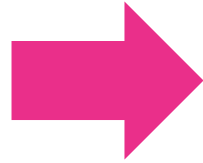


Certificate No. : 017-AVO-SZ

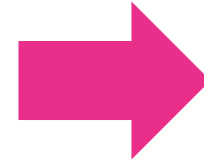
Date : January 26th, 2021



Design **FOR Recycling**



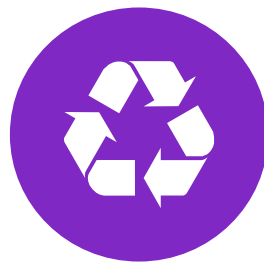
Recycling in Practice



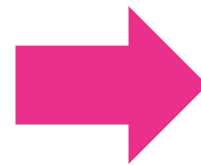
**High Quality
Recycled Material
Available**



Design **FOR** Recycling



Recycling in Practice



High Quality Recycled
Material Available



50%

Of all plastics used to be
of recycled content

~70%

Of our plastic
bottles are
polyolefins



Material **AVAILABILITY**



Material **QUALITY** and
SAFETY

#Sustainability



#Recyclable
dispensing systems



#Recyclable
flexible packaging



#Reuse
of packaging



#Innovative
materials and
solutions



#Chemical
recycling of plastics



#Elimination
of materials



#Innovative
materials and
solutions

Solid Bars

Personal Care Products





#Innovative
materials and
solutions

Holy Grail 2.0

Personal Care Products





#Reuse
Of packaging

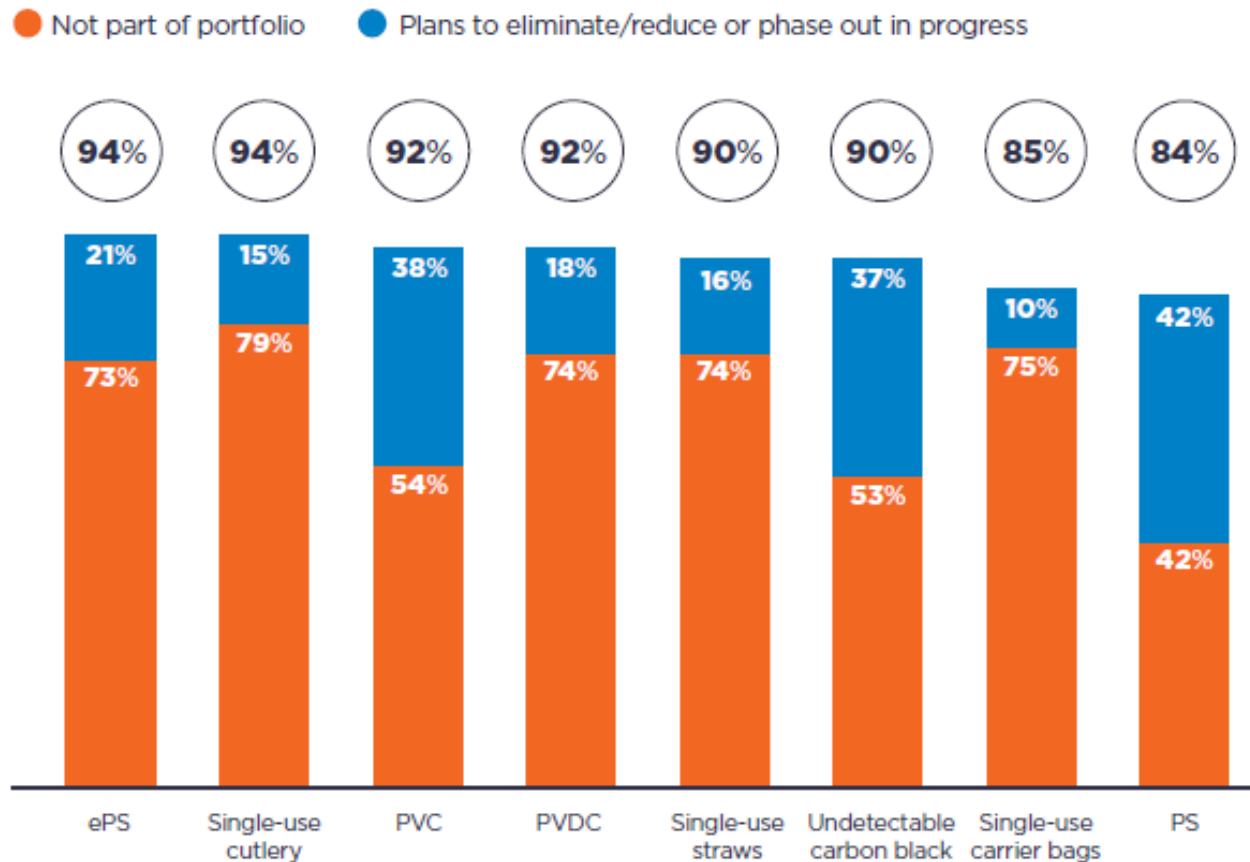
Refill Stations





#Elimination
of materials

Problematic or Unnecessary Plastics



BANNED FROM AVON'S
PORTFOLIO SINCE 2018

Source: Ellen MacArthur Foundation

A group of cyclists in white and red jerseys are racing on a track. They are wearing helmets and sunglasses, and their bikes are in motion. The background is a blurred green field.

Everyone needs to
embrace the
SUSTAINABILITY
JOURNEY

RecyClass

RecyClass Unwrapped

Questions & Answers session

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





Thank you for participating
& stay tuned!