



NYLON TO NYLON : RECYCLING TECHNOLOGIES LEAD THE WAY

**Welcome to DOMO
Sustainable Solutions**

**Thomas Marquardt
Circular Solutions Development Expert**

DOMO

caring
is our formula

DOMO'S 2030 TARGETS AND 2024 ACHIEVEMENTS

Planet care



-40% / -26%
CO2eq Emissions
(sc.1&2)
(and carbon neutral by 2050)



-20% / -33%
Waste disposal



-25% / -7%
Water withdrawal



50%
Renewable electricity
(and 100% by 2040)

Partner of choice



20% / 10%
of EM sales coming from
circular and bio-based
solutions



-20% / -10%
carbon footprint of sold
compound products



Gold / Platinum
EcoVadis rating

Responsible employer



<1 / 5.5
Safety TRIR



80% / 70%
employee engagement

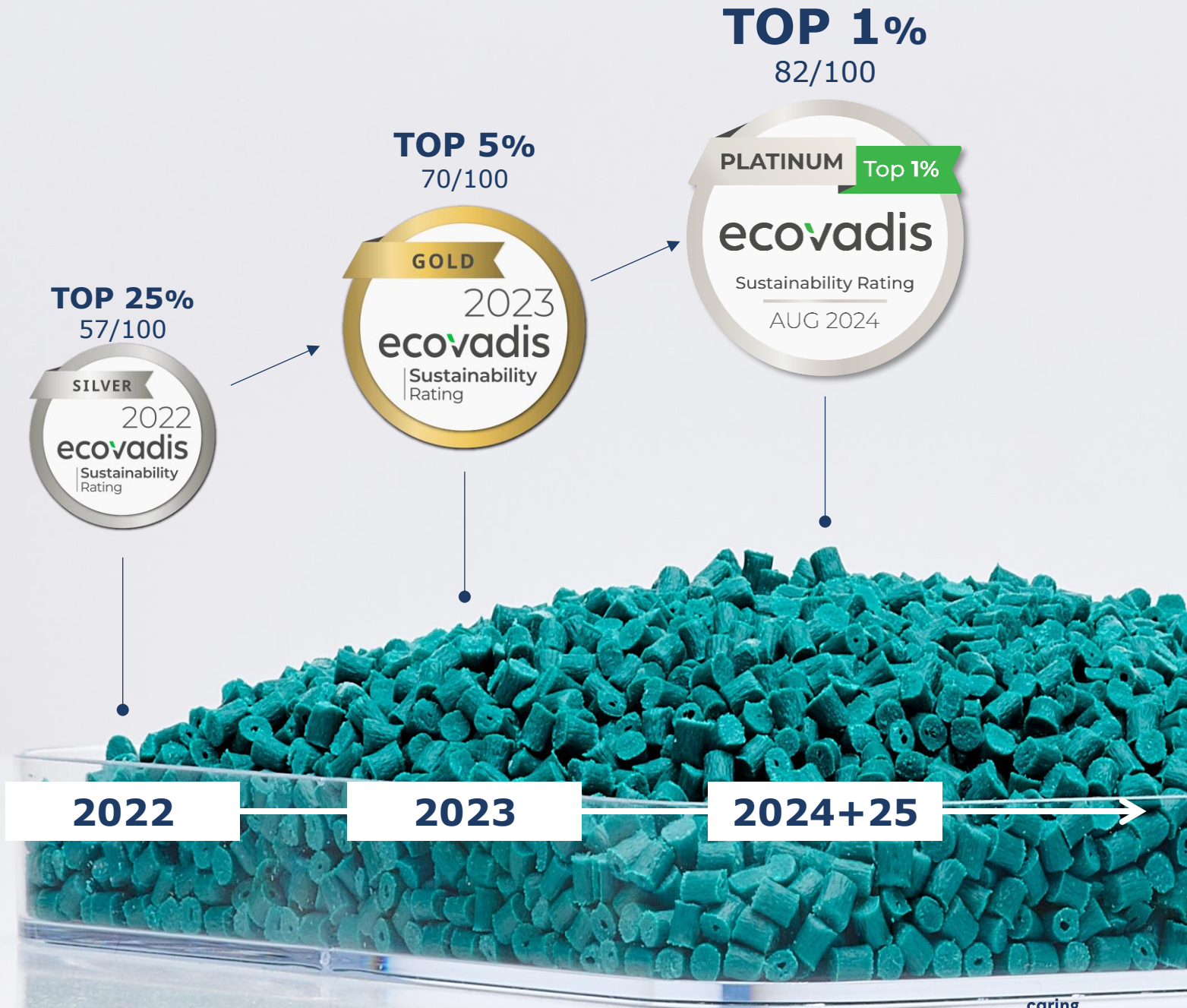


35% / 29%
women in management
role

PROVING OUR SUSTAINABILITY LEADERSHIP

EcoVadis Platinum Medal

Awarded in 2024 for outstanding performance across Environment, Labor & Human Rights, Ethics, and Sustainable Procurement.



WHAT WE DO

MEETING INDUSTRY-SPECIFIC STANDARDS



SITES	ISO 9001 Quality	IATF Quality (AUTO)	ISO 14001 Environment	ISO 45001 Occupational Health & Safety	ISO 50001 Energy	ISCC+ Circular economy	UL Certifications
Arco Italy	✓	✓	✓	✓		✓	✓
Belle-Etoile France	✓	✓	✓		✓		✓
Gorzów Poland	✓	✓	✓	✓		✓	✓
Premnitz Germany	✓	✓	✓	✓	✓	✓ *	
Jiaxing / Haiyan China	✓	2025				✓	✓
Mumbai India	✓						✓ *
Buford USA	✓						✓
Blanes Spain	✓		✓	✓	✓		
Leuna Germany	✓		✓	✓	✓	✓	
Valence France	✓			✓			



Each ISO refers to the most up-to-date version of the standards; 2015 (9001, 14001); 2016 (IATF) and 2018 (45001, 50001).

* Expected finalization end 2025

caring is our formula

OUR SOLUTIONS

TECHNYL®: A WORLDWIDE PERFORMANCE BRAND

>20% recycled content

CO2 reduction

Post Industrial / Post Consumer feedstock



Sustainable development and human care

TECHNYL® 4EARTH
Sustainable polyamide

TECHNYL® SAFE
Food and water contact



Lightweight

TECHNYL® STAR
High-flow PA6 & PA 6.6

TECHNYL® MAX
High stiffness & strength



Flame and temperature resistance

TECHNYL® ONE
Enhanced electrical properties

TECHNYL® PROTECT
Flame retardants

TECHNYL® RED
High thermal resistance



Technology grades

TECHNYL® SHAPE
For extrusion & blow molding

TECHNYL® SLIDE
Friction & wear resistance

TECHNYL® PURE
Electrically neutral



LESS NOx AND CO₂ EMISSION



LIGHTWEIGHT



VEHICLE ELECTRIFICATION



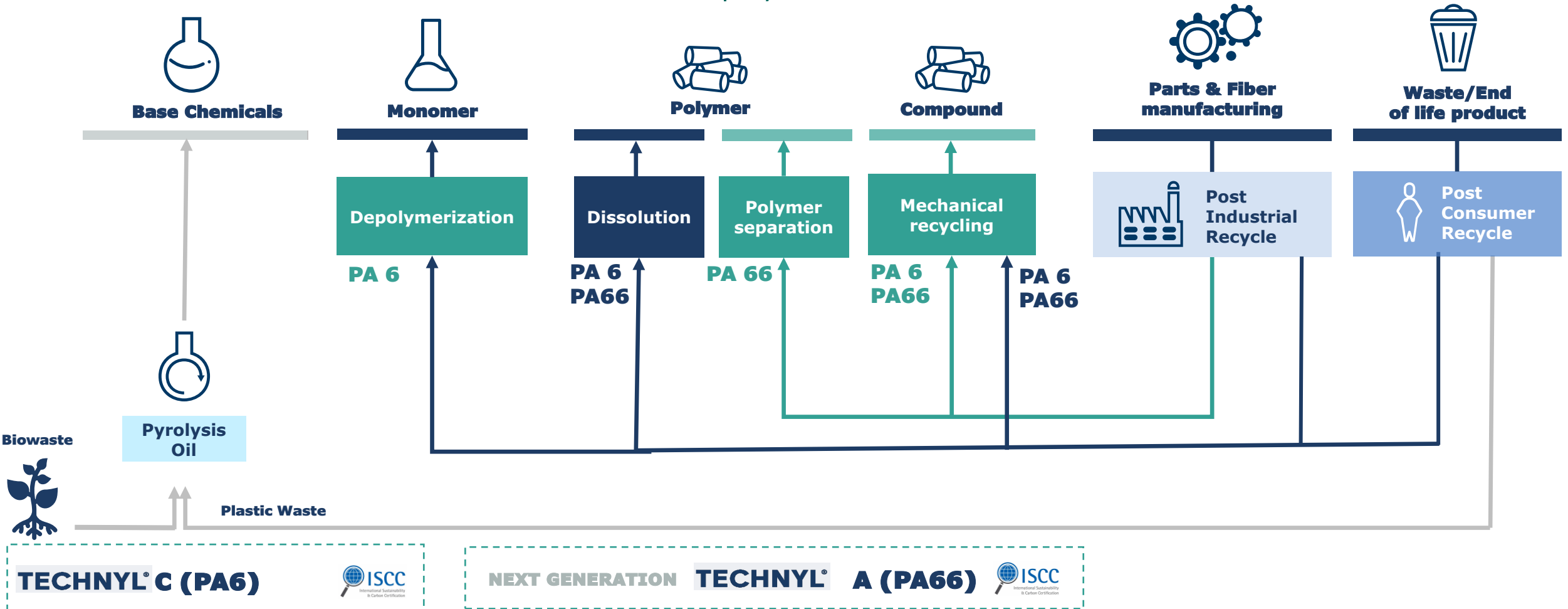
CONNECTIVITY



DOMO'S ENGAGEMENT TO CIRCULARITY

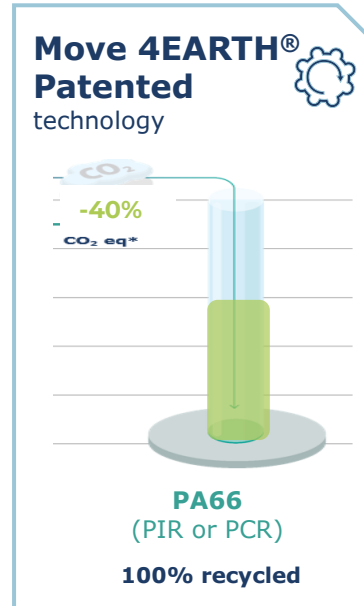
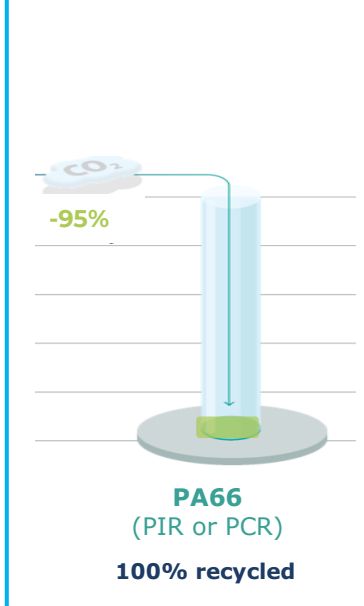
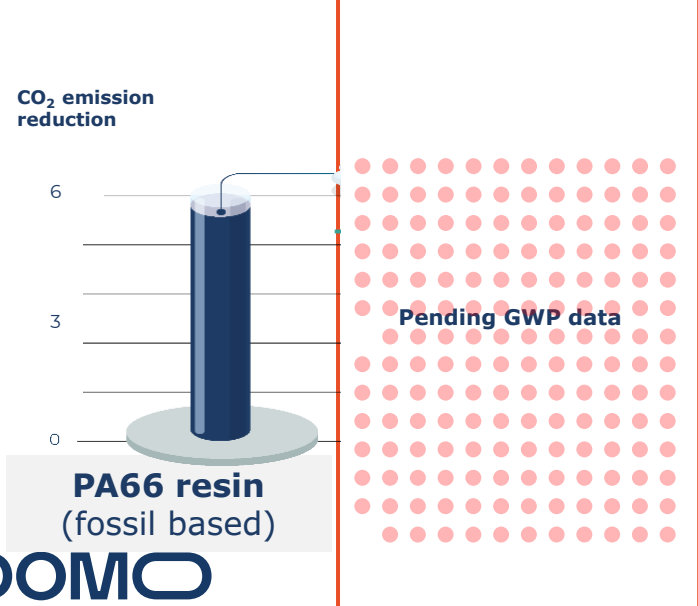
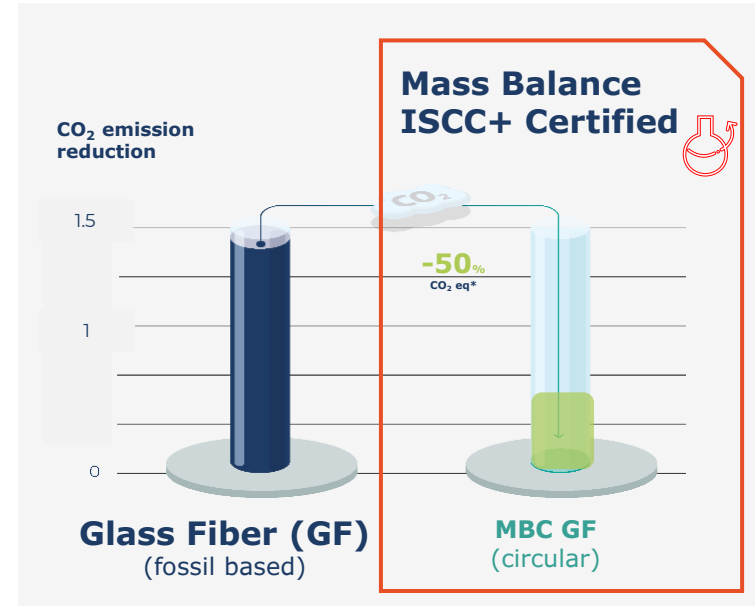
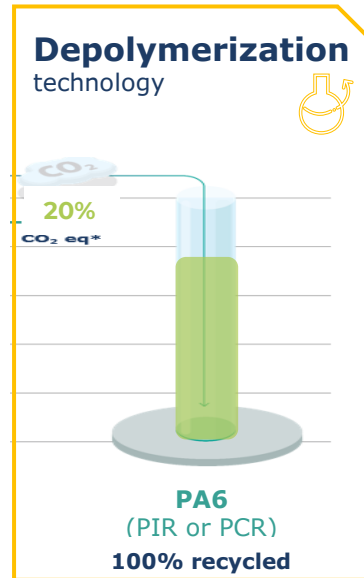
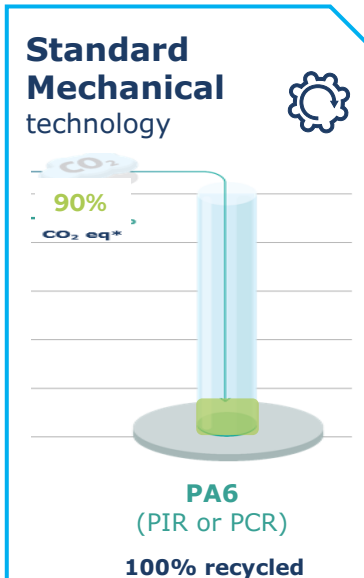
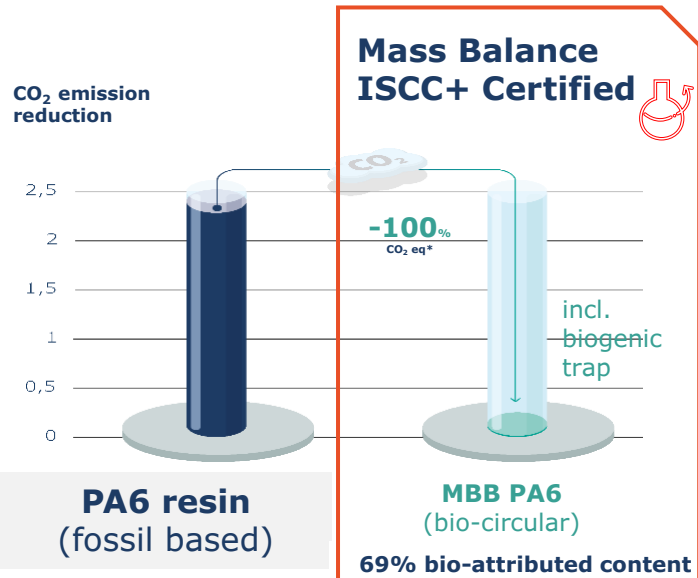
EXISTING RECYCLING PRODUCT RANGE AND EXPECTED BEYOND 2026

TECHNYL® 4EARTH®
Sustainable polyamide



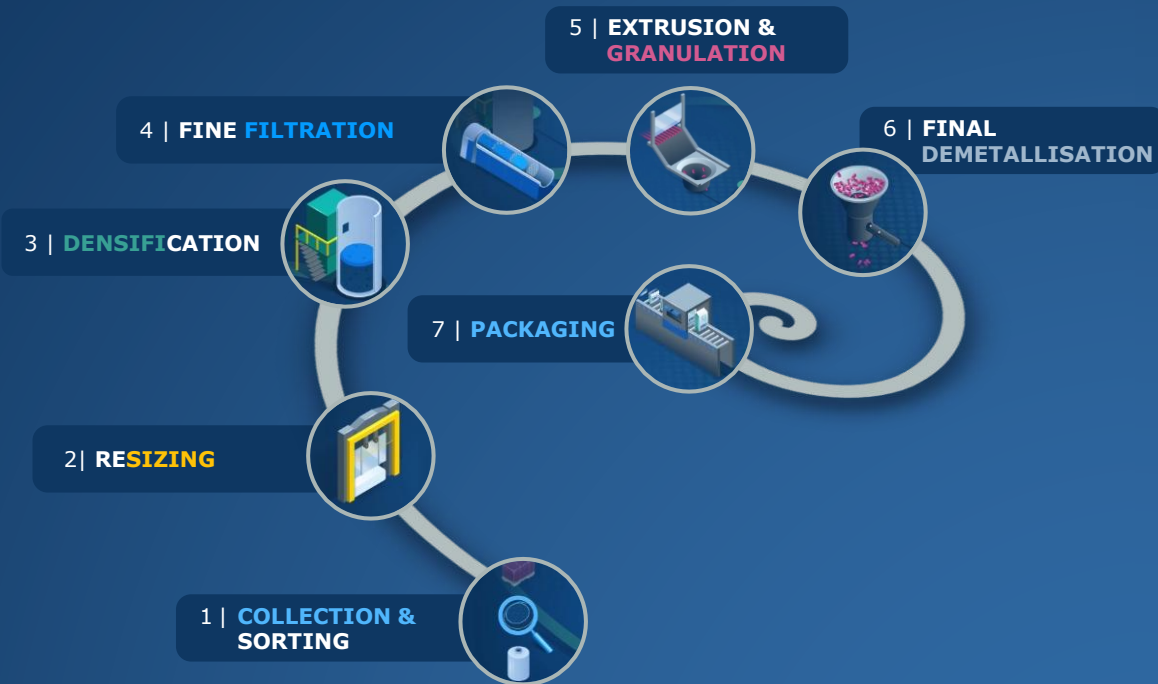
PIONEERING CIRCULARITY

CO2 FOOTPRINT VS FOSSIL EQUIVALENT

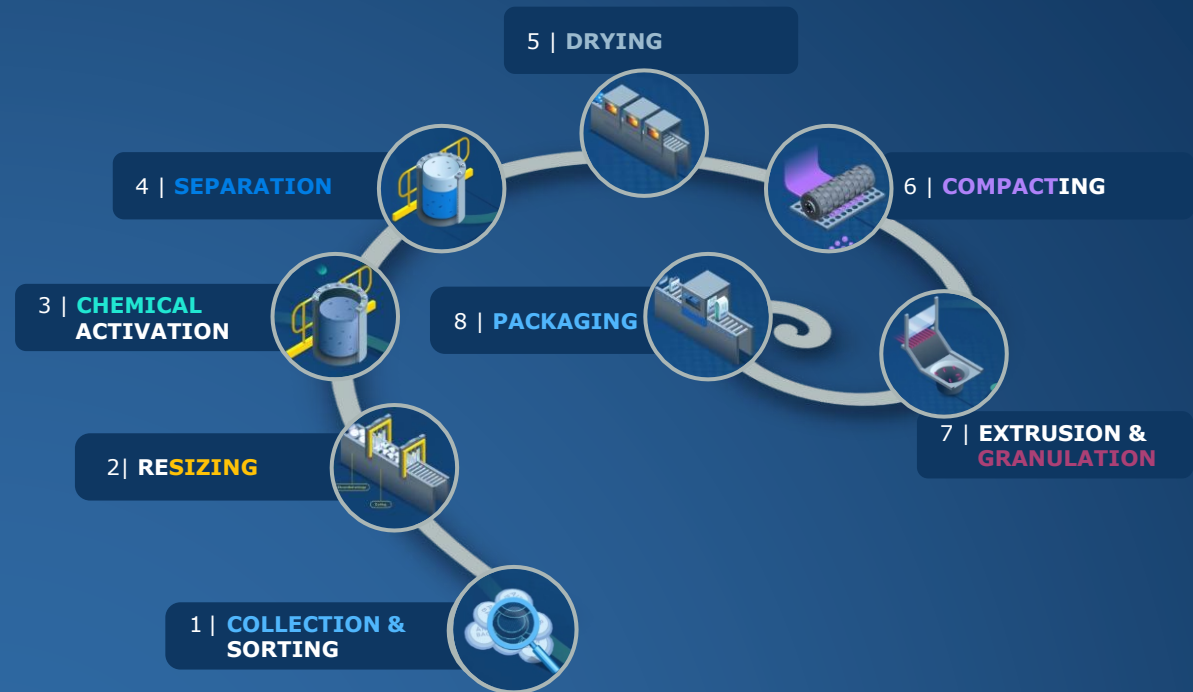


DEDICATED RECYCLING PROCESSES & CONTINUOUS REGENERATION

MECHANICAL RECYCLING



MOVE 4EARTH® PATENTED RECYCLING



POST CONSUMER FEEDSTOCK SOURCING

PA66 ELV AIRBAG DISMANTELED

Airbag types:

Driver airbag



M-011937

Passenger airbag

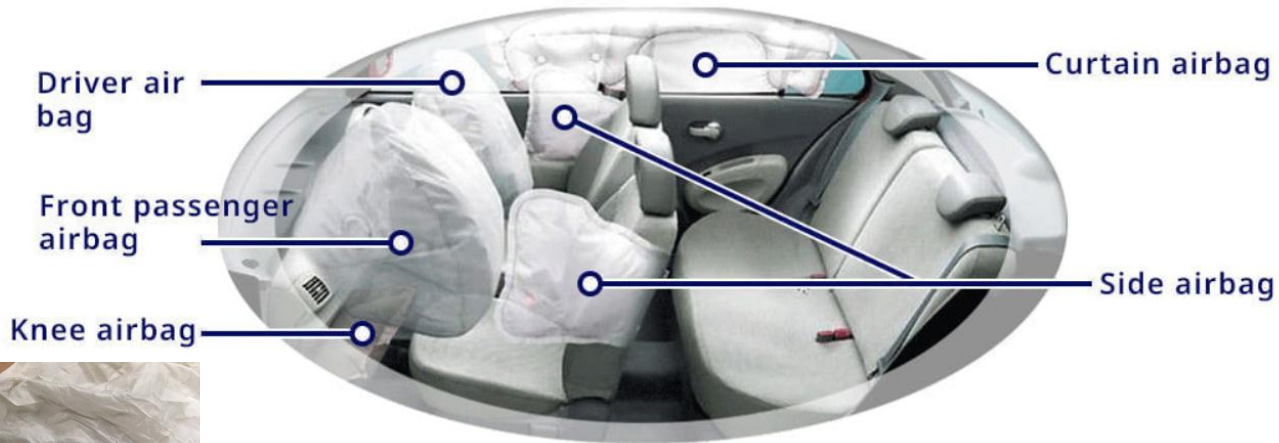


M-011938

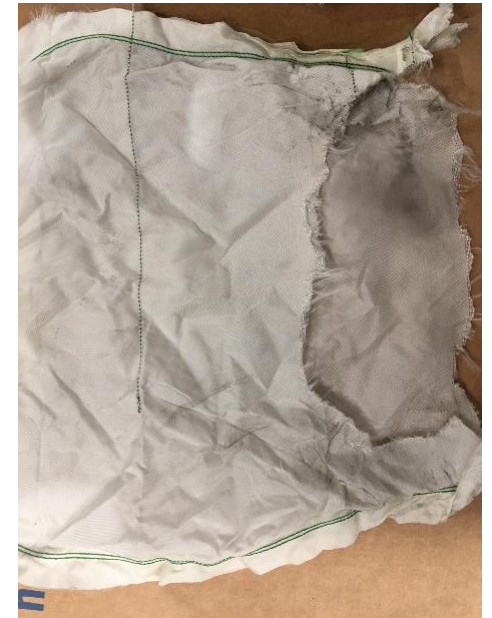
Curtain



M-011940



Side airbag



M-011941



M-011939

PIONEERING CIRCULARITY

MECHANICAL RECYCLING – PCR FEEDSTOCK SOURCING

NEW SOURCE : POST CONSUMER PA6 FISH NET FEEDSTOCK



**UNDER DEVELOPMENT: MECHANICAL PERFORMANCE IN COMPARABLE RANGE TO C1E LEVEL
COLOR: SOBER / BLACK**

TECHNYL 4Earth C7E 218 V30 BK	based on C118 V30 BK with 30% PCR fishnet feedstock
TECHNYL 4Earth C7E 238 V15 BK	based on C 238 V15 BK with 30% PCR fishnet feedstock
TECHNYL 4Earth C7E 238 V15 BK H	based on C 238 V15 BK with 76% PCR fishnet feedstock

AUTO SUSTAINABLE OFFER

OUR OFFER FOR AIR MANAGEMENT APPLICATIONS



Mechanical Technology – In-house
From Post-Industrial PA 6 fibers & films

Our sustainable offer:

TECHNYL® 4EARTH C2E 216 V30 BK

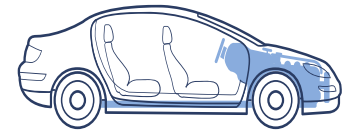
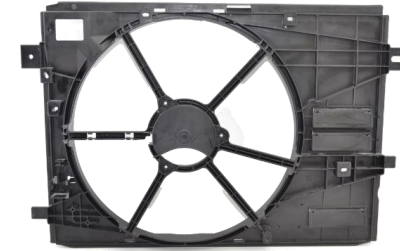
TECHNYL® 4EARTH C2E 216 V30 BK H

TECHNYL® 4EARTH C2E 218 V30 BK

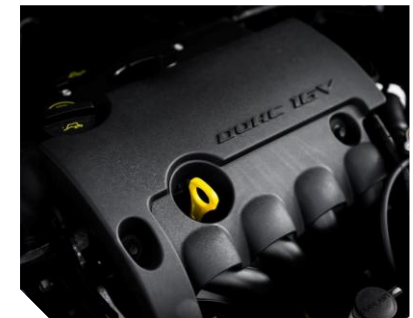
TECHNYL® 4EARTH C2E 218S MV30 BK 21N H

Applications:

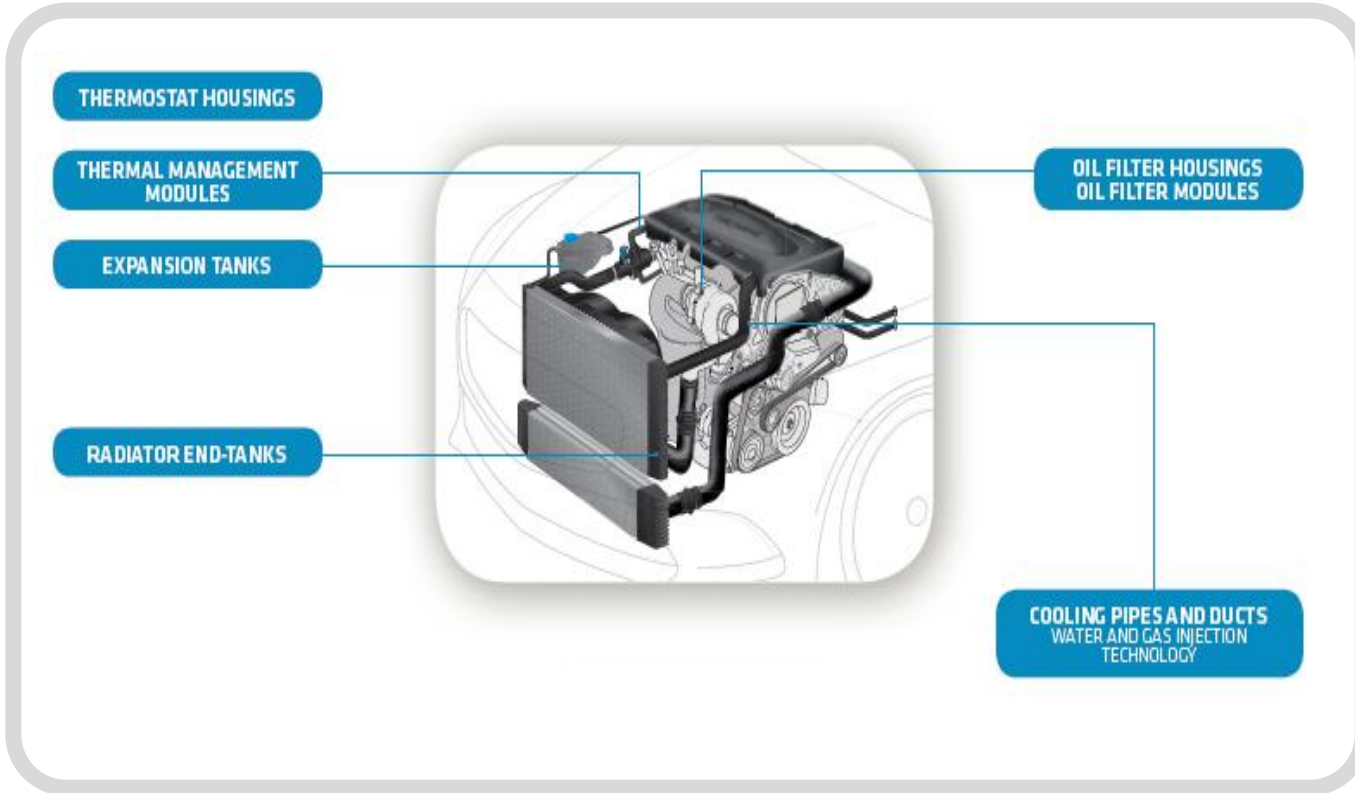
Air Filter Housing
Air Intake Manifold
Engine Beauty cover
Fan & Shroud
Grill Shutter System



UNDER THE HOOD



Internal Combustion Engine Vehicles



New Cooling applications for **Electric Vehicles**



MARKET DRIVERS AUTOMOTIVE EUROPE – ELV DIRECTIVE + TARGETS OF OEMS

Automotive – ELV Directive revision

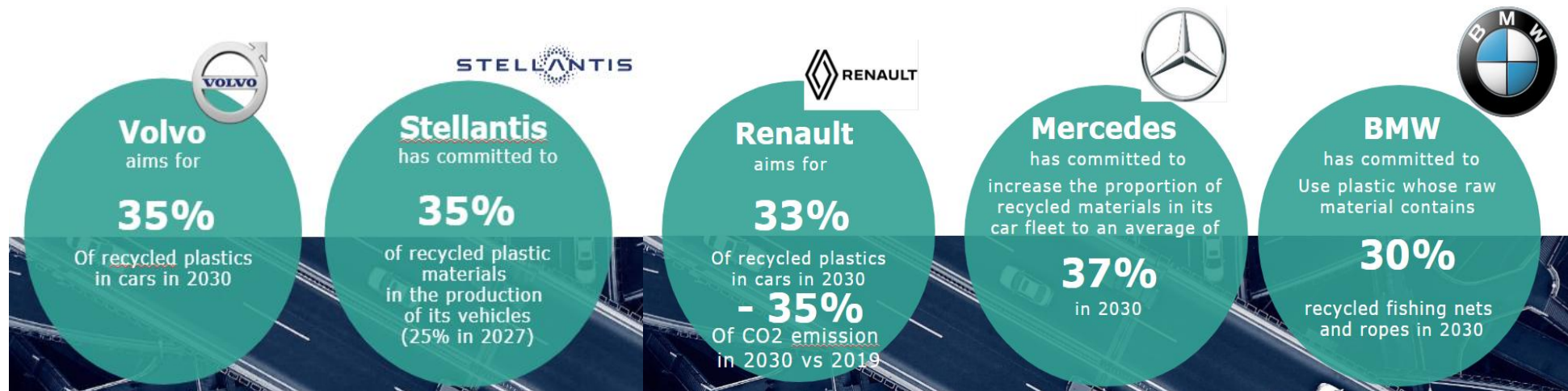
Adopted by EU Parliament, sent to Council for approval:

- **20% recycled plastic content target in new vehicles** (vs. previous 25%)
- **15% of this recycled content from end-of-life vehicles in a closed-loop** (vs. previous 25%)
- **post-industrial plastic and bio-based plastic** may count towards the targets
- **Chemical recycling** now explicitly described

February 12, 2025 11:32 AM

European Parliament votes for lower recycled plastic content in vehicles

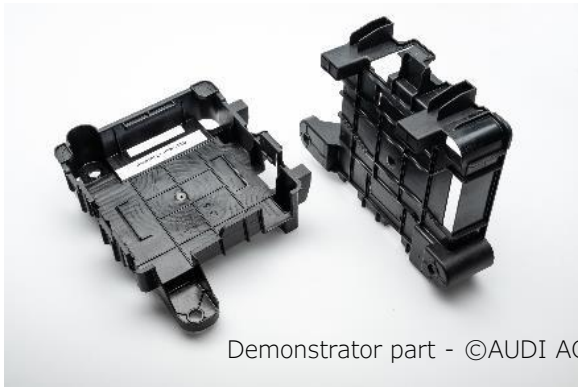
Amendments to the End-of-Life Vehicles regulation allow inclusion of post-industrial and bio-based plastics in quotas, as well as a renewed focus on chemical recycling



Same look different soul

At DOMO we play with formulations and technologies to deliver the best product for each customer-specific need.

This automotive bracket from AUDI AG was tested with various recycled formulations and technologies.



Demonstrator part - ©AUDI AG

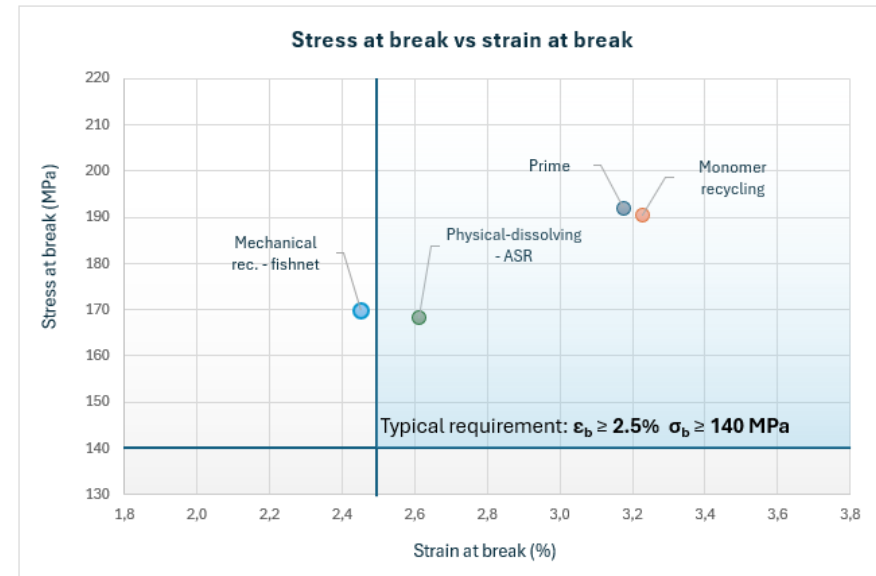
PA6-GF30

The best fit for AUDI AG application requirements was **30% physically post-consumer recycled** (PCR).



Technological
innovation

DISSOLUTION



VALIDATION

Tensile properties



Part testing



Dimensional accuracy

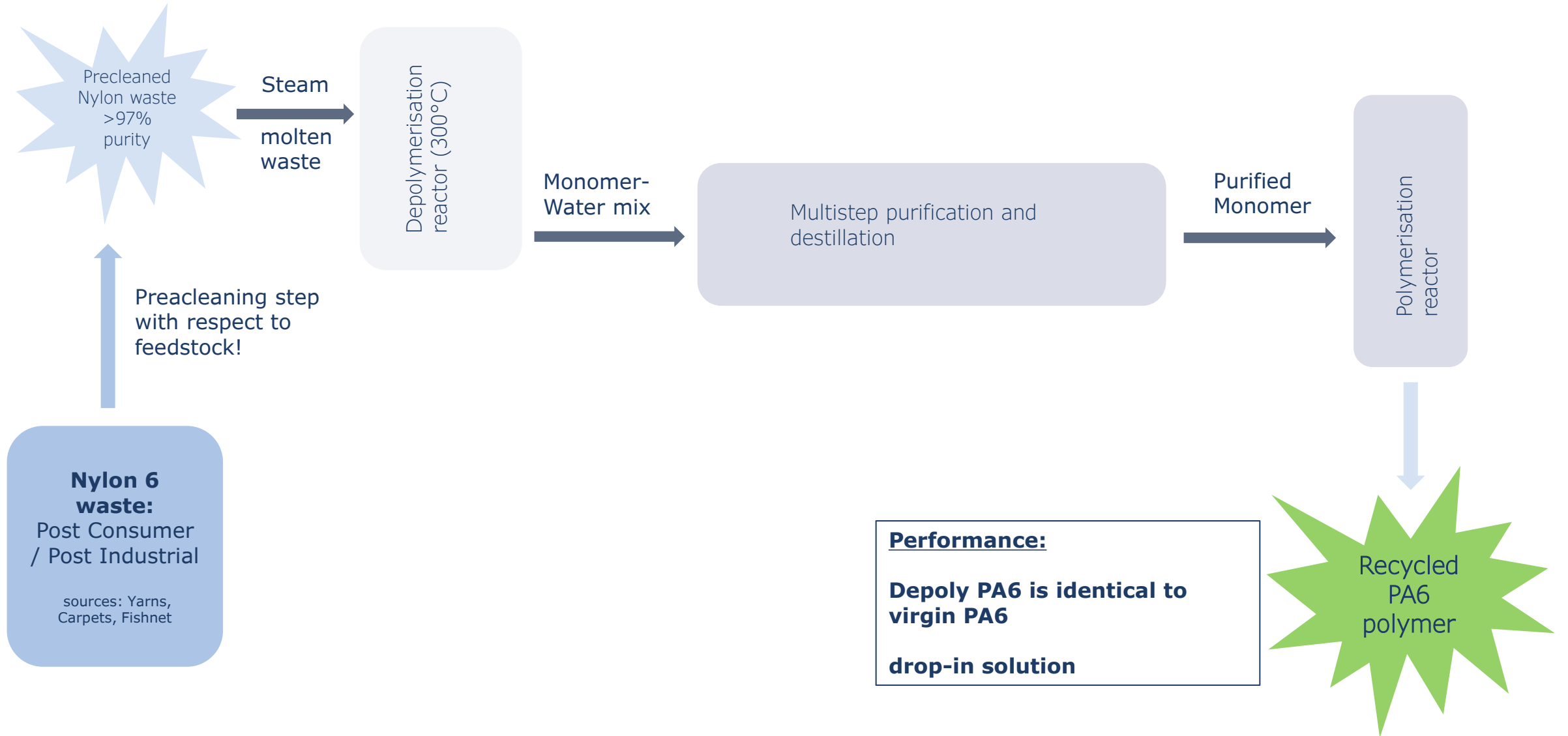


Functional tests



PA6 MONOMER RECYCLING

DEPOLYMERIZATION OF PA6



PA6 MONOMER RECYCLING

Flame Reatardant // Light color applications

- Color flexibility
- Flame retardant applications:
-> chemically recycled polymer = virgin polymer
(one time fingerprint test required by UL)

UL card remains valid // no rehomologation needed by customer

Example of nomenclature: **Technyl Protect C 52G1 V25 BK** -> **Technyl 4Earth C 52G1 V25 DP BK**
(prime version) (sustainable version)

- Recycled polymer content: 25-35% depending grade and customer request

FR grades examples:

TECHNYL 4Earth C 52G1 V20 DP	GY R7035 LPU
TECHNYL 4Earth C 52G1 V25 DP	GY 2747 *
TECHNYL 4Earth C 52G1 V30 DP	GY 2408

TECHNYL® 4EARTH® C 52G1 V25 CR GY 2747

TECHNYL 4EARTH®
Sustainable polyamide

From waste to new more sustainable residual current circuit breakers

- 50% recycled nylon
- 20% less CO₂ footprint compared to conventional materials
- Perfect color match
- Prime like performance






©DOMO Chemicals

In cooperation with **SIEMENS**

DOMO caring is our formula

PIONEERING CIRCULARITY

ISCC+ OFFERING - FOR TECHNYL® MBB AND MBC

	Mass-Balance 	PA6 resin	PA66 resin	Glass Fiber
 BIO-Circular	Feedstocks for TECHNYL® MBB	<ul style="list-style-type: none"> ▶ From Used Cooking Oil UCO and/or Biocircular Methane ▶ Up to 96% Biocircular PA6 ▶ Up to 100% CO₂ reduction vs fossil 	<ul style="list-style-type: none"> ▶ Up to 64% Biocircular PA66 ▶ Pending GWP assessment 	
 Circular (PCR)	Feedstocks for TECHNYL® MBC	<ul style="list-style-type: none"> ▶ Post-Consumer ▶ From end-of-life Tires TPO («Tyre Pyrolysis Oil») ▶ Up to 69% circular PA6 ▶ Pending GWP assessment 		<ul style="list-style-type: none"> ▶ Post-Industrial ▶ 100% circular ▶ 60% CO₂ reduction vs fossil

Switch mechanism



TECHNYL® PROTECT

C60 G1 V25
BK MBB45

45% mass balance certified bio-attributed PA6-GF25,
flame retardant

benefits

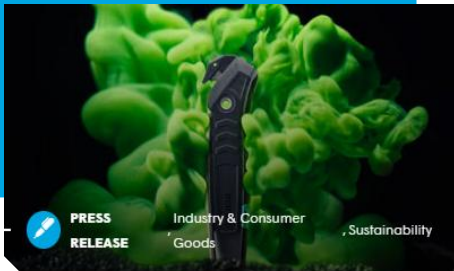
- > The ISCC PLUS-certified solutions allowed Vimar to introduce a sustainable material in applications that require excellent mechanical, thermal and aesthetic performance, using existing processing and tools.

PIONEERING CIRCULARITY

SUCCESS CASES

SUSTAINABLE SAFETY KNIVES

 CONSUMER GOODS



MARTOR opts for **DOMO's TECHNYL® 4EARTH®** sustainable polyamide for ECO line of knives.



SUSTAINABLE FAN & SHROUDS

 MOBILITY



TECHNYL® 4EARTH® wins the Plastic recycling award India 2024.



ELECTRIC SWITCHES

 ELECTRIC & ELECTRONIC



More sustainable solutions in electrical and electronics.



RESIDUAL CIRCUIT BREAKERS

 SAFETY PRODUCTS



Siemens and DOMO Chemicals join forces to drive sustainability in the electrical industry.



PIONEERING CIRCULARITY

OUR SUSTAINABLE SOLUTIONS – FOR MORE INSIGHTS ON OUR OFFERING VISIT WWW.DOMOCHEMICALS.COM

DOMO caring is our formula

About us Products Industries Services Sustainability Media

Sustainability at our core

At DOMO, we aim to become a sustainability leader in our sector. We care deeply about the communities in which we operate and our impact on the environment. This is why we embrace the United Nations Sustainable Development Goals (SDGs) and have included these in our sustainability targets (see below).

DOMO

Experience

As an integrated polyamide specialist, DOMO is a leading global solution provider for the circular economy. Discover our products.

Engineered Materials Product Finder

Find a product or property and filter through our product database

Search by product name **SUBMIT**

MOST SEARCHED FOR IN PRODUCTS

[TECHNYL®](#)

[Automotive](#)

[Industrial & Consumer Goods](#)

[Electricals & Electronics](#)

[View all products →](#)

SUSTAINABILITY CARING FOR A BETTER TOMORROW

SUSTAINABILITY REPORT 2023

2023 Sustainability Report

Our Sustainability Report showcases our efforts and progress we have made for 2023 to become a benchmark for sustainable development and social responsibility.

[Read more →](#)

OUR SUSTAINABLE SOLUTIONS

Setting the pace with sustainable polyamide solutions

Our aim is to continuously expand our sustainable portfolio and contribute to a more sustainable future.

[Read more →](#)

RECYCLED-BASED

Up to 100% recycled content

- From 30 to 90% CO2 reduction
- Mechanical performance matching application needs
- Dark colors

[More information →](#)

RECYCLED MOVE 4EARTH®

From 20 to 50% recycled content

- From 20 to 25% CO2 reduction
- Prime Similar Performance
- FR and hydrolysis resistant grades available
- Unlimited color choice

[More information →](#)

MASS BALANCE

Up to 100% recycled content

- From 16 to 34% CO2 reduction
- Prime identical Performance
- No re-homologation needed
- Virtually all products available

[More information →](#)

BIO-BASED

From 59 to 63% bio-based content

- Excellent Product Performance
- Unlimited color choice

[More information →](#)

THE INDUSTRY MUST ACT NOW AND TOGETHER !

READY TO PARTNER

Sustainability
100% recycled polymer content

CO₂ reduction:
up to 92%
Compared to virgin alternatives
Unfilled

4EARTH® A1E 316 H
 4EARTH® A2E 216 H
 4EARTH® A2E 236 H
 (impact)
 4EARTH® AC2E H
 4EARTH® C2E 216 H
 4EARTH® C2E 219 H
 4EARTH® C2E 216M H
 (impact)
 4EARTH® C2E 236 H
 (impact2)

GF

4EARTH® A1E 218 V30 H
 4EARTH® A1E 218 V35 H
 4EARTH® A1E 218 V50 H
 4EARTH® A2E 219 V30 H
 4EARTH® A1E 318 V25 H
 4EARTH® A1E 318 V40 H
 4EARTH® C2E 216 V15 H
 4EARTH® C2E 216 V20 H
 4EARTH® C2E 216 V25 H
 4EARTH® C1E 216 L2 V30 H
 4EARTH® C2E 219 V35 H
 4EARTH® C2E 249 L1 V15 H

CF

4EARTH® A9E 218 C10 NC H
 4EARTH® A9E 218 C30 NC H
 4EARTH® AC9E 218 C10 H
 4EARTH® AC9E 218 C10 Y20 H
 4EARTH® C9E 218 C10 NC H
 4EARTH® C9E 218 C30 NC H
 4EARTH® C9E 218 C50 NC H

Mixed filled

4EARTH® C2E 216 S30 H
 4EARTH® C2E 218S MV30 H
 4EARTH® C5E 216 M20 H

HFFR

4EARTH® A2E 32G1M
 4EARTH® A1E 60G1 V25
 4EARTH® A1E 60G1 V25
 4EARTH® A1E 20 V25

>50% recycled polymer content

CO₂ reduction:
up to 50%
Compared to virgin alternatives

4EARTH® C2E 216 V15
 4EARTH® C2E 238 V15 (impact)
 4EARTH® C2E 216 V30
 4EARTH® C2E 218 V30
 4EARTH® C2E 216L1 V30
 4EARTH® C2E 218 V35
 4EARTH® C2E 216 V40
 4EARTH® C2E 216 V50
 4EARTH® A2E 216S V20 BK 21N

<50% recycled polymer content

CO₂ reduction:
up to 20%
Compared to virgin alternatives

1 = recycled matrix polymer without TiO₂/pigments including ex A4E
 2 = recycled matrix polymer with TiO₂/pigments or property damaging additives
 9 = High Performance fully recycled carbon fibre range

TECHNYL® 4EARTH®

Sustainable polyamide

A1E 218 V30 BK 34NG LP

HIGH QUALITY RECYCLED PA66 GF 30 FOR COOLING APPLICATIONS



Recycled material
35% in the compound

High quality recycling sourcing
compared to traditional mechanical recycling

Cooling application compatible
both with ICE and EV

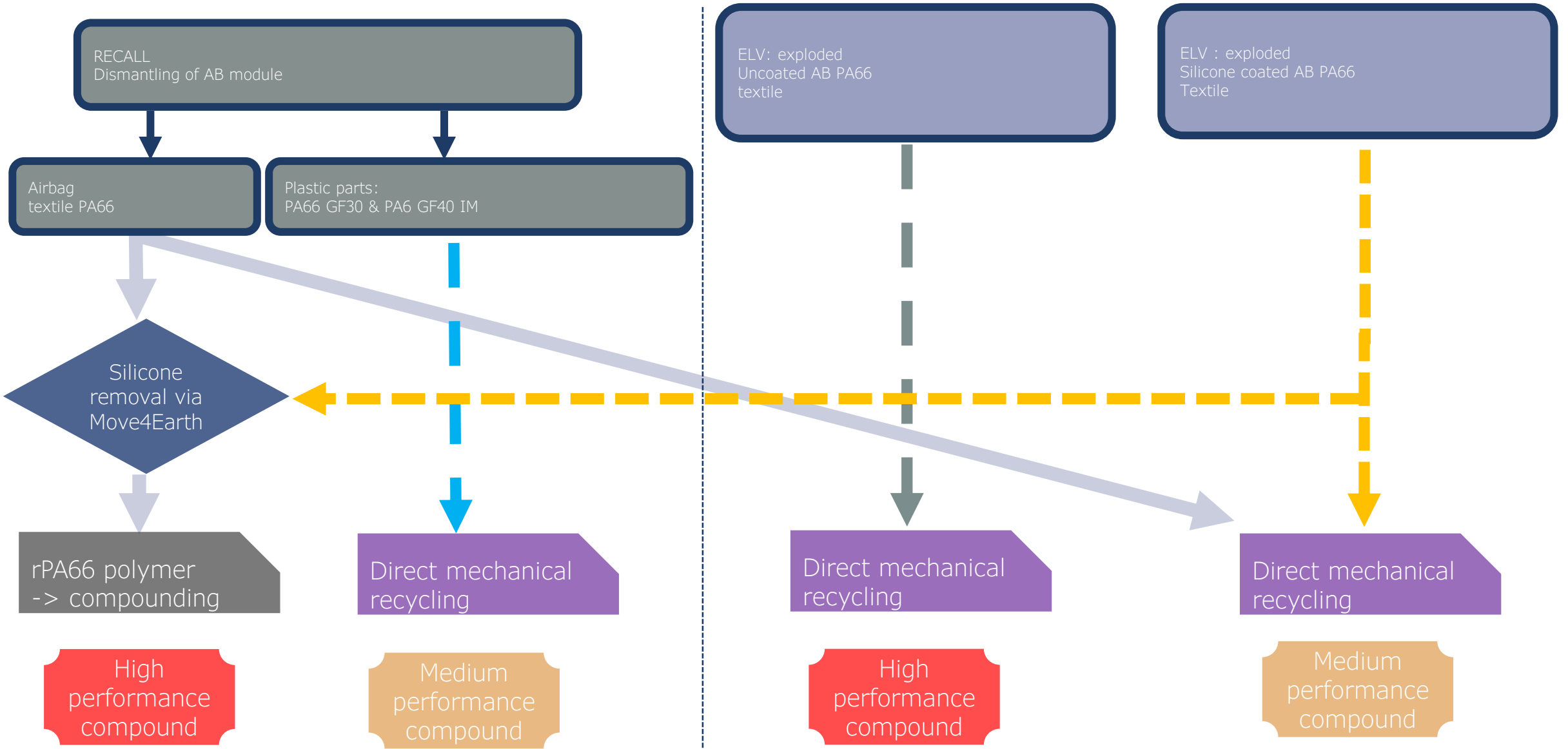
Iso glycol performances
than Prime material A 218 V30 BK 34NG LP

Similar processing
than Prime material A 218 V30 BK 34NG LP

Similar surface aspect
than Prime material A 218 V30 BK 34NG LP



PROCESSING OPTIONS



PA6 MONOMER RECYCLING**LIGHT COLOR APPLICATIONS / STRUCTURAL APPLICATION**

Color: natural polymer available

Colored compound upon customer specification on demand available

Example:

TECHNYL 4Earth C 219 V30 DP NC H

Furniture application:

General naturel grades:

TECHNYL 4Earth C 216 V15 DP NC H

TECHNYL 4Earth C 216 V30 DP NC H

TECHNYL 4Earth C 216 V35 DP NC H

TECHNYL 4Earth C 216 V40 DP NC H

