

## **NEXEO PLASTICS**



#### Who We Are





## Nexeo Plastics is a leading global thermoplastic resins distributor

Serving a global customer base with quality products from first-class suppliers.

Unlocking value for suppliers and customers through efficiency and reducing complex processes

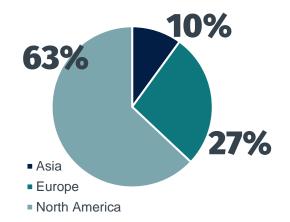
#### Where We Are







|                   | Regional Overview                  |              |                          |
|-------------------|------------------------------------|--------------|--------------------------|
|                   | AMERICAS                           | EUROPE       | ASIA                     |
| Sales<br>Coverage | North America                      | Pan-European | Central/Eastern<br>China |
| #Warehouses       | 9 and 60 (3PL)                     | 18 (3PL)     | 15 (3PL)                 |
| Fleet             | 140 units (private<br>fleet) & 3PL | 3 PL         | 3PL                      |



### **NEVICOLOR:** the most complete technical partner



Nevicolor is a leading Italian thermoplastic distributor and compounder that joined the Nexeo Plastics family in June 2021.

#### SOME NEVICOLOR PRODUCTS...



#### Food contact certified

New range of products designed in compliance with norm EU 10/2011 and FDA, in accordance with GMP



#### **Precision molding**

Very high fluidity and dimensional stability for molding with superior precision



#### ISO 10667 Certified

Recycled thermoplastic granulates with low environmental impact and reduced CO2 emissions



#### Certificates by sector medical

ISO certifications 10993 and USP VI for the medical market



#### Supertechnopolymers

Very high mechanical performance. Available with carbon fiber, PTFE. Silicone, Barium Sulphate

And more...

It provides Nexeo Plastics access to Nevicolor's robust offering of tailor-made compounds, specialty polymers, lab services and recycled material, as well as its highly technical and analytical specialization in the industry.

### Plast analisi® High-level Analysis of Plastics

PLASTANALISI® is a Plastic Testing Laboratory able to carry out accurate composition analyses, mechanical tests, thermal and functional tests of plastic components.













experience

customers

Over 2000 analysis

5 days average delivery ISO090011 Quality time for analysis results

Certification

#### MAIN ITALIAN PRODUCT LINE CARD















#### **OUR SUPPLIERS**









































Progress beyond

## Bringing More Sustainable Solutions to Consumer Appliances

Federico Baruffi

Smart Plastics 2022 - September 15<sup>th</sup> 2022







## Agenda

Our Commitment to Sustainable Progress

How our materials can support your sustainability targets

Real world applications case studies

Q&A







## Solvay Materials

Our Commitment to Sustainable Progress



## Solvay Today



We are a science company whose technologies bring benefits to many aspects of daily life.

Our innovative solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, healthcare applications, water and air purification systems.

Our Group seeks to create sustainable shared value for all, notably through its Solvay One Planet plan crafted around three pillars: protecting the climate, preserving resources and fostering better life.













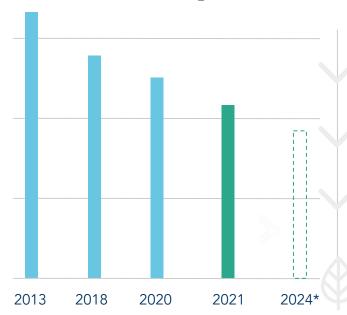






# Carbon Footprint evolution for Amodel® PPA

GWP expressed in CO<sub>2</sub> eq./kg of Amodel® PPA



Energy efficiency measures

100% renewable electricity

Introduction of bio-derived monomers gen 1

Introduction of bio-derived monomers gen 2



Carbon footprint of our Amodel<sup>®</sup> PPA was reduced by 30% between 2013 and 2021

<sup>\*</sup>expected improvement







## Solvay Materials Solutions

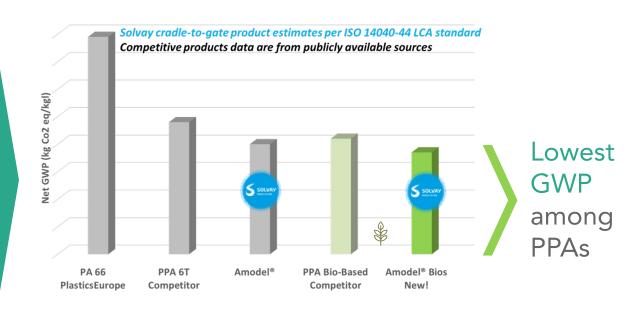
Sustainability without compromise on Performance







- Partially Bio-sourced (Lower GWP than 6T PPA)
- Bio-based resin from non-food competing feedstock
- Resin produced with 100% Renewable Electricity
- Highest Tg (135°C) among Bio-based PPA
- Lower Moisture absorption than 6T PPA
- High elongation & weldline strength
- Dimensional Stability & Chemical resistance

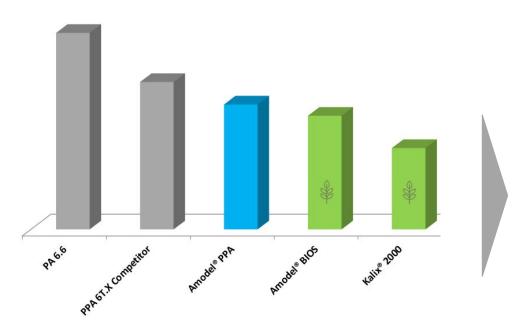


Up to -14% GWP Reduction vs. standard PPA





#### Net GWP (kg CO2 eq/kg)



#### Kalix® 2xxx Series

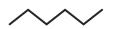
HPPA variant - the structural material with optimal combination of:

- strength,
- stiffness,
- aesthetics,
- low moisture pick-up,
- bio-based content (made from castor bean oil)
- produced from 100% renewable electricity.



## Omnix® ReCycle HPPA

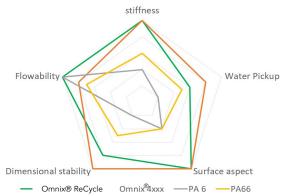


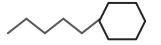


#### PA6 & PA 6.6

#### Standard Performance

- Chemical resistance
- Good mechanical performance
- Good heat resistance
- High moisture absorption



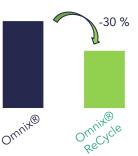


#### Omnix® ReCycle HPPA

#### Best of PA 6 and 6.6 plus...

- Better mechanical properties
- Lower water absorption
  - Better dimensional stability
  - Better retention of mechanical properties
- More aesthetic surface appearance

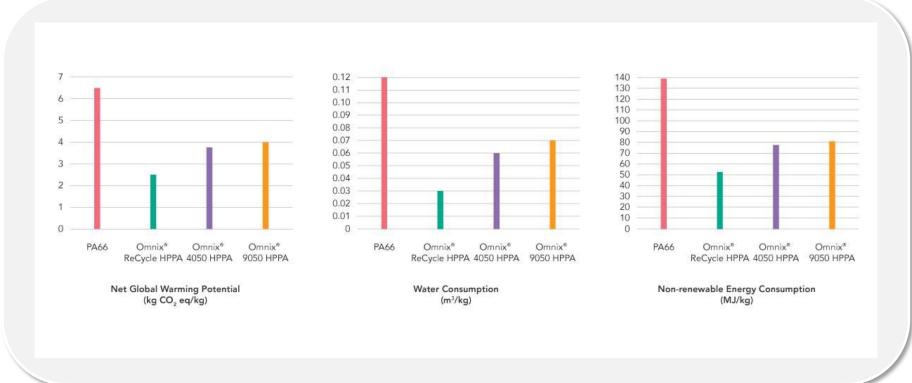




## Omnix® ReCycle HPPA



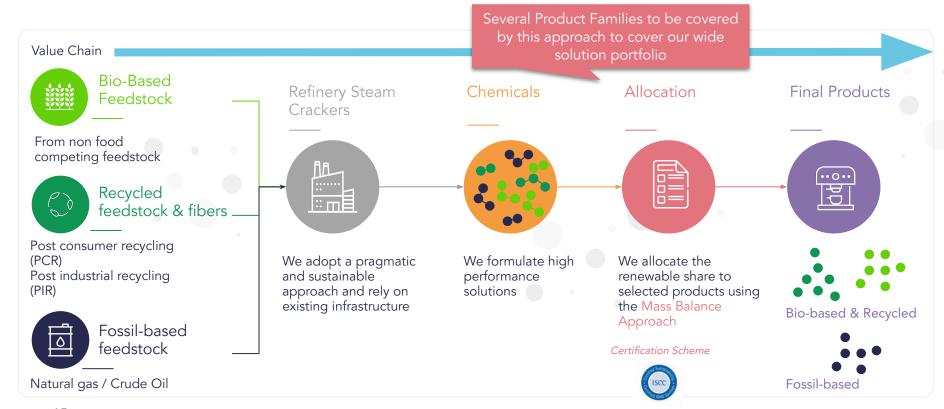






## • The mass balance approach











## Sustainability & Circularity in Action Case Studies



## Where Omnix® ReCycle can bring value and competitive advantage

Some examples in the Consumer Appliances Market



Coffee makers (Both Drip & Single serve types)



Ovens & Air Fryers



Microwaves



Kitchen Utensils



Compressors (refrigerators)



Food processors & slow cookers

## Key benefits compared to PA6 and PA6.6

- Better mechanical properties
- O Lower water absorption

Better dimensional stability

Better retention of mechanical properties

- O More aesthetic surface appearance
- C Lower GWP
- Recycled resin content up to 70%



## Omnix® ReCycle for Coffee Machines



#### Gear Box

#### **Support Frame**



#### Omnix® ReCycle:

- High stiffness
- Easy to mold
- Lower moisture absorption vs standard PA
- Low GWP

#### Omnix® ReCycle:

- High stiffness
- High dimensional stability
- Outperforming standard PA
- Low GWP

#### Front Exterior Part



#### Omnix® ReCycle:

- Excellent surface quality
- High flowability
- High stiffness
- Low GWP



#### Capsule holder

#### Omnix® ReCycle:

- Excellent surface quality
- Easy to mold
- Outperforming standard PA
- Low GWP



## Omnix® ReCycle for Kitchen Robots and Food processors



#### Kitchen robot chassis

#### Replacing

- Aluminium dies cast
- Painting on plastic



#### Solvay Value Proposition

Omnix® ReCycle offers a unique combination of performances:

- → high stiffness (50% Glass Fibre)
- colorability and surface appearance (no painting)
- meeting cost & sustainability targets



Reduction of Global Warming Potential

Omnix® ReCycle

Painted polymer

### Questions? • • •





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Progress beyond











