

Introduction to Advanced Solutions

LyondellBasell Masterbatch and Color Concentrates

Our approach to Sustainability

We have developed five program areas to address the key overarching challenges:



0 pellet loss to the environment

Using our scale and reach to make a positive impact across our value chains

* AEPW ambition by 2025 and beyond ** ACC and PlasticsEurope goal



Sustainability is key for brand owners and consumers.

We are facing **design**, **sorting and recycling challenges** across the packaging industry.

- Major companies with well-known brands have expressed the need to inspire responsible consumption.
- They are putting a strategic social or environmental commitment at the heart of the consumer experience.
- Consumers are increasingly making more conscious sustainable choices.



Design Challenges. Today's packaging solutions need to be designed thoughtfully in order to be recyclable

- Product Design includes the selection of materials which support reuse or recyclability
- Recycling-ready packaging designs aims at the complete sustainable solution, a responsibility shared by all in the packaging value chain





LyondellBasell's Advanced Solutions Masterbatch and Color Concentrates Portfolio With our varied material technologies knowhow and sustainability focus, we are your partner of choice for innovative solutions



LyondellBasell Solutions support intelligent design of articles to improve recyclability of a given product

- Design for circularity is optimizing packaging design which supports sorting and recycling processes
- Mono-material packaging, easy separation and the use of additives play an important role in determining the recyclability of a given product and eventual quality of the recyclate



LyondellBasell Recycled solutions include Masterbatch and Color Concentrates that contain post-consumer or post-industrial recyclate as carrier resin

- Many brand owners and retailers have committed to increasing recycled content in their packaging to an average of 25% by 2025, compared with the current global average of just 2%¹
- Masterbatch and Colors with post-consumer or post-industrial carrier help our customers reach their recycled content goals

1. The Ellen MacArthur Foundation.

LyondellBasell Masterbatch and Color Concentrates based on renewable resources offering the same properties as their virgin counterparts

- Masterbatch based on renewable non-fossil fuel carriers are ideal drop-in solutions for sustainable food packaging, films, toys and cosmetics
- The products can be applied, with no restrictions, to the same applications as fossil-based equivalents offering lifetime performance and especially recyclability.



LyondellBasell's Advanced Solutions Masterbatch and Color Concentrates Portfolio We need to design and select materials to improve the sorting and recycling of plastics. With our *Advanced Solutions* product range and our technical expertise, we offer solutions to support you in reaching your sustainability goals