

Advancing Rigid Packaging with Up to 70% PCR

GCR and CurTec validated CICALICNXT® rHDPE solutions for injection and blow molding applications, supporting high PCR content, smooth processing, and lower CO₂ impact in rigid packaging.

Challenge

CurTec had established specific recycled content levels across its rigid packaging range, with **50% PCR for injection-molded** formats and **70% PCR for blow-molded** applications.

The challenge was to **integrate** those levels of post-consumer recycled HDPE **without affecting technical requirements** or the **processability** for industrial production.



**Blow
 molding**
70% PCR
65% CO₂ reduction



**Smooth
 processing**
**Virgin-like
 behaviour**



**Injection
 molding**
50% PCR
45% CO₂ reduction

Solution

GCR partnered with CurTec to validate CICALICNXT® rHDPE for **rigid packaging in injection and blow molding**, selected for its controlled feedstock, high cleanliness, and reliable processability.

Validated scope:

- ▀ **Injection molding:** lids and drums with **50% PCR content**
- ▀ **Blow molding:** drums with **70% PCR content**

This validation confirmed the suitability of CICALICNXT® rHDPE across multiple high-PCR rigid packaging formats at CurTec.

PPWR Relevance

PPWR is increasing the focus on minimum recycled content in plastic packaging. This case shows that high PCR levels can already be integrated into demanding rigid packaging formats with the process efficiency needed to support practical readiness.

GCR and CurTec demonstrate that CICALICNXT® rHDPE can support high-PCR rigid packaging for demanding applications, with the reliability and processability required for industrial production.