Now

CIRCULOOS

Plastic Pilot

Controlling and recycling manufactured plastic

Plastic Pilot

Recycled plastic in home-appliance components

Thermolympic · Zaragoza, Spain



CIRCULOOS

Funded by the European Union

This project has received funding from the European Union's "Horizon Europe" programme under grant agreement 101092295

CANONICAL ROBOTS

CONTENEDORES LOLO

Thermolympic
PLASTIC INJECTION SYSTEMS

WHO WE ARE

CIRCULOOS

A family-owned injection moulder supplying Europe's appliance makers

Family-owned company

Plastic injection

30+ years of experience

Zaragoza, Spain

Main sectors: automotive · home appliances · consumer goods

What we bring: technical expertise in injection moulding, a highly automated line, and a standing commitment to recycled material.

CHALLENGE

CIRCULOOS

Up to 50% recycled granulate in a washing-machine detergent dispenser

Reduce impact

Less virgin resin, lower CO2 per part

Secure recycled supply

Qualified granulate from certified recyclers

Access a marketplace

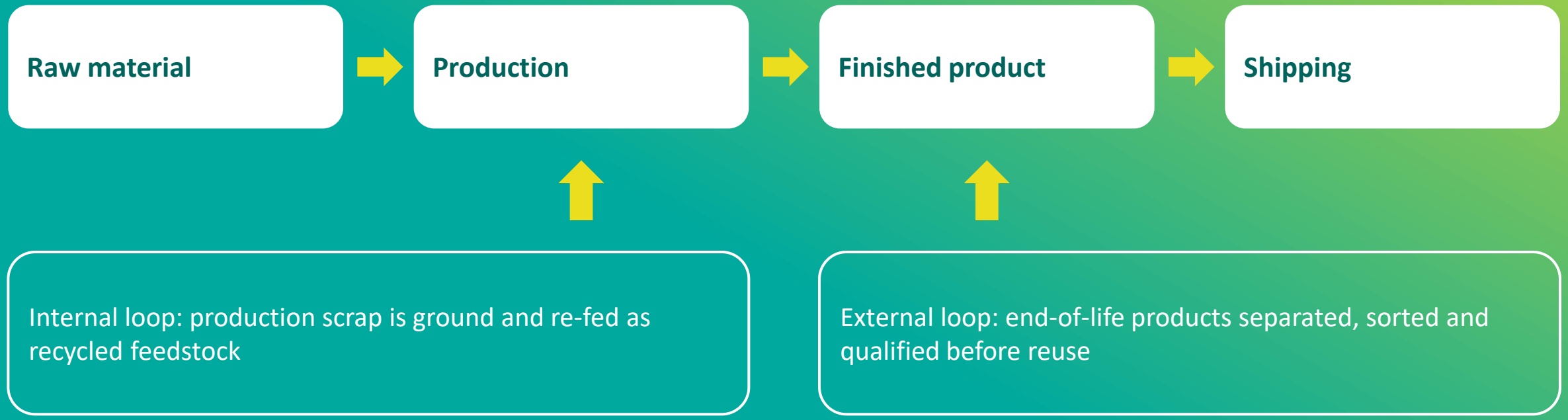
Trade secondary materials through CIRCULOOS

Reference product: detergent dispenser for washing machines

PROCESS

CIRCULOOS

We close the loop inside the plant and across the supply chain



Recycled granulate is inspected before injection, so part quality matches virgin material

PARTNERS

CIRCULOOS

Two partners make the recycled loop work



Contenedores LOLO

Supplier of recycled material

Collects and processes post-consumer and post-industrial plastic, and delivers granulate qualified for injection moulding.



Canonical

Technology integrator

Detects potential issues in the incoming material, so variability in the feedstock never reaches the mould.

CANONICAL ROBOTS

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PLASTIC PILOT

CLOSING THE LOOP
FOR A CLEANER TOMORROW

LESS PLASTIC

LOWER CO_2

CIRCULAR SOLUTIONS

1 USE
Detergent drawer in everyday life

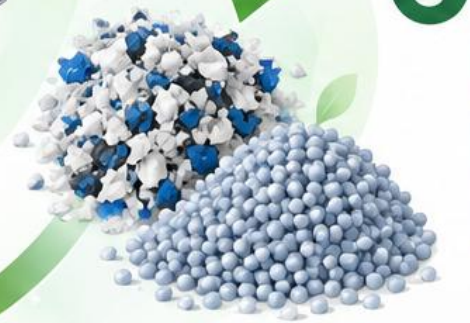


2 COLLECTION
Used drawers at end of life



3 RECYCLING
(Contenedores LOLO)
LOLO receives, sorts and granulates the material

CONTENEDORES LOLO



4 VERIFICATION
(Canonical Robots)
AI vision technology to ensure material quality



CANONICAL ROBOTS

5 TRANSFORMATION
(Thermolympic)
Injection moulding with verified recycled material

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6 ASSEMBLY
The detergent drawer is ready for use



From waste to a new life



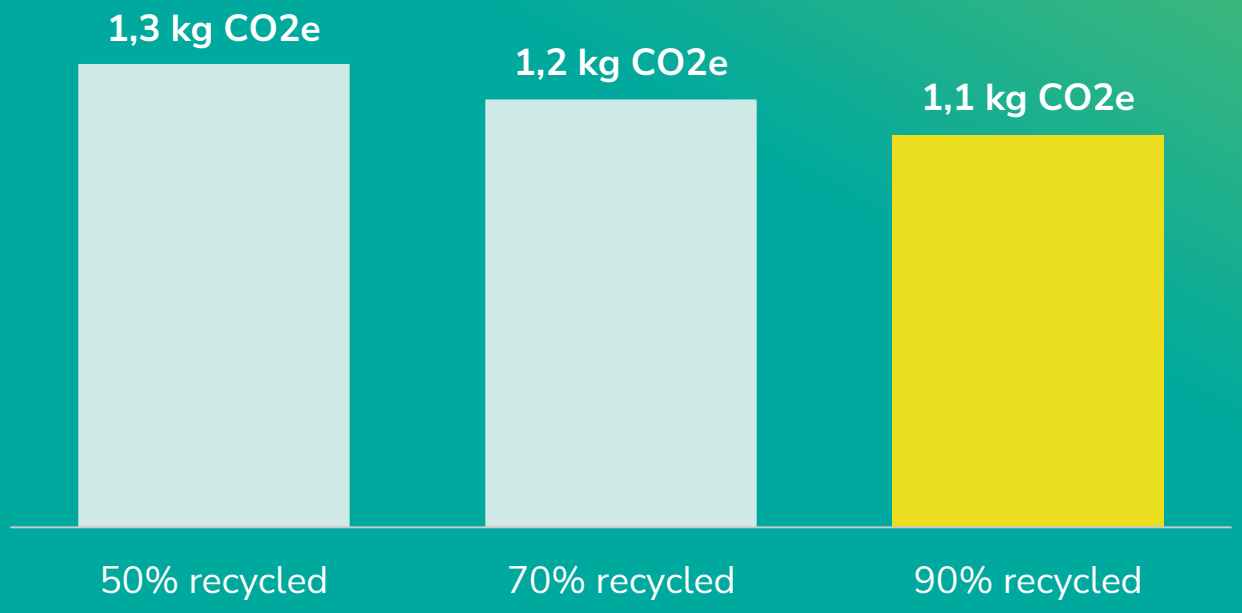
Same Part A Cleaner Tomorrow

A CIRCULAR EUROPE FOR A BRIGHTER TOMORROW

RESULTS

More recycled content keeps cutting the footprint: 1.3 to 1.1 kg CO2-eq per dispenser

Carbon footprint per dispenser, by recycled content



- Virgin material demand falls sharply
- Recycling adds only marginal impact
- Circular scenario wins at every stage

Source: CIRCULOOS life cycle assessment with the GRETA tool, 2026

KPIs

Every pilot KPI meets or beats its benchmark

Impact	KPI	Result	Benchmark
Environmental	Recycled material used	50%	n/a
Environmental	CO2 emissions vs virgin plastic	-27%	≥ 25%
Economic	Production cost reduction	>25%	30%
Economic	Energy saving (avg. scrap rate)	10.5%	10%

Also measured: 32% less non-renewable energy use and 28% less water consumption, with no loss of part quality.

Source: CIRCULOOS life cycle assessment with the GRETA tool, 2026

SCALING UP

CIRCULOOS

Two open-call projects extend the pilot beyond our plant

CIRCUPRINT

Recycled thermoplastic into large printed parts

Post-industrial and post-consumer leftovers are fed into a BAAM extruder to print durable products such as furniture.

Expected: 10-25% less CO2, 30% more waste re-used

RePlast

AI sorting on the moulding line

Mixed scrap is sorted by polymer and colour by an AI vision system, and every batch is tracked with a digital passport.

Expected: 20-30% less virgin plastic demand

Both routes plug straight into the plastic pilot: same feedstock, same quality checks.

WHAT'S NEXT

CIRCULOOS

From one dispenser to the rest of the catalogue

1. Extend 50% recycled content to more home-appliance parts, starting with the families already validated.

2. Qualify more recyclers through the marketplace, so supply of certified granulate keeps pace with demand.

3. Share the inspection method with other moulders, so recycled feedstock stops being a quality risk.

We are looking for recyclers with steady certified supply and brands ready to spec recycled content.