

8 | 10 | 21  
ANTWERPEN



SDG-Trefdag

# SPAN KRACHT

Locale actoren samen voor  
duurzame ontwikkeling



## ***Circulaire Economie & Recyclage***

***Nicolas Braem***

***Founder & CTO***

***POLYPERCEPTION***



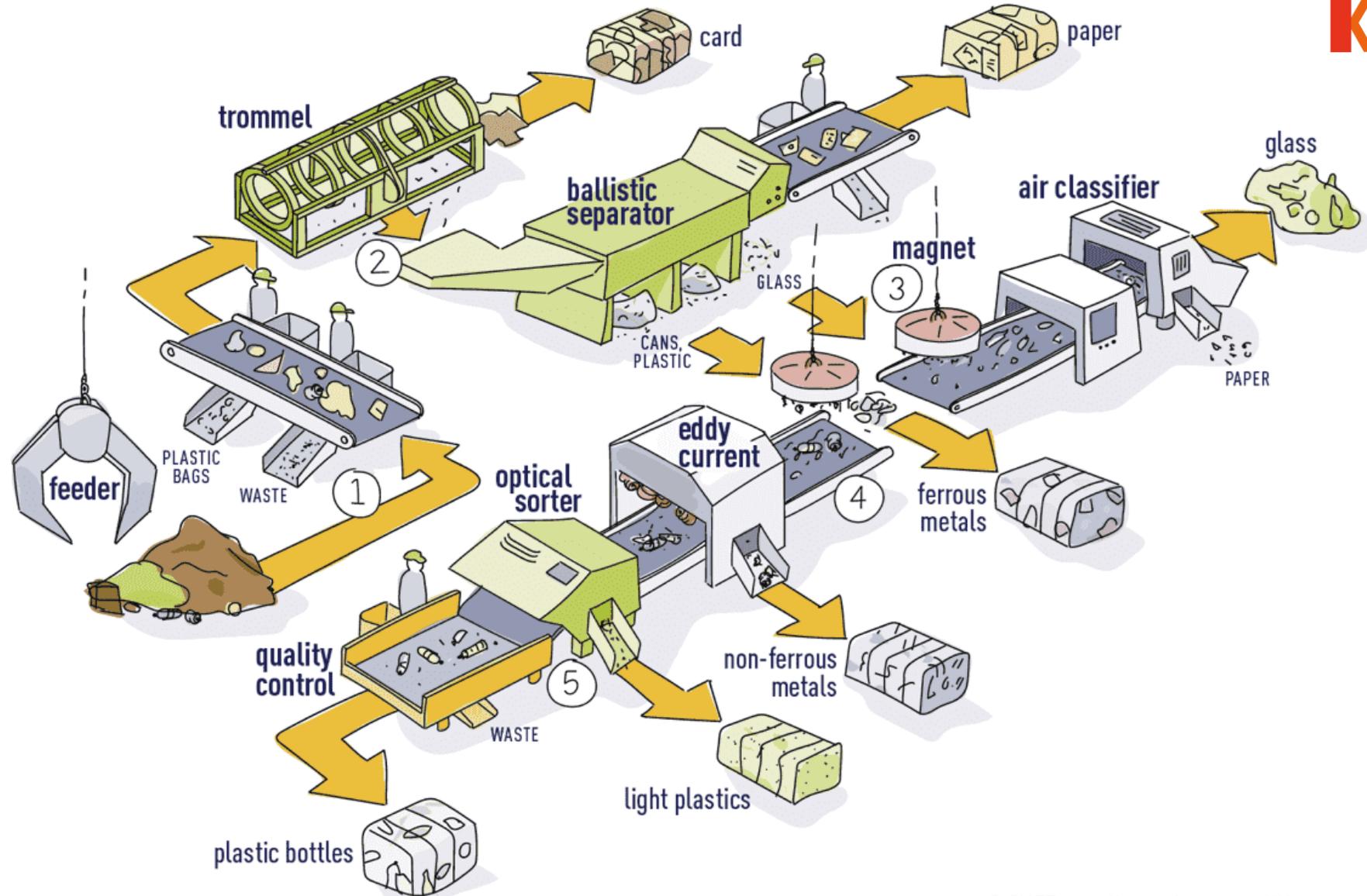


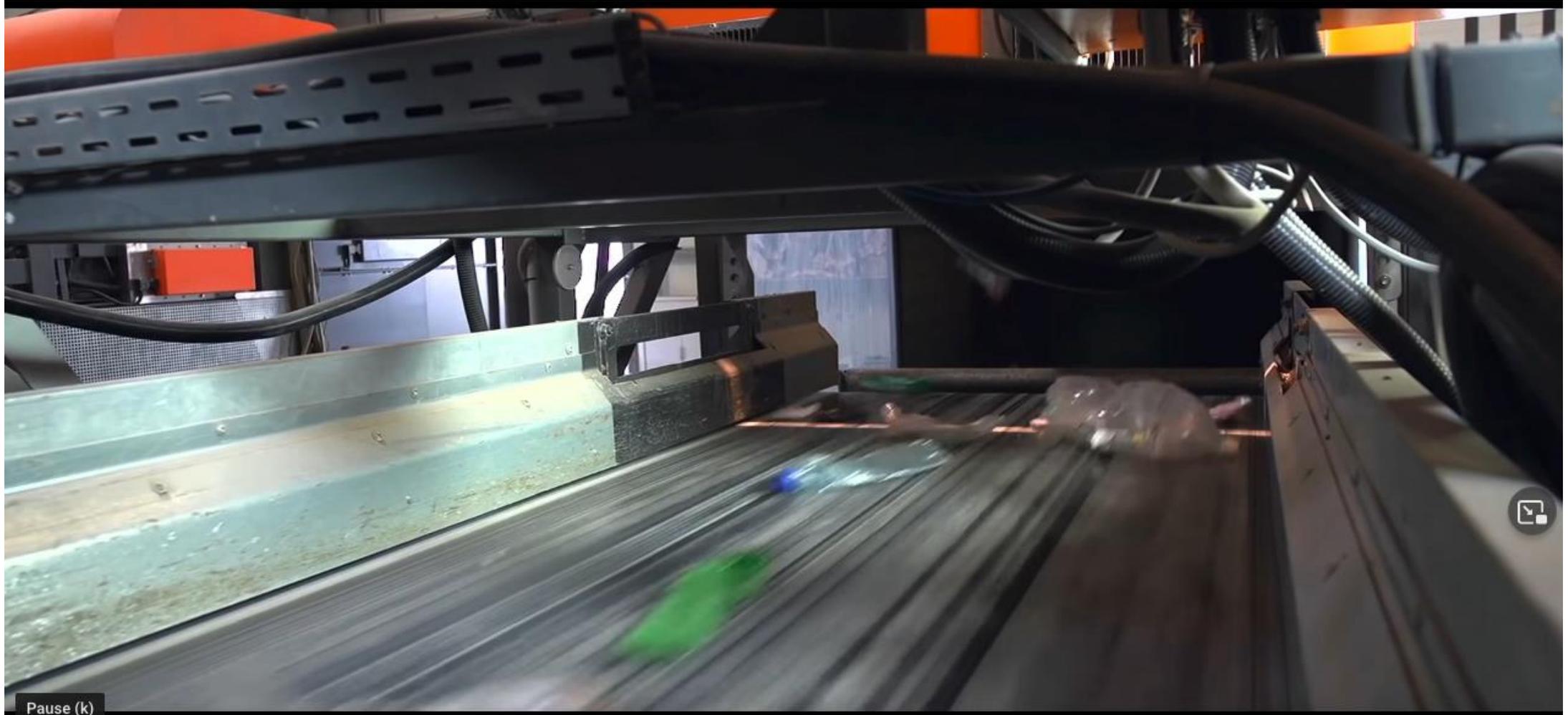
# POLYPERCEPTION

*We want to empower **decision makers** across waste management with real-time data and valuable insights to make **more impactful decisions**, as we transition towards a circular future.*

VANAF 1 APRIL 2021

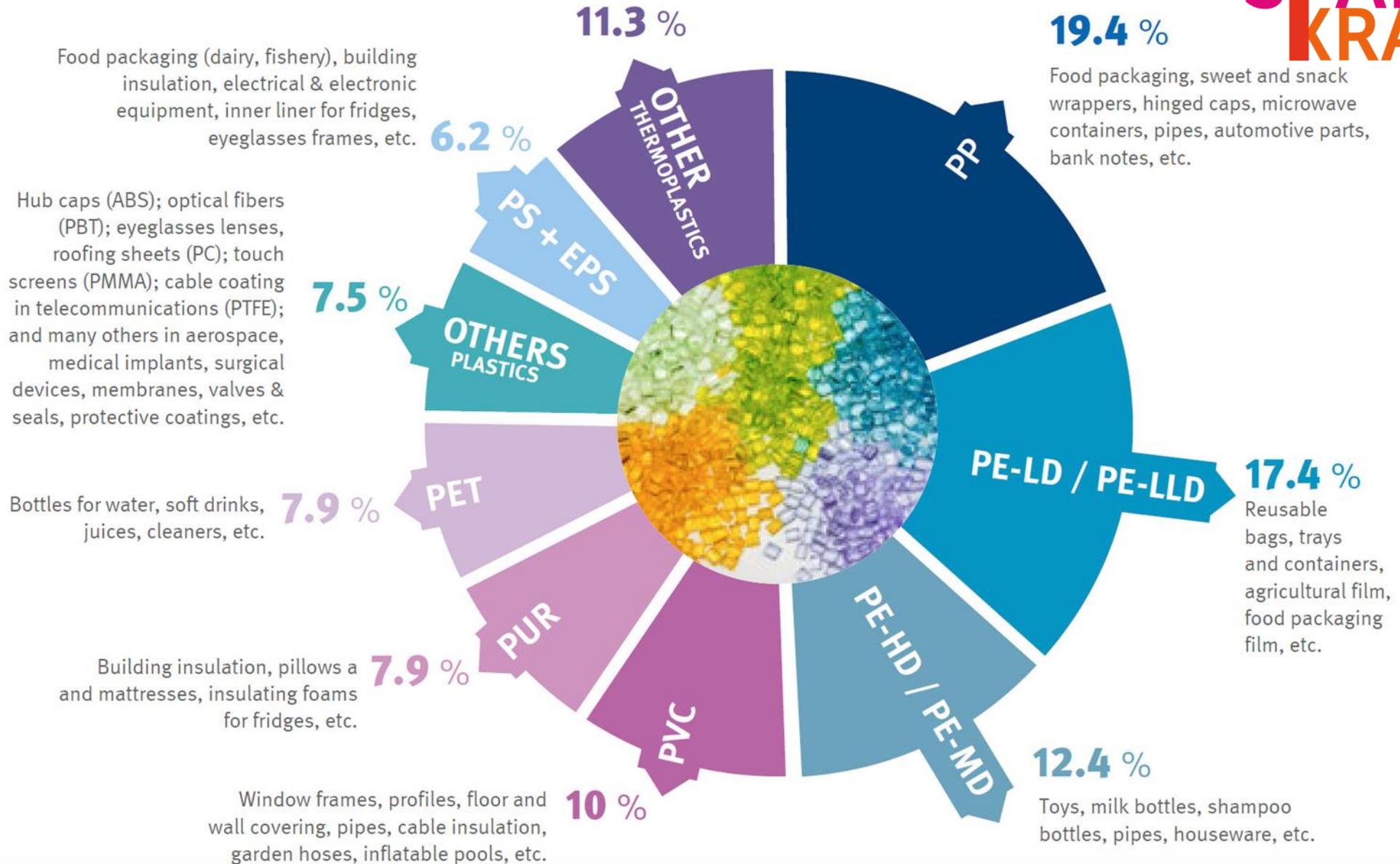








# SPAN KRACHT



SOURCE: PlasticsEurope, Market , Research Group, (PEMRG) and Conversio Market & Strategy GmbH

We're moving to 100% recycled plastic bottles for all our locally-produced brands in the Netherlands and Norway.



**ecoo**  
Rethinking plastics

EN ▼ For your garden ▼ Solutions for enterprises ▼ Our story ⋮ Menu 🔍

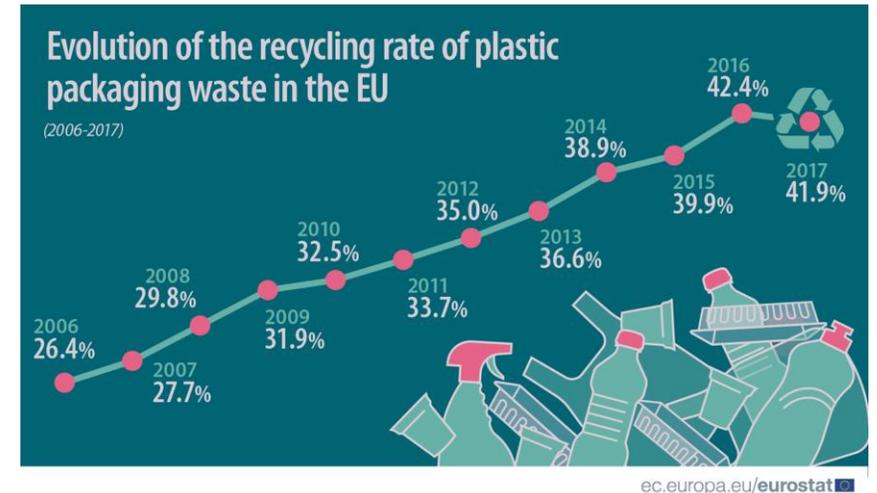
## From your residual plastics we create garden benches

Ecoo recycles your residual household plastics into new products that matter. This is how we give this raw material a sustainable place in the world again.



## European Waste Market is set for a decade of change

The European Commission published  
in its *'Strategy For Plastics In A Circular Economy'* a  
**4x increase in sorting and recycling capacity for plastics**  
from 2015 to 2030



## ***Plastics Recovery Facilities (PRFs) operate with little information***

PRFs know very little about:

- **Composition** of mixed **input** waste stream
- **Quality** of **sorting processes** across the sorting line
- The **recovery rate** and **purity** of the separated output waste

This limits their Operational abilities, Commercial and Investment decision making and Auditing requirements

Today they rely on manual sampling to get this information, but this method is **slow, inaccurate and costly**

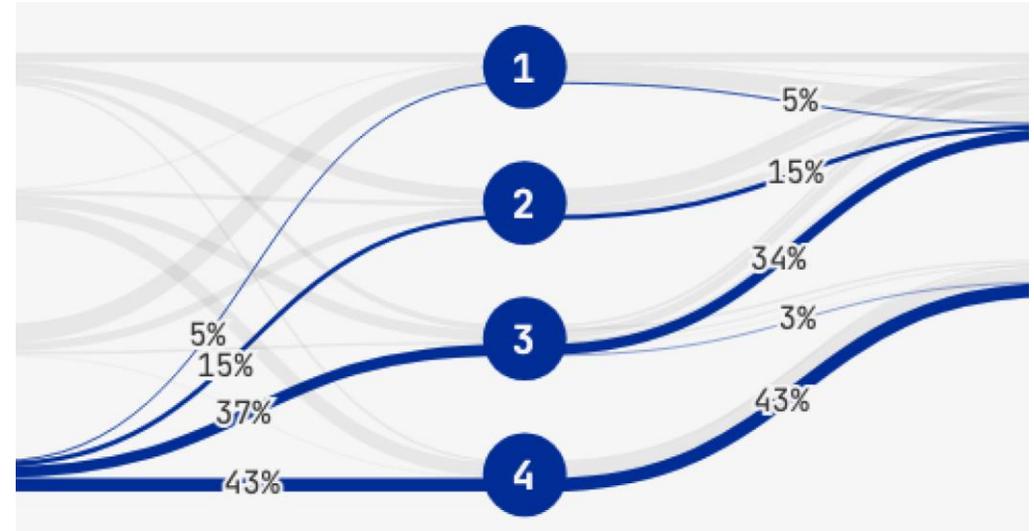


***Let's use AI to  
gather insights***

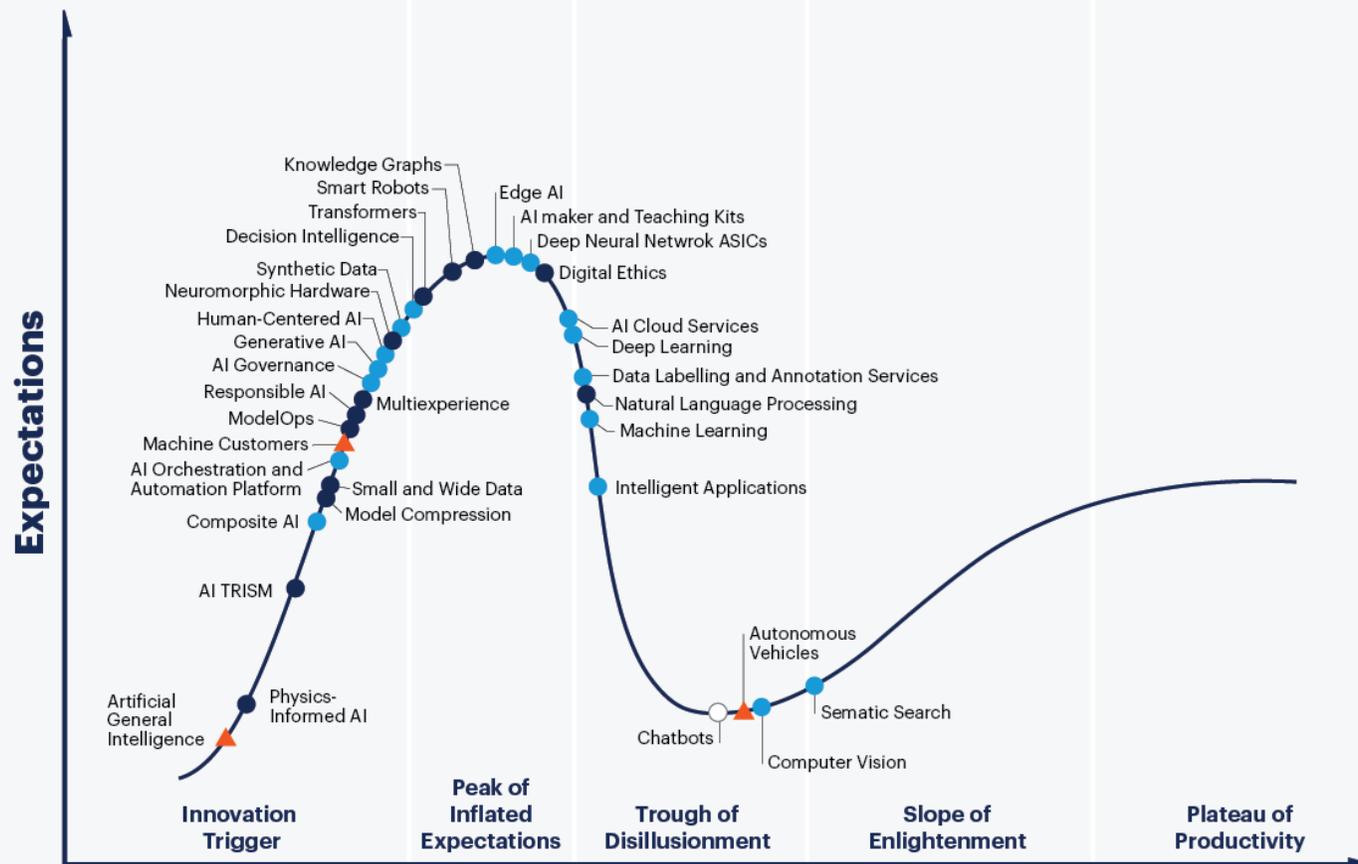
# *We track waste at object level throughout PRF's*



We deploy cameras across the line giving us a digital twin of the sorting process.



# Hype Cycle for Artificial Intelligence, 2021



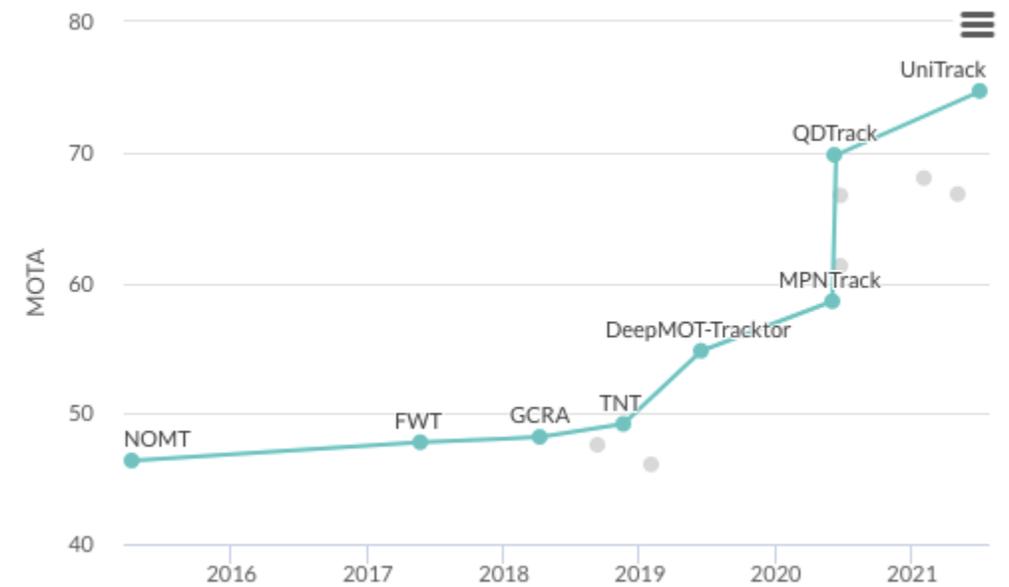
Plateau will be reached:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- ▲ more than 10 years
- ⊗ obsolete before plateau

As of July 2021

[gartner.com](https://www.gartner.com)

# Multi-Object Tracking

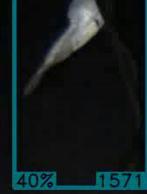




Aluminium Can 11.27g



Plastic Other 1.32g



Plastic Bottle FOOD Clear 20.09g



Tetra Pak 19.23g



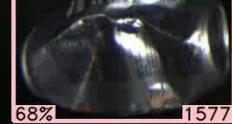
Tetra Pak 19.88g



Aluminium Can 10.56g



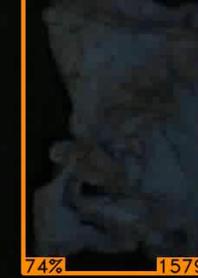
Aluminium Can 11.04g



Aluminium Can 10.20g



Plastic Foil 5.67g



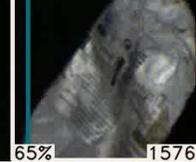
Tetra Pak 22.37g



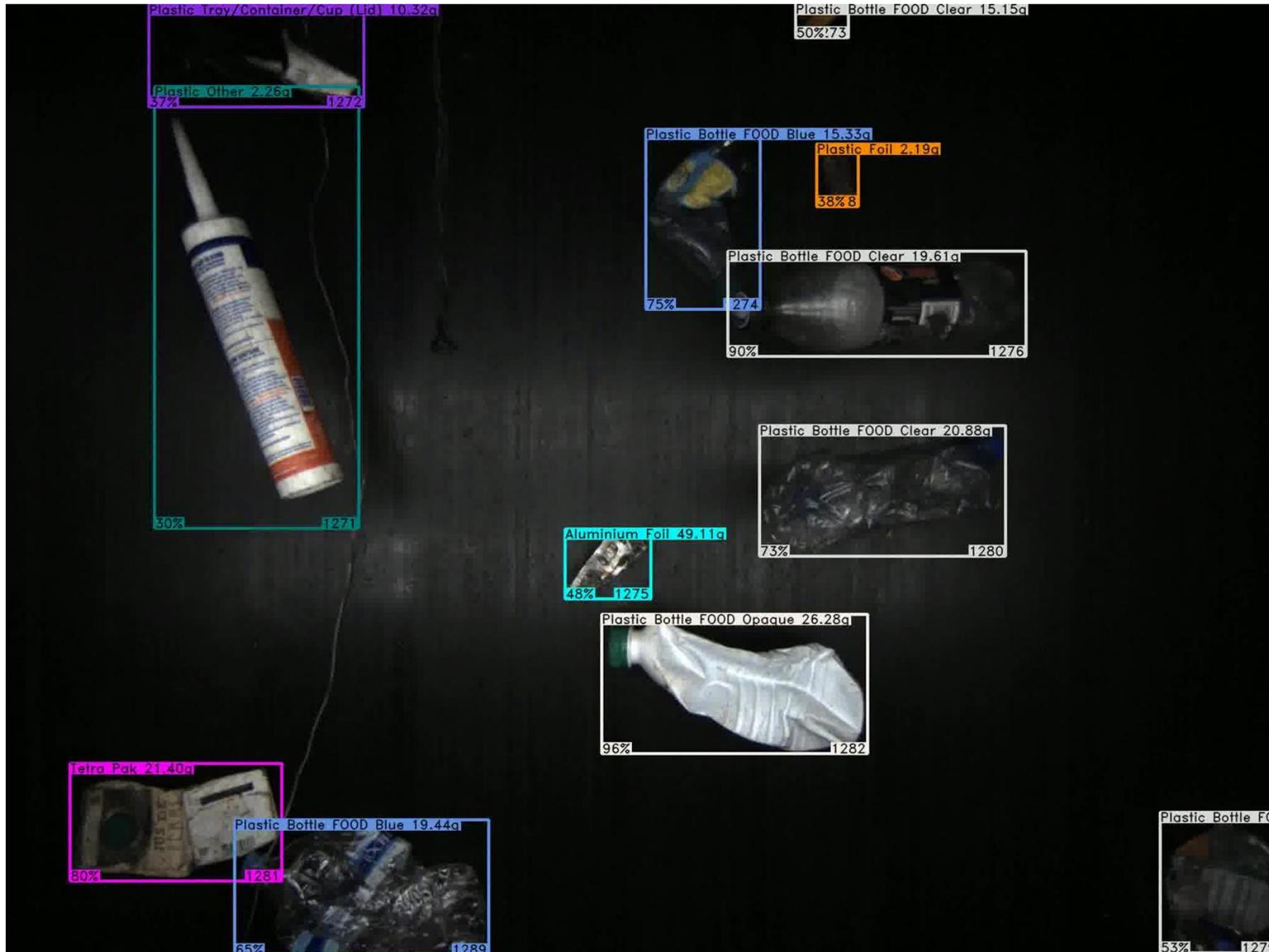
Plastic Bottle FOOD Clear 15.54g



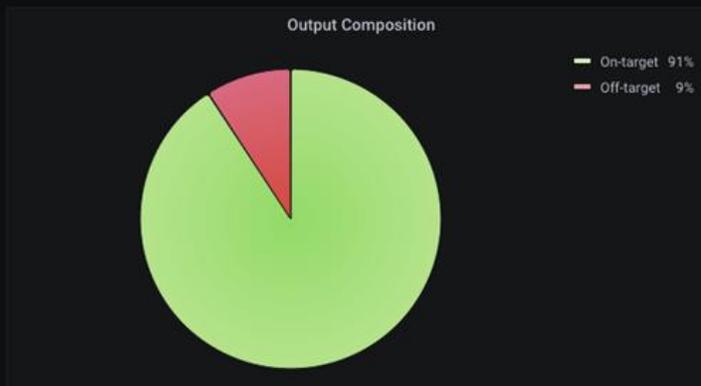
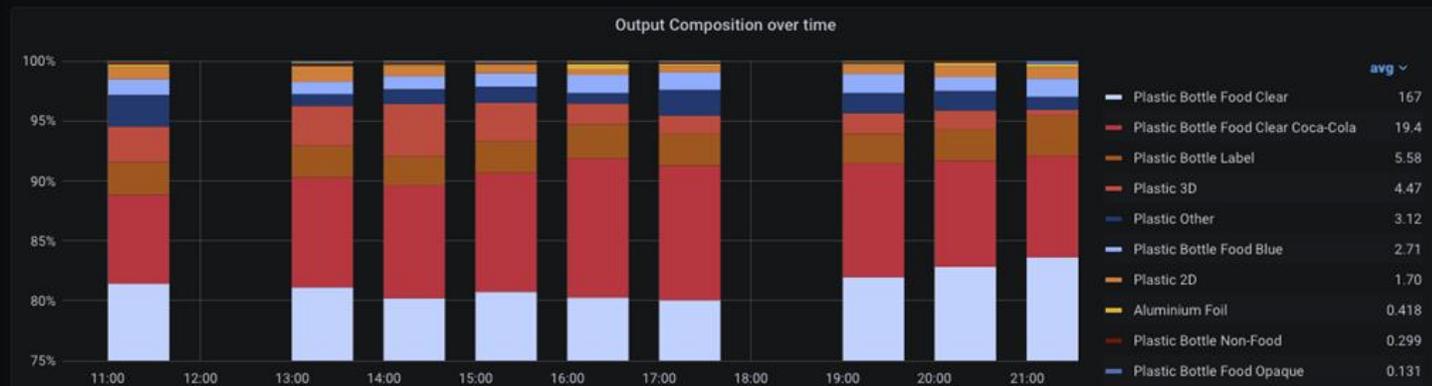
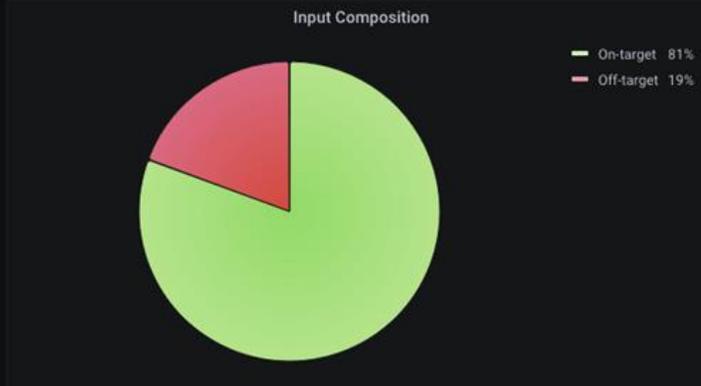
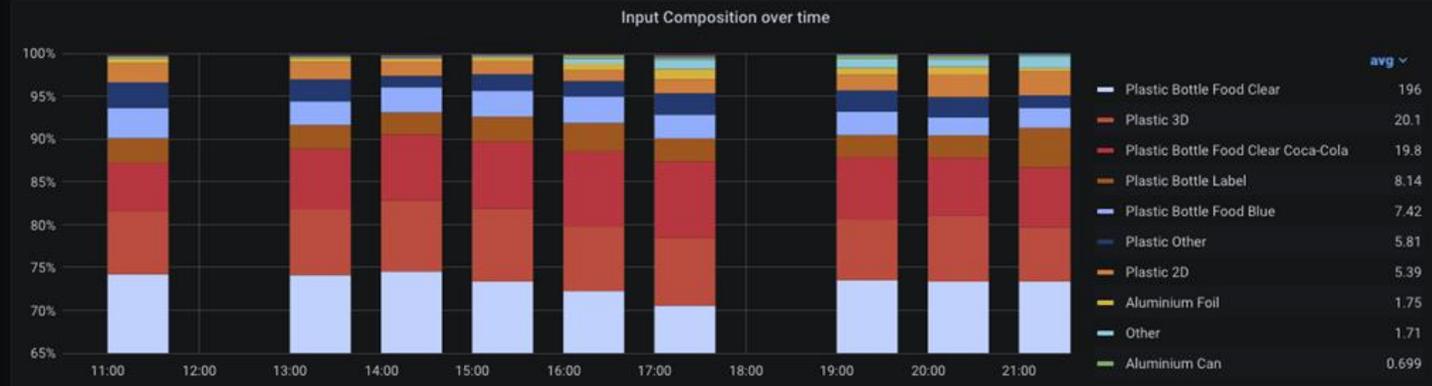
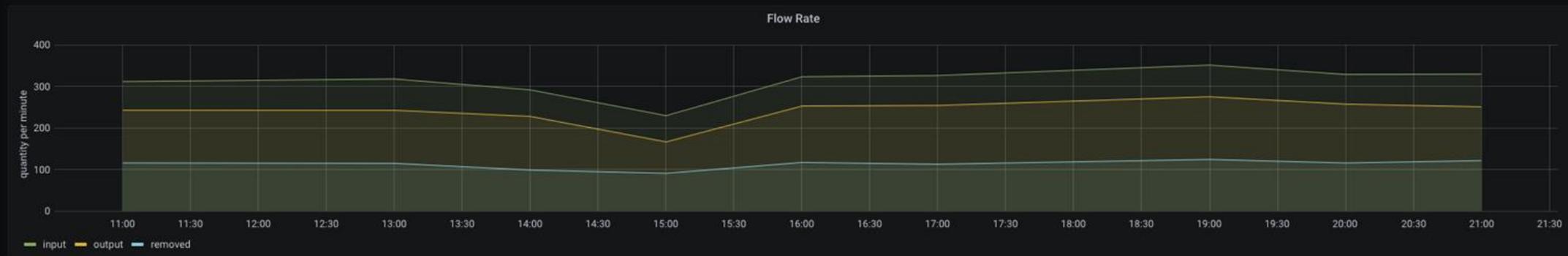
Plastic Bottle FOOD Opaque 25.81g



# SPAN KRACHT



Interval 1h Quantity objects



# *Impact*

- **higher sorting & recycling rates** through better operational performance
- enable **transparency & traceability** in supply chain through automated quality reporting & auditing
- better **policies & legislation** by providing data & insights to decision makers & producers



***[nicolas@polyperception.com](mailto:nicolas@polyperception.com)***