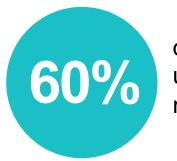
Digimarc Recycle

Unlock Circularity

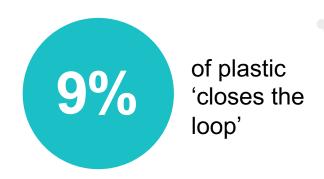
Immense Pressure & Legislation Demands Action



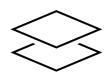
of consumers are unsure how to recycle plastics



of plastic is incinerated, landfilled, or leaks into the environment



Today's technologies will not suffice to achieve plastic circularity



Products need to be designed for recycling

%

Mandatory recycled content targets are coming



PCR price > virgin & availability of PCR grades is missing

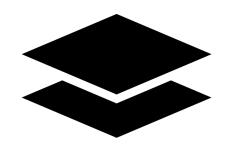


EPR becoming widespread; taxes & bans increasing



Conscious consumers demand more and voting with wallets

Current Sorting Technologies Cannot Deliver the PCR Needed For True Circularity



NIR cannot identify food/non-food, other grades, and many multi-layer or composite structures



Al/OR is not proven to scale to the 000's items required, and struggles to classify some form factors, especially at end of life



Only Digital Watermarking can reliably provide SKU-level identification at scale, independent of material

Digimarc Recycle Can Transform Waste Sortation

How does it work?



Product packaging connected to its digital twin





Product packaging enters recycling/waste facility





Digimarc detection technology embedded in sortation equipment



Sorting equipment identifies packaging by detecting secure digital watermark

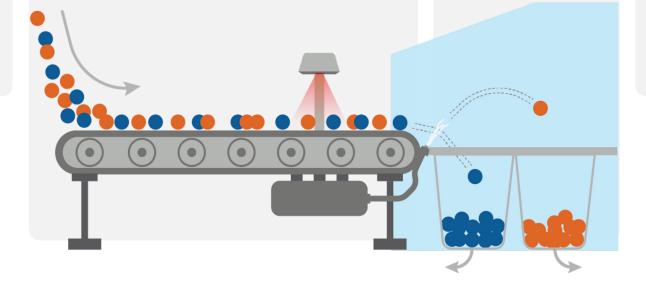


Locations of items satisfying sorting rules are provided to blowout mechanism



Unprecedented sorting accuracy and granularity





Why Digital Watermarking?

Looks like this...



Performs like this...













Imperceptible

Robust

Granular

Deterministic

Extensible

Compelling ROI Opportunity Across The Value Chain

Central Entities & PROs

Brand Owners & Producers

Recycling Facilities

Increased Revenue

Extending EPR schemes

Consumer share of wallet and brand equity

New PCR revenue streams

Reduced Cost

Tracking targets and streamlining EPR instruments

PCR costs, BOM optimization, avoidance of taxes and fines

Optimized facility operations and throughput

Compliance

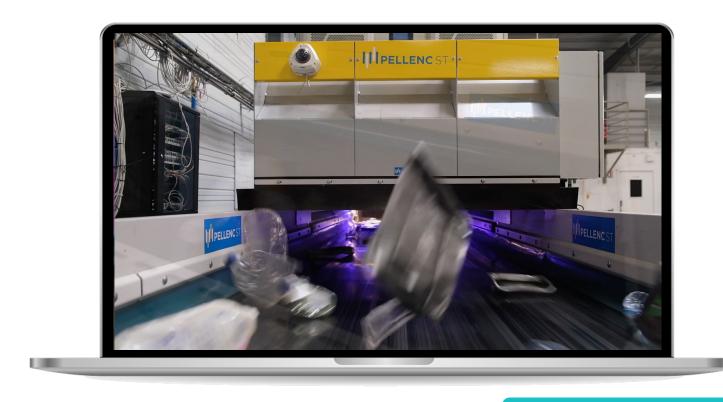
Delivering on legislative commitments and targets

Product recyclability, PCR content, digital marking and ESG targets

Confidence and accuracy in feedstock specification

Proven at Scale & in Industrial Conditions

Consistent high performance across all tested categories of plastic



>125,000 Items

>250 SKU

>95% Detection Rate

Break Down the Adoption Barriers and Drive Network Effects



Unlimited recycling facilities

Unlimited brands, retailers and producers

Unlimited products and items

We invite pioneering central entities to leverage Digimarc Recycle and transform plastic circularity for <\$1 per capita!