



SHERBOURNE RECYCLING

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- Operates the most technologically advanced Materials Recycling Facility in the U.K.
- Partnership of eight local authorities make up the company structure and ownership
- Seeking to regain control over the processing of residential recycling, associated costs, and flexibility regarding legislative changes
- Fully operational since April 2024, processing waste since August 2023
- DEFRA 23/24 authority waste management annual results saw FOUR councils in top 20 most improved recycling rates, and a fifth, 3rd overall nationally





is long established but in order to



KEY STATS

47.5 TONS OF RECYCLING
PROCESSED PER HOUR



100%
OF MATERIAL
KEPT IN THE UK



1,500,000

RESIDENTS SERVICED



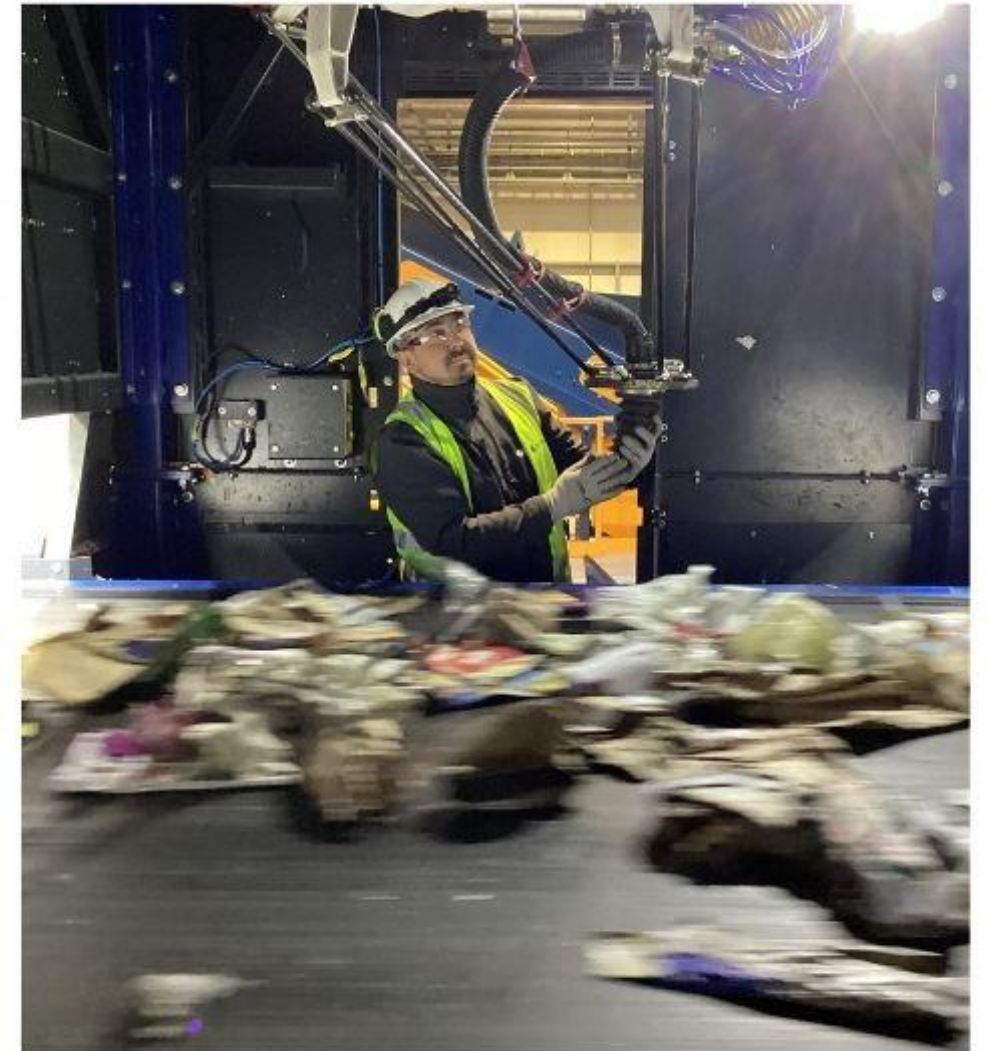
12+ PACKAGING
PARTNERS

3 ISO
ACCREDITATIONS

8 PARTNER
COUNCILS



**INTEGRATED AI
AND ROBOTICS**



£65,000,000

INVESTMENT BY COUNCILS

250,000 TONNES PER ANNUM
RECYCLING CAPACITY





RECYCLABILITY AND CONTAMINATION

- Can recycle a wider range of materials, including 'plastic bags and wrapping' and 'cartons' through fully commingled collection services
- Difference in recyclability in theory vs in practice
- Mono-material products and packaging are always the answer for improved recyclability
- End market required for materials, flexibles and cartons remain a challenge

Paper and Card



Glass



Metals

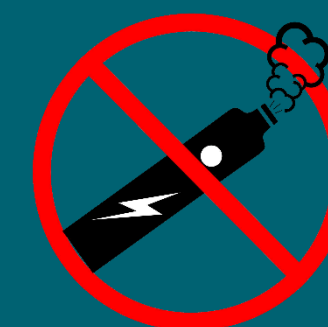


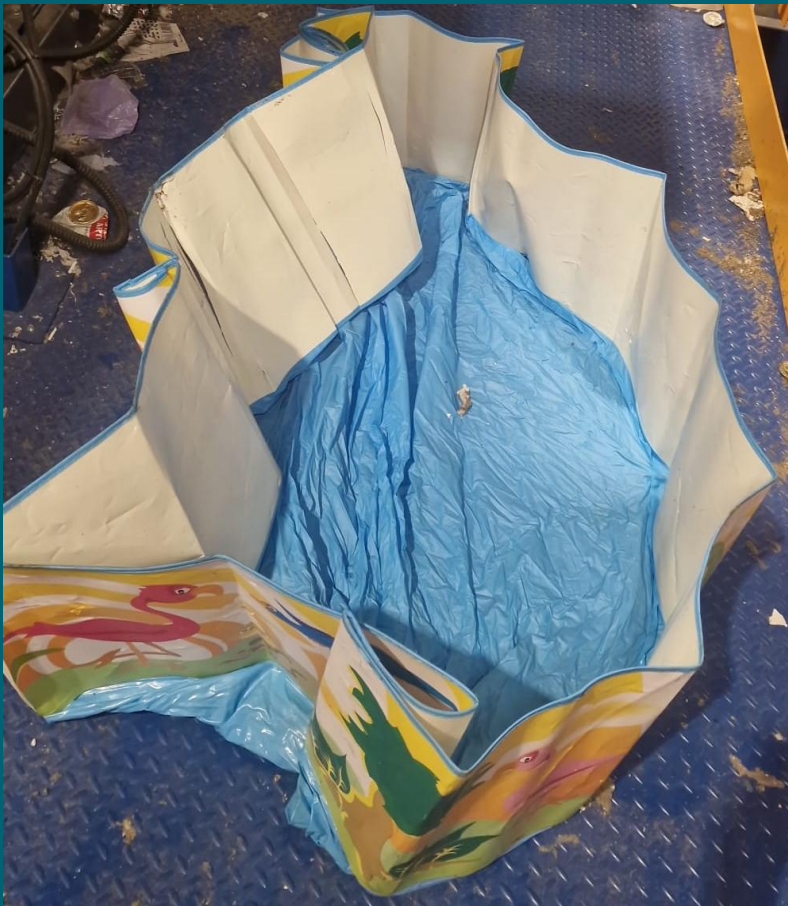
Plastics



Challenges to successes:

- Smaller fraction e.g. shredded paper (sub 50mm)
- 'Wishcycling' e.g. electrical items
- Crazy contaminations e.g. treadmills....
- Vapes!

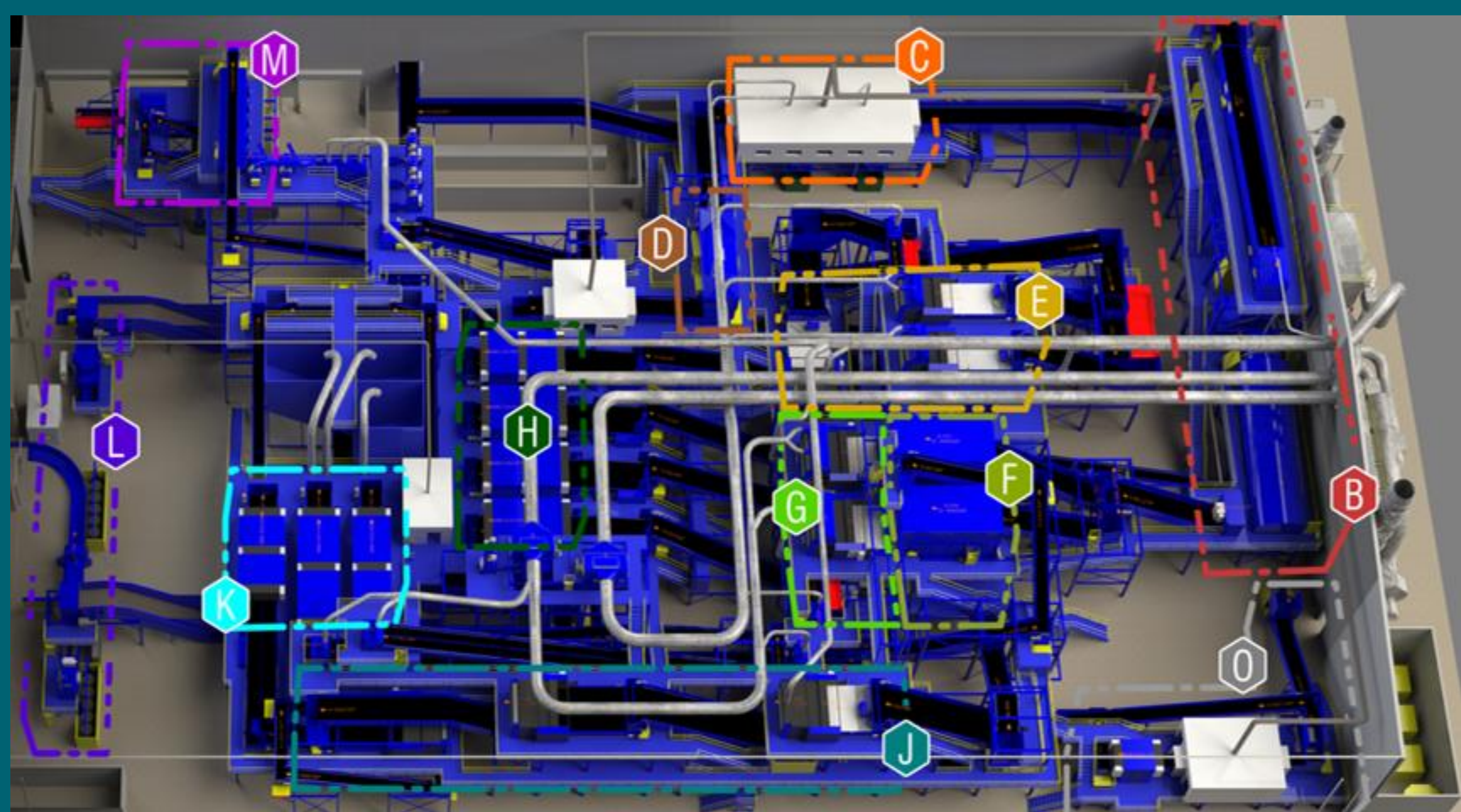






TECHNOLOGY

SHERBOURNE RECYCLING





LATEST WASTE TECHNOLOGY

- Powered by image-based AI which identifies distinguishing features in the same way as the human eye
- Recognises material in constantly changing conditions, generating essential data from the material composition
- Up to 90 picks per minute
- Up to 95% efficiency of targeted product recognition, improving recovery rates
- Adaptability to compositional changes – ready for DRS and Simpler Recycling
- Key kit: 18 sorting robots, 14 optical sorters, 14 AI units, multiple trommels, ballistics, magnet and eddy current





‘LIVING LAB’ CAPABILITY

- Working with multiple global food and beverage brands to test product recyclability
- Product analysis: size fraction and polymer detection
- Capture rate analysis
- Feedback on design improvement for the separation / handling of materials, including end market opinion
- Supporting the process of designing circularity into packaging
- Tailoring material separation to end market demands
- Creating new material grades, with ‘food grade’ ambitions



COLLABORATION

- Working with global brands to transform the relationship between producers and end markets, designing circularity into packaging
- Practical support and reporting on EPR legislation
- EA work placement scheme – sharing knowledge and learning
- Engagement with local authorities - LARAC conference site visits
- Engagement with Governmental departments – understanding infrastructure





THANK YOU

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