

# TEXTILE WASTE FOR FUTURE FEEDSTOCK : A VISUAL MANIFESTO FOR THE NORTHEAST

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Illustrative lenses enhanced by Generative AI - prompts used  
Armand Agraviador's own work as sole visual references



## Stop paying to burn value

**Emissions Trading Scheme**  
The 2028 extension of the UK ETS to energy-from-waste will impose financial penalties on incinerating synthetic textiles. Disposal costs will increase, creating economic pressure to divert textiles from residual waste.

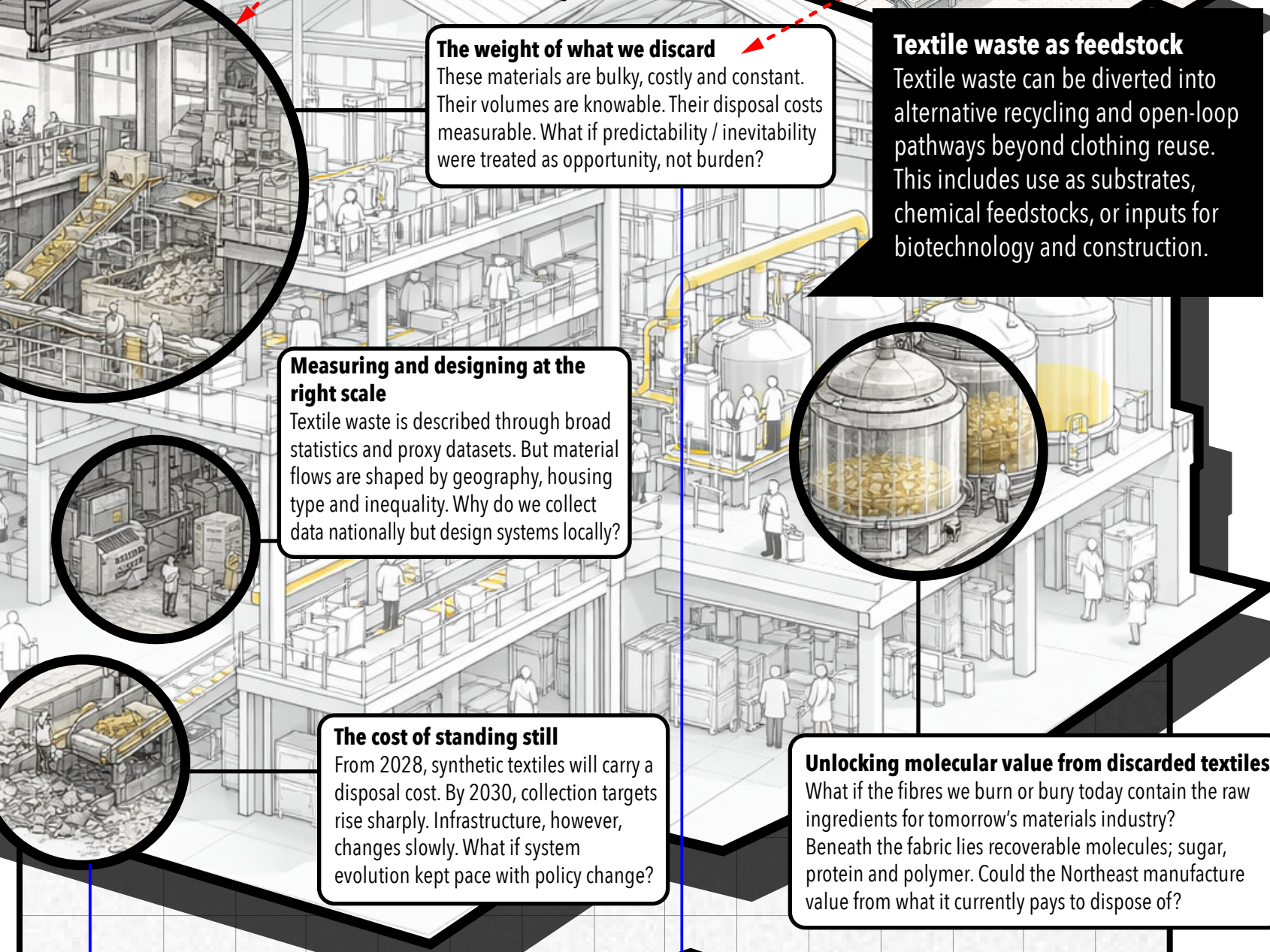
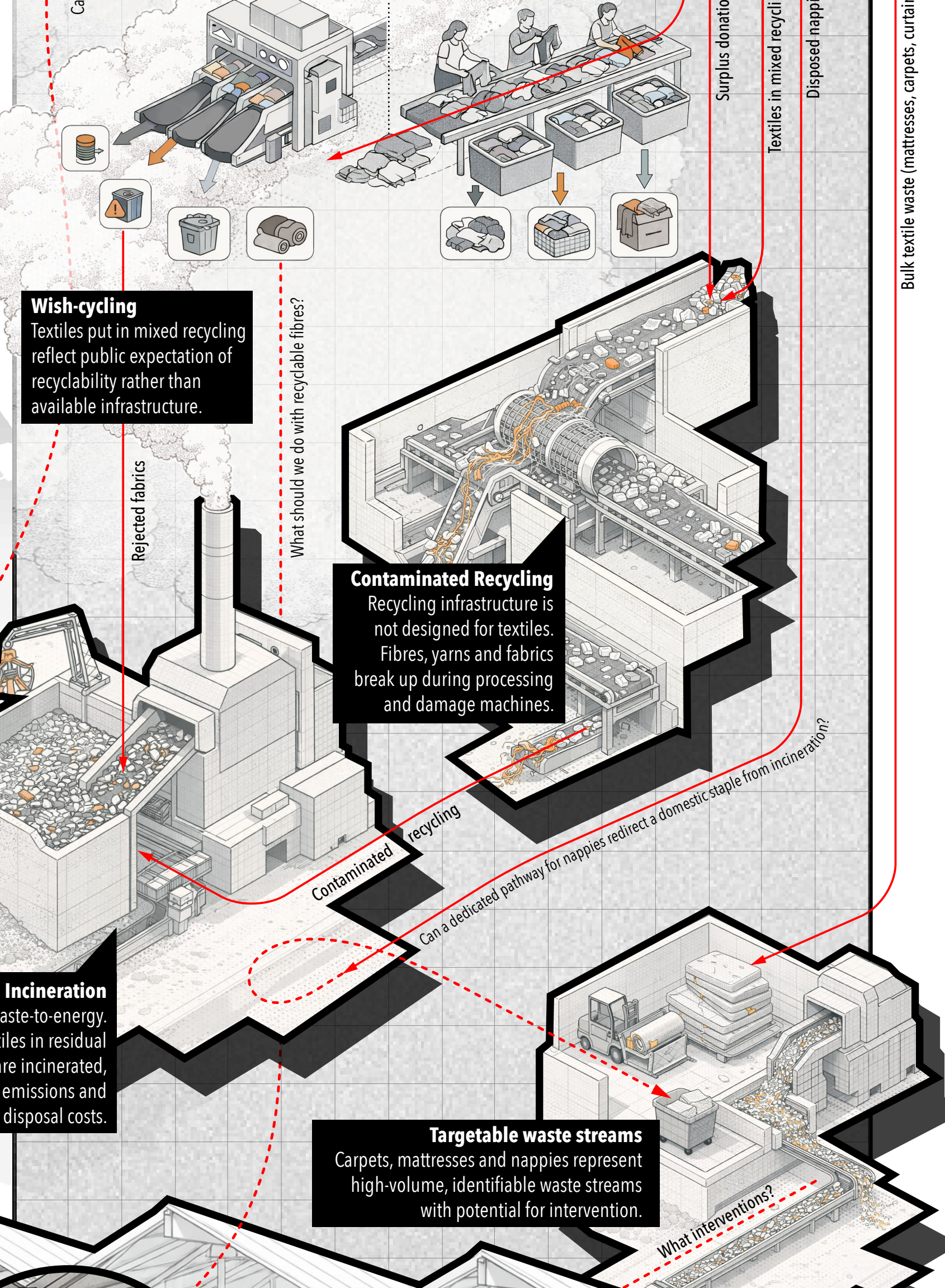
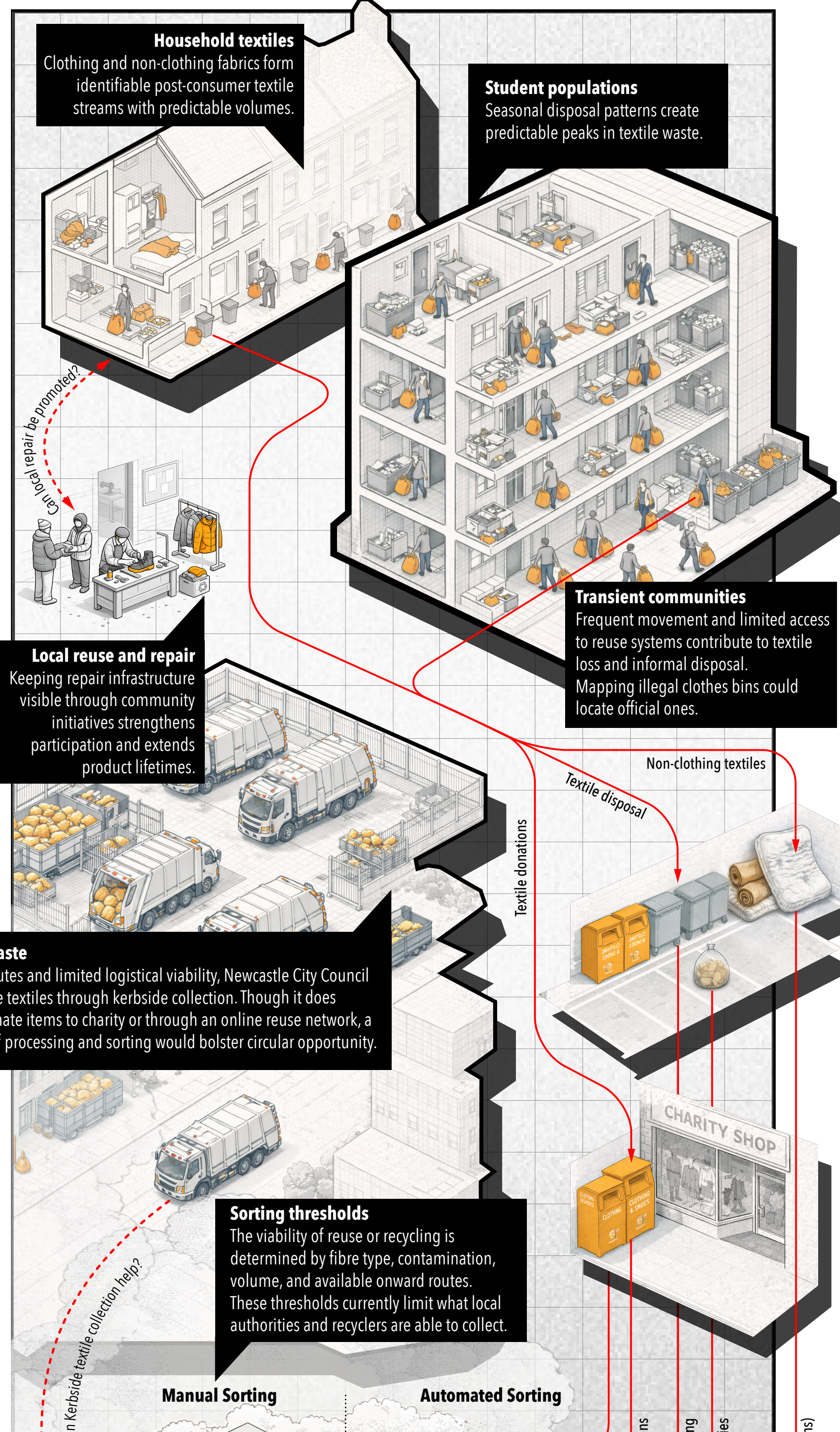
**Overseas Resale Market**  
The decline in global second-hand textile markets and the rise of low-quality fast fashion have destabilised charity and export resale. Only a small proportion of donated textiles are sold locally, straining reuse infrastructure.

**Data Gaps**  
Newcastle lacks localised textile waste composition data. Without fibre-specific data, it is difficult to design economically viable collection and processing systems.

## Design with the region

**Geography and Inequality**  
Low population density, limited car ownership and socio-economic polarisation complicate centralised recycling models. The region needs distributed, localised interventions.

**Local vs National Tension**  
Alignment between scales in data and recycling infrastructure will determine viability.



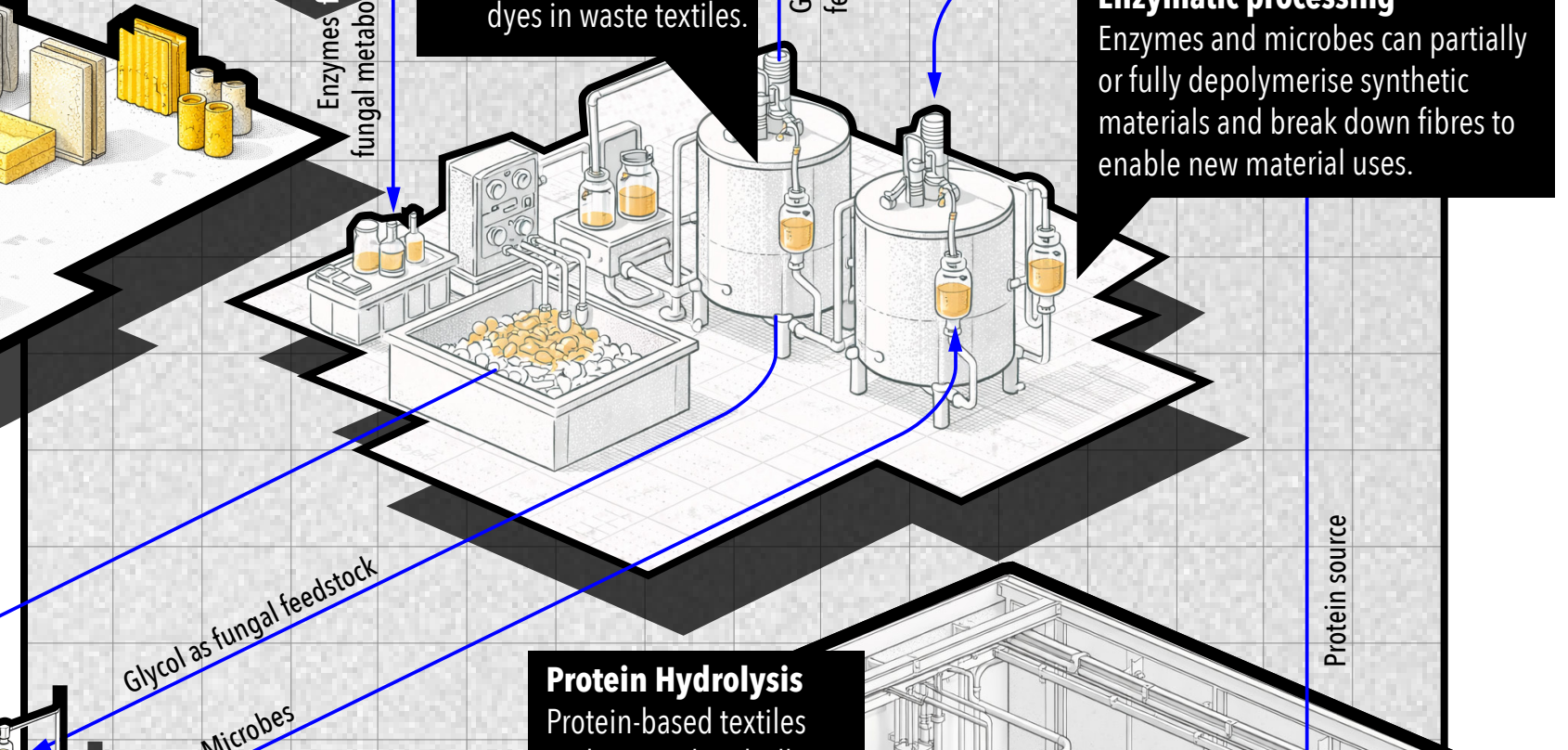
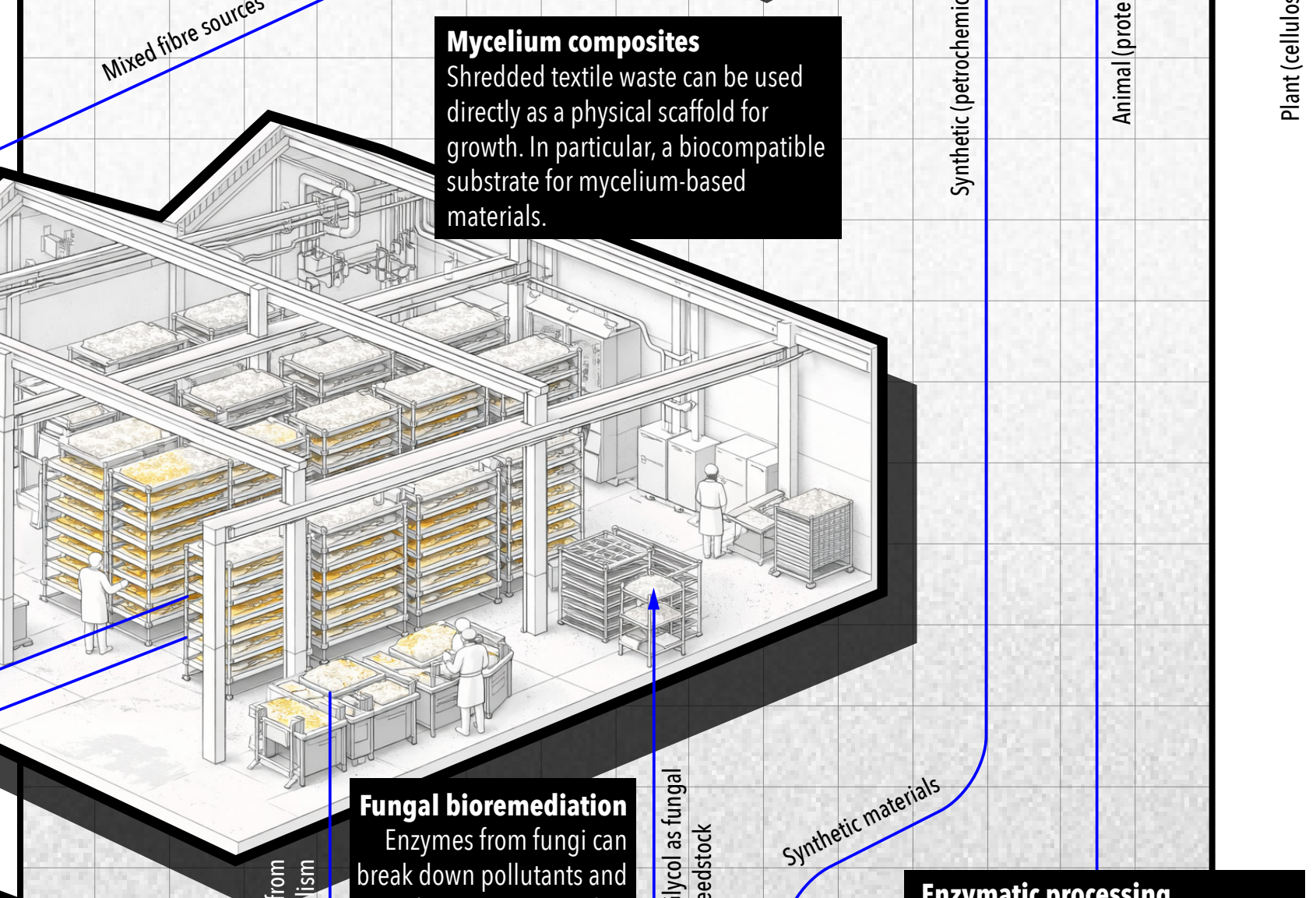
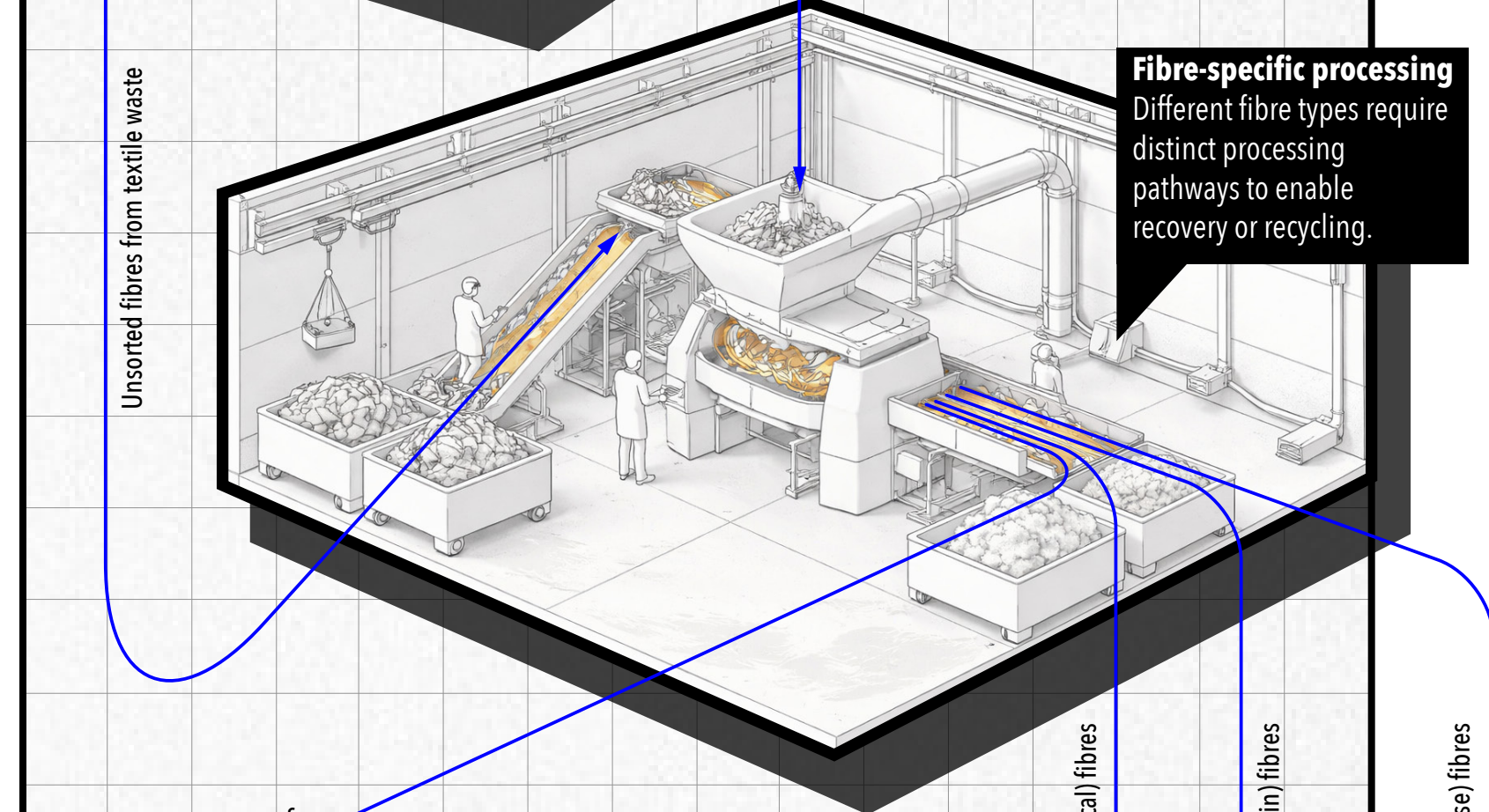
## Engineer the enablers

**Economic Viability of Recycling**  
Circular systems must be economically self-sustaining. Revenue from reuse, recycling and new material markets must exceed collection, sorting and processing costs.

**Extended Producer Responsibility (EPR)**  
Producer levies could fund repair, awareness and infrastructure development. However, simplified national proxy models risk disadvantaging local contexts.

**2030 Collection Targets**  
The UK Textiles Pact aims for 60% collection of post-consumer textiles by 2030. This requires collaboration between councils, charities and recyclers, grounded in local data. Onward routes must be visible to motivate and support residents' commitment to recycling.

**Automated Infrastructure**  
National ambitions to develop automated sorting and fibre-to-fibre recycling infrastructure could absorb non-reusable textiles.



## Grow the new material economy

**Action Planning**  
Models such as ReLondon demonstrate the value of materials flow analysis and coordinated action plans. A Newcastle roadmap must translate national ambition into place-based implementation.

**Biotech Open Loop Pathways**  
Textile waste can become feedstock for enzymes, mycelium composites, microbial fibres and bio-based materials. These routes extend value beyond traditional fibre-to-fibre recycling.

**New Revenue Streams for Non-Reusable Textiles**  
Biological and chemical processing routes offer potential markets for materials currently considered unrecyclable. This reframes waste as industrial feedstock.

