

Using surplus bakery products in animal feed – and saving money

Tesco and SugaRich have successfully worked together since 2012 to tackle the problem of surplus bakery products from stores, safely diverting 80% to animal feed, instead of to AD.

- The collaboration has developed an end-to-end process to recover surplus bread as a safe, wholesome, nutritious animal feed.
- The process is audited and approved by competent authorities and proven to be replicable and robust.
- Store personnel are fully trained to segregate bakery products, that would otherwise have been wasted, from general food waste.
- There is a major cost reduction compared with sending as waste to AD plants, plus income is received from animal feed.
- The project is on track to use over 20,000 tonnes of bakery surplus per year to animal feed.

The savings and income have far exceeded the implementation costs and the scheme has now been rolled out across the Tesco estate to over 98% of stores.



“SugaRich have been delighted to work with Tesco on such an innovative and pioneering project that has led the way in recovering former products from retail in to animal feed”

Paul Featherstone, Group Director, SugaRich

Summary

[Developing a safe and robust process](#)

[Key learnings](#)

[Process diagram](#)

With AD gate fees typically around £40 / tonne #1 and additional haulage costs on top of that, every tonne of surplus bakery product used as animal feed saves money

Developing a robust process for safely using food products, that would otherwise have been wasted, to animal feed

The key challenges that had to be addressed:

- Overcoming scepticism that a robust process could be developed and implemented.
- Ensuring store staff could effectively and efficiently segregate bakery products from the in-store bakeries (ISB) that would otherwise have been wasted.
- Proving the business case.
- Engaging competent authorities, showing the process was safe, and getting clearance to proceed. All Tesco stores diverting bakery surplus to animal feed are registered with Trading Standards as part of their obligations.
- Identifying relevant stores: stores who use their ISB ovens to produce non-bread products are excluded to ensure products containing meat (such as meat pies) do not contaminate the product preventing it from being diverted to animal feed under animal by-products regulations (ABPR).

The Tesco teams, working closely with SugaRich, overcame these challenges by:

- Defining a simple in-store segregation method using pink bags which are then put in separate roll cages and back-hauled to the Tesco Recycling Service Units (RSUs).

- Training all store staff in how to segregate bakery products that would otherwise have been wasted and avoid contamination with any meat-containing products.
- Developing a commercial model which includes income from animal feed providers and cost savings from avoided gate fees.
- Working closely with the competent authorities to ensure the process met animal feed requirements at all stages; in-store, during transport, and during re-processing.



Simple segregation of bakery products in store



Large scale transport to reprocessing facility via Tesco RSUs

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[Summary](#)

Developing a safe and robust process

[Key learnings](#)

[Process diagram](#)

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Key learnings so far:

- For Tesco it was important that the process was carried out at scale in order to integrate training, logistics and administration across as many stores as possible.
- It is essential to consult and work with in-store staff to find the best methods of segregating bakery products, that would otherwise have been wasted, from other food waste.
- Detailed training is necessary to ensure that any meat-containing products (e.g. pie residues) are kept separate and do not contaminate the food to be used as animal feed.
- Ad-hoc inspections are needed at the stores, in Regional Distribution Centre (RDC) depots, as well as on-line inspection at the reprocessing plant, to identify and remove any residual contaminants.
- There needs to be active involvement of the competent authorities, including the Animal & Plant Health Agency (APHA), to get their advice and input to ensure the process and controls are accepted.

"The Tesco project to divert surplus bakery products to animal feed has been worth all of the hard work as we realise significant cost savings and environmental benefits."

Kirsty Howland, Procurement Manager – Waste & Recycling, Tesco



SugaRich collect and replace full containers from the RDC. The surplus food is then transported to SugaRich's national network of reprocessing centres.
Source: sugarich.co.uk



After processing, the foods are blended to the required feed formulation, then sieved and ground create a free flowing meal

Source: sugarich.co.uk



Thorough inspection and separation of any contamination before re-processing

Source: Tesco

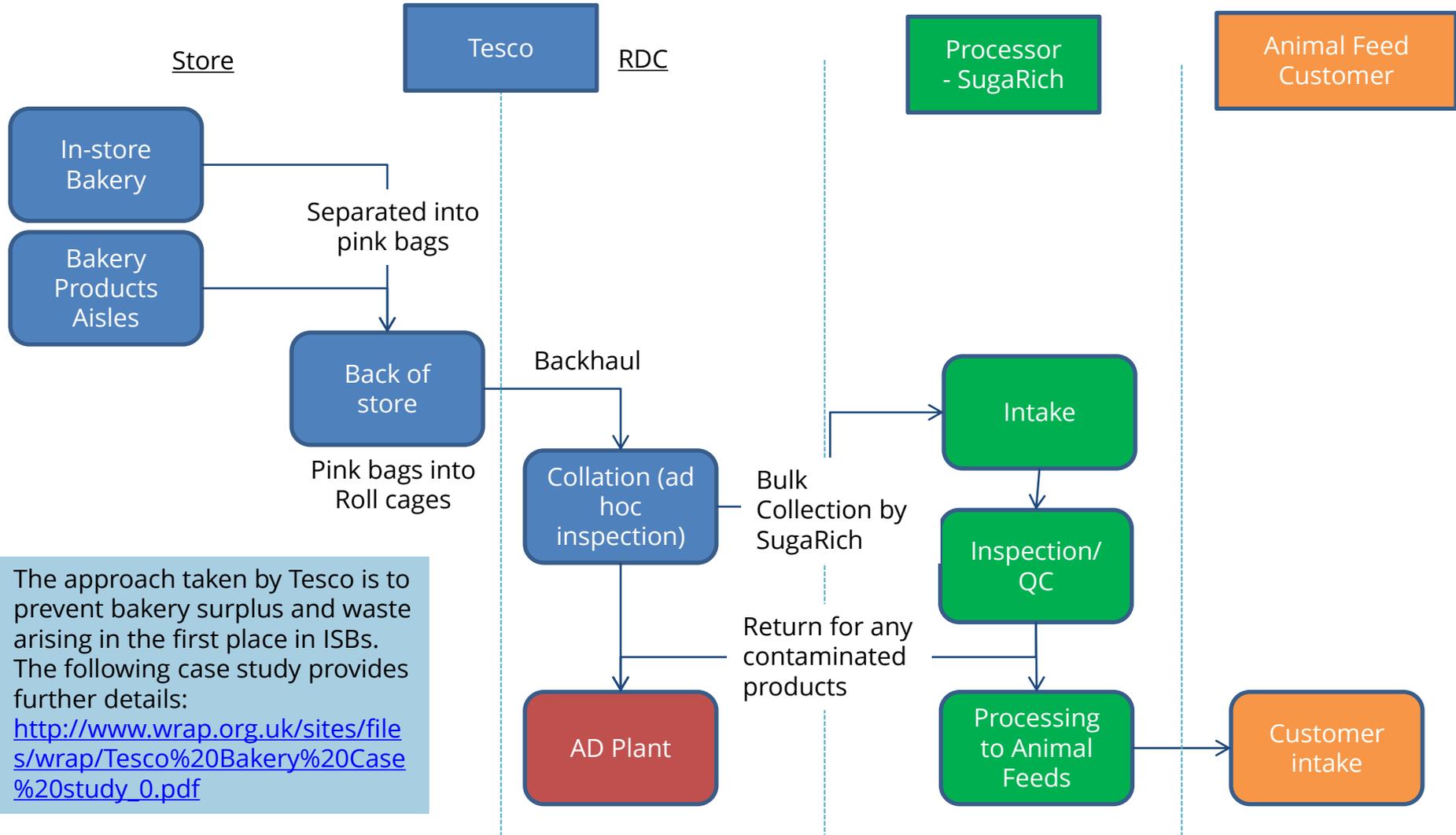
[Summary](#)

[Developing a safe and robust process](#)

Key learnings

[Process diagram](#)

The process has been refined to be robust and efficient



[Summary](#)

[Developing a safe and robust process](#)

[Key learnings](#)

Process diagram



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Our mission is to accelerate the move to a sustainable resource-efficient economy through:

- re-inventing how we design, produce and sell products,
- re-thinking how we use and consume products, and
- re-defining what is possible through recycling and re-use.

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