



Waste Valorisation Workshop

WRAP and Biorenewables Development Centre (BDC) hosted Waste Valorisation workshop on Tuesday 1 November 2016 with support from Forum for the Future.

The ambition for the Waste Valorisation Workshop was to bring together food/drink supply industry and organisation looking for solutions for the management and valorisation of unavoidable wastes, in order to hear about latest research from organisations that are driving change, learn more about funding options, and hear industries views on how and what is needed to develop project and ideas.

Presentations were delivered by representatives from a range of stakeholders (please see the presentation slides attached):

- Gavin Miligan 'Deriving increased value from food waste & co-products' FoodWasteNet <http://www.foodwastenet.org/>. They provide business interaction vouchers and proof of concept funds.
- Adrian Higson 'Waste Valorisation' NNFCC <http://www.nnfcc.co.uk/>. Deliver project funded by BBSRC, Innovate UK, EPSRC, LINK, Interreg and Horizon2020.
- Mark Gronnow 'Biowaste to higher value' Biorenewables development centre' <http://www.biorenewables.org/>. BDC can provide business support to eligible SMEs located in Yorkshire and Humber through funding from University of York, European Regional Development Fund and Hefce (Higher Education Funding Council for England)
- Steven Broome 'Industrial Biotechnology and Bio-refining at CPI' <https://www.uk-cpi.com/>. Projects funded by European Commission, Innovate UK and BBSRC.
- Matthew Smyth 'Waste Valorisation workshop: the future for 'end of pipe' Aqua Enviro <http://www.aquaenviro.co.uk/>. Deliver industry funded projects.

Once the current valorisation and innovation landscape was set by the presenters, we were keen to understand where we can work to accelerate innovation from both the perspective of the waste owners and the solution providers. We used breakout sessions to understand the barriers of commercializing new waste valorisation ideas and hear potential solutions.

The first breakout session focused on identification of opportunities – what are the key issues for the industry? The second breakout session looked at how to accelerate the development of new innovation and the adoption of disruptive valorisation and how Courtlaud 2025 can deliver these both for food manufactures and for solution providers. Barriers and solutions identified by the attendees are listed in the table below.

Area	Barriers	Solutions
Knowledge	<ul style="list-style-type: none"> ✗ Lack of data on quantities and qualities of waste ✗ No resource to obtain the data ✗ People do not see value in data ✗ Lack of sustainability knowledge outside the core business (especially within the SME's) ✗ Unknown market opportunities (new markets, existing markets) ✗ LCA systems view is absent from decision making ✗ Companies focus on outcomes and not processes 	<ul style="list-style-type: none"> ➤ Right language needs to be used. Sustainability vs economics ➤ Definition of waste and overall terminology needs to be clear and consistent ➤ Better communication: success stories, case studies (showing how ideas can be commercialized). ➤ Confidence and clarity in funding is needed ➤ Access to existing knowledge – do not reinvent the wheels. Industry needs a knowledge sharing hub across the sectors ➤ Access to expert advice is crucial ➤ Smarter regulation is required. Regulators need to seek industry view ➤ Policy clarity (stability) is required ➤ Need a process for actors to know: <ul style="list-style-type: none"> ➤ That there will be consequences; ➤ Where to get advice on those consequences ; ➤ Where to get solutions to address them ➤ Knowledge sharing workshops are crucial and needed ➤ Government needs to consult with industry to set the brief ➤ Government needs to bring innovation together ➤ Economic case needs to be linked with consumer perceptions (ensure acceptable branding and language) ➤ Raise public awareness on valorisation and valorised products
Cost	<ul style="list-style-type: none"> ✗ Hidden costs (what is really known) ✗ Cost of valorisation for small businesses is too high ✗ Logistics is expensive (i.e. moving feedstocks to processors) ✗ Need sufficient quantities of waste to make it viable ✗ Economic impact of the landfill industry 	<ul style="list-style-type: none"> ➤ Confidence and clarity in funding is needed ➤ There is a need for scalable valorisation processes and facilities so the markets can be developed at a range of scales
Feedstock	<ul style="list-style-type: none"> ✗ Segregation of waste materials (e.g. bread from packaging) ✗ Excess waste from high retailers specs. Need to keep shelves full (wonky veg). ✗ Leftover waste from seasonal variations resulting in over supply for retailers ✗ Potential of biodegradable plastics to contaminate waste ✗ Shelf life extension from mixed materials packaging versus widely recyclable mono-materials ✗ 'use by' versus 'best before' dates 	<ul style="list-style-type: none"> ➤ Food waste needs to be segregated from other waste and potential separated further into specific components ➤ Integration through the waste hierarchy is required ➤ Waste: determination of how much is there available and what it contains

The presentations on the day and discussions provided useful insight into the barriers that are stopping industry to commercialize new waste valorisation ideas. We recognize that **raising awareness** within the sector is crucial. WRAP will work to develop suitable **case studies** that showcase waste valorisation from research to the commercialization. WRAP will also continue to **engage with the sector** and help to develop projects that ‘test’ valorisation options in the business environment.

We will continue to deliver **research projects** that act as evidence in discussions with the government and industry and share **success stories**, together with the **research results** on our website <http://www.wrap.org.uk/content/courtauld-commitment-2025>.

In order to accelerate waste valorisation and bring environmental and economic benefits to the industry we need your support and would like to continue working with us.

For further details on Courtauld 2025 commitment and information, please do not hesitate to contact us.

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