

Department of Environment, Climate and Communications
By email to: bioeconomy@decc.gov.ie

26 January 2023

Submission on proposed National Bioeconomy Action Plan 2023-2025

Dear Sirs,

The Irish Whiskey Association wishes to make a submission on the proposed National Bioeconomy Action Plan 2023-2025

The Irish Whiskey Association is the lead representative body for the Irish whiskey industry, one of Ireland's fastest growing export sectors, with all-island export value in excess of one billion euros in 2022. The Irish Whiskey Association comprises member companies accounting for 99% of global sales of Irish Whiskey, including large producers such as Irish Distillers and Tullamore D.E.W; and a large number of SME and craft producers. The Irish Whiskey Association is part of Ibec, Ireland's largest business representative organisation.

Commitment to circular economy and re-use of Irish whiskey co-products


The Irish Whiskey Sustainability Roadmap, launched by Minister of State Pippa Hackett in May 2022 commits the Irish whiskey industry to **strengthening our place in the regenerative and circular economy**. In line with this goal, the roadmap contains the following action for Irish whiskey businesses:

"Re-use 100% of the co-products of Irish whiskey production (spent grain/pot ale) to eliminate all organic waste."

Re-use as animal feed

Every year, over **350,000 tonnes** of co-products from Irish whiskey production (spent grain/pot ale) are reused to become high-quality animal feed.

Re-using Irish whiskey co-products as animal feed is an efficient use and re-use of an otherwise potentially waste material; and has been a practice in Irish farming since the 1700's. Irish whiskey production extracts the starch and sugar from grains leaving a co-product rich in protein, fibre and oils which ruminants and pigs can make use of to produce meat and milk. This helps to enrich the rural economy, not only for livestock farmers, but also for arable farmers who utilise animal slurries to grow their crops. Once the co-product is produced to an accepted quality standard there is no risk in pursuing this practice.



Most Irish whiskey co-product is collected from distillers by registered contractors who supply high-quality animal feed to Irish farmers. For example, **Specialist Nutrition** is an experienced animal feeds company, working with Irish whiskey distilleries to re-use co-product and supply a comprehensive range of high-quality feeds to Irish farmers.

The re-use of Irish whiskey co-products has the effect of annually displacing the need for nearly 18 of the 20,000 tonne large grain tankers which import animal feed into Dublin Port. Irish whiskey co-products have a lower carbon footprint than imported animal feed.

Potential for use in producing biofuels

Work by Mr. Rasaq Abolore, a PhD student in TU Dublin, has highlighted the potential to produce renewable biofuels, such as bioethanol, from Irish whiskey co-products.

“The conversion methods for producing bioethanol from cellulosic biomass resources like distillers' waste grain include a pretreatment procedure, such as drying, size reduction, and removal of lignin and other unwanted components such as protein, water and fibre. This is followed by the opening up of the structure of the cellulose and hemicellulose components in the plant cell wall. Acids or enzymes are then used to convert the hemicellulose and cellulose component into glucose (a sugar), which is then fermented to produce bioethanol.” (Abolore, 2022, <https://www.rte.ie/brainstorm/2022/0913/1323241-turning-whiskey-waste-into-biofuel/>)

However, there are mixed views within industry on the extent of the potential of using Irish whiskey co-products to produce biofuels. This is a topic that require further exploration.

Recommendation for proposed Action Plan

In response to the consultation, the Irish Whiskey Association recommends the following proposed actions should be considered for inclusion in the proposed Action Plan:

- The proposed Action Plan should seek to support industry-led research and innovation aimed at exploring:
 - (i) the potential of using Irish whiskey co-products to produce biofuels;
 - (ii) developing economically viable models for anaerobic digestion.
- The proposed Action Plan should seek to facilitate collaboration and knowledge transfer across the brewing and distilling, agricultural feed supply and farming sectors with the aim of maximising the economic and nutritional return from the re-use of Irish whiskey co-products as feed products. As part of this, and in line with the ‘food first principle’, the proposed Action Plan should support research and innovation aimed at examining if and how Irish whiskey co-products can be reintroduced into the human food chain.
- The proposed Action Plan should support all-island collaborative projects involving industry and academia.

- There should be active industry representation in all fora established under the Action Plan, including the development of any targets applicable to industry.

[Redacted]

Yours Sincerely,

[Redacted Signature]

Director
Irish Whiskey Association