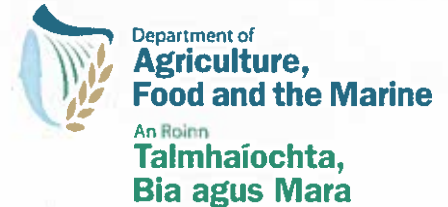


Bioeconomy Consultation,  
Dept of the Taoiseach,  
Government Buildings,  
Merrion Street,  
Dublin 2



15/09/2017

To whom it may concern,

As you may know, the Department of Agriculture, Food & Marine (DAFM) has played an active part in the process to date to develop the national policy statement on the bioeconomy. Accordingly, we will confine our reply under this public consultation piece of the exercise to highlighting what we see as the most critical issues that need to be addressed or included as the process moves to the final stages.

DAFM strongly supports the development of the bioeconomy and bioeconomy opportunities so as to further develop Ireland's transition to a low carbon, biobased and circular economy and in particular as a sustainability solutions driver of innovation and local investment for the agri-food sector<sup>1</sup>, rural development and environmental protection. Indeed, DAFM took an active interest early on in kick-starting development of the bioeconomy in the areas under its remit by investing in the Bio-Eire research project which was specifically aimed at identifying the optimum value chains in the agri-food sector and we are pleased to see that the findings of this Teagasc-led study have been taken into account and contributed usefully to the current exercise.

DAFM believes that there is merit in having the national bioeconomy policy statement mirror or at least draw on the European Commission's description of the bioeconomy particularly in light of the ongoing review of the EU bioeconomy strategy due to Circular Economy policy developments e.g. in relation to fertilisers and also due to the opportunities afforded in the EU research and innovation funding opportunities. Flexibility in the definition of the bioeconomy is also considered particularly useful as increasingly high value biomaterials such as polymers, natural fibres, proteins, food, feed and fertilising ingredients, health promoting molecules and bioactive chemicals are being produced from an ever-growing and diverse list of renewable biological resources.

It is agreed that an overarching policy framework with the objectives as set out in the discussion document for the development of the bioeconomy in an Irish context is required. The political commitment and the development of an appropriate vision are considered essential to provide appropriate signals, pathways and signposting to all relevant stakeholders. The framework within which the bioeconomy is being developed must seek to find the appropriate balance between scientific, market and socio-technological

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<sup>1</sup> Agri-Food sector includes: primary agriculture, horticulture, the food and beverage industry, fisheries and fish processing, forestry and forestry processing (definition as in DAFM Statement of Strategy 2016-2019)

development and the appropriate mix of governance, time and space and alignment of research, innovation, coordination & support instruments, collaboration to share risk and rewards, investment including de-risking approaches and appropriate business models. Specific emphasis should be given to prioritisation of value chains, inter-sectoral linkages and developing processes for implementation and for monitoring of policy interactivity and unintended consequences. International best practice should be analysed with regards to determining the most suitable approaches for coordinating development and monitoring progress. Key performance indicators capturing shifts e.g. from fossil fuel based products to biobased products and circular approaches could be adopted. There is also a need to consider the impact of the development of the bioeconomy on present structures, cultures and practices and related institutional or other barriers to implementation that may arise. The development of markets and market support instruments such as standards for biobased products and certification of biobased processes are considered essential from the outset.

The establishment of common and fundamental principles is supported as the bioeconomy is not sustainable by default and can be either linear or circular depending on the choices made and the approaches taken. Implementing the bioeconomy in an Irish context with consideration of circular economy principles including taking into account a cascading approach, innovation, lifecycle analysis, environmental impacts, food safety and sustainable sourcing should be considered to ensure a safe, restorative and regenerative bioeconomy is further developed. It may however be required that broader analysis of the effect of diversion of side streams away from e.g. animal feed and forestry should be undertaken so as to assess for effects of actions (for unintended consequences) on the economy and the environment. Food safety risks associated with the use of biological materials in the food and feed chain needs to be also carefully considered from a public health perspective and due to the export facing nature of the Irish agri-food sector. Engagement with industry and farmers is a key function of DAFM and this type of engagement can provide opportunities to begin to lay this conceptual groundwork in activities and actions undertaken.

The national policy statement should also ensure that prioritised value chains should be benchmarked against innovative and cutting-edge internationally identified and possibly alternative processes, technologies and products that may lead to improving identified value chains and/or provide alternative, innovative pathways for development in the longer term.

A national policy statement should seek to analyse what approaches may need to be in place to appropriately quantify renewable biological resources with a view to monitoring biomaterial flows and land use impacts. Biomass mobilisation and coordination of biomass mobilisation across different sectors may be also a matter that needs to be considered as due to scale issues many biomaterial streams go direct to waste rather than being mobilised for higher value use/processing. Examination of these matters may well be best considered at a local or regional level and may allow for the development of appropriate local strategies and actions, the detection of local facilitators and regionalised alliances of industry/entrepreneurs, researchers, farmers, foresters, supports agencies and regulatory authorities. In relation to agriculture, the use of environmental schemes is a specific mechanism which could promote the uptake of products from the bioeconomy.

The definition of waste will potentially be completely revised in the bio and circular economy. This shift will engage industry and the public in the adoption of the bioeconomy concept – essentially waste will no longer be waste but rather a raw material with another use. Examples of where bio-waste materials are not recycled and valuable and scarce nutrients are being wasted should be identified and examined alongside related regulation and policy so as to determine what is required to encourage the development of the circular and bio-economy considerations.

We thank you once again for this opportunity to provide further feedback and we look forward to engaging further in the interdepartmental group that will develop the national bioeconomy policy statement and indeed to playing an active part in any follow-on actions that may stem from the completed exercise.

Yours Sincerely,

Richard Howell, S.I.

Research & Codex Division

Department of Agriculture, Food & Marine