

The document is welcomed by UCD, a national leader in the bioeconomy, as it sets out an overview of the bioeconomy and it poses a series of questions on how to move forward. A policy statement should set out a clear vision on how the bioeconomy can deliver social, economic and environmental sustainability for Ireland.

A policy statement that promotes innovation, high value products, resource efficiency, cascading use of resources, and rural development will help to promote the development of a sustainable bioeconomy in Ireland. Innovation can drive diversification in sectors such as agriculture, agri-food, marine and forestry. Innovation as a driver for the development of the bioeconomy is critical to a policy statement. A policy statement that recognizes the importance of research for innovation where the integration of fundamental research and applied research as well as lab to pilot and demonstration scale are critical to speed up implementation in the market of products and processes.

A national bioeconomy policy that promotes and supports innovation in the regions is critical.

Innovation and diversification will support the creation of new value chains: The sustainable use of our natural resources to produce high value products for sale in national and international markets will create jobs and increase Ireland's competitiveness. A policy statement should support job creation, career development (re-skilling), rural development and Ireland's competitiveness.

A Coherent policy framework is needed to enable the development of the bioeconomy. Ireland can benefit from the Italian Government experience in the development of a national bioeconomy policy on the bioeconomy. An all of government approach led by the Taoiseach's office with the support of all departments is important and should be reflected in a policy statement.

A policy statement that includes participative governance will strongly aid bioeconomy development across sectors. The creation of new value chains will require participation across sectors; technological developments can occur within a sector but market penetration and resource supply will require new partnerships across sectors creating new business relationships. A Policy statement to recognise and promote this is of great importance.

A policy statement should recognise the importance of sustainability (Social, economic and environmental) and circularity to the bioeconomy. A policy statement on the bioeconomy should not promote the generation of waste but rather should support the use of unavoidable waste. A re-examination of the definition and what constitutes waste is needed. Such an exercise can also promote earlier intervention in the management of a resource to avoid it becoming a waste. A policy statement that clearly guides the development of resource usage, resource efficiency and avoids categorising residues as wastes can help to develop the bioeconomy and circular economy.

The development of the Bioeconomy and circular economy In Ireland should be framed together without impediment to one or the other or both.

Residues are mentioned as part of the bioeconomy in Ireland but do not appear in the definition of what the bioeconomy is in general (Page 3). Biobased residues are now widely recognized as being integral to the bioeconomy and circular economy.

Bioactives, proteins are not explicitly mentioned as products of the bioeconomy but these are recognized more and more at European level and beyond as a critical offering from the bioeconomy where there is no equivalent from fossil economy or where the fossil economy will not be able to compete due the higher costs of production from fossil resources or the inability for a fossil equivalent to be marketed as natural.

Ireland can stimulate the bioeconomy through support for the production of high value products that contribute to better human and animal nutrition health, resource efficiency, environmentally friendly processes and products (reduced greenhouse gases, water savings, biodegradable products, nontoxic products)

The role of government in driving the bioeconomy through public procurement is very important in a policy statement.

Other points

Page 3 Section 2 “Benefits of the bioeconomy” bullet point number 4 states “reducing our dependency on natural resources and imports” is an error. It should refer to “fossil based resources” and not natural resources.

Page 5. Should use the term “Biobased chemicals” and not “biochemical”. They have different meanings.