

The development of the Irish bioeconomy is not only desirable but is absolutely necessary if we are to transition to a low-carbon economy. In order to meet our climate change commitments we inevitably have to do more with less and become more strategic in the way we manage and utilise our waste streams.

Please see below ICMSA response to the following prescribed questions.

Does the broad definition outlined above adequately encompass the opportunities presented by the bioeconomy?

In the definition described there is no reference to the economic benefits of investing in the bioeconomy. Therefore the definition should include the "conversion of waste streams into value added products". There must be an economic incentive to invest in the bioeconomy.

How can a high-level policy statement on the bioeconomy assist in progressing the development of the priority value chains identified?

IE what can government do to promote investment and development of the bioeconomy? The value chains identified aim to exploit agriculture, marine and forestry resources through the valorisation of waste streams and the production of biomaterials, biochemicals, and bioenergy. With this in mind it must be a priority for government to provide the infrastructure required in order to fully utilise the outputs of the bioeconomy. For example, anaerobic digestion of animal manure is only feasible for farmers if there is sufficient infrastructure present to inject the biogas into the grid.

The development of this relatively new industry in Ireland requires investment. Tools to access low cost finance will be necessary to incentivise investment given the risks associated with the development of new technologies.

What lessons can Ireland take from the European approach, including to the circular economy?

Ireland must invest in research for innovative applications of waste streams. While the generation of energy from these streams is useful, it is also the end product, therefore we must extract any possible uses of the waste stream prior to its use as a source of energy in order to increase its economic value. Further developments of centres such as the <u>National</u>

<u>Institute for Bioprocessing Research and Training</u> and Moorepark Technology Limited should be encouraged.

Given the cross-sector nature of the bioeconomy, how can a national policy statement best support development?

Lessons should be learned from the River Basin Management Plan where the delivery of goals across multiple districts was not effective. A single department or group should be formed with the sole responsibility of developing the bioeconomy. Currently the development of the bioeconomy is the responsibility of the Department of An Taoiseach along with six other departments. Given that the bioeconomy isn't the principal priority of any of these departments could result in a lacklustre attempt at developing this sector without delivering any real change.

Can we identify a common set of principles, including in particular the application of the cascading principle, which will assist in the development of both the bioeconomy and circular economy?

In light of the recent "cash for ash" scandal, the ICMSA support the application of the cascading principle.

How can a national policy statement support local and regional cooperation around the use of renewable biological resources?

To promote local and regional cooperation, the ICMSA would like to see the establishment of locally led subsidised schemes that would support individuals to develop and establish industries that maximise the potential of renewable resources.

How can waste policy, including an examination of the definition of waste, best support developments in the bio and wider circular economy?

The inclusion of an awareness campaign highlighting the potential uses of common waste materials would prove useful in the creation of a bioeconomy aware environment. Start up grants provided by IDA and Enterprise Ireland should be prioritised for small companies that valorise waste streams.

How can we stimulate market demand for bioeconomy products? What is in it for the consumer?

Stimulating demand could be initiated by the government wherby public procurement prioritises bio – products. Scale of business is necessary to keep costs down thereby to encourage early technology adopters, tax incentives should be created to offset the higher cost normally associated with these products.

What is the most appropriate mechanism to coordinate development and monitor progress?

The development of the bioeconomy in Ireland is not an easy task. Strong links between research, enterprise and consumer demand must be established. Lessons could be learned from the organisations such as ICBF and AHI – which have successfully linked industry, research, DAFM and stakeholders together to achieve common goals. The establishment of a similar organisation for the development the bioeconomy would be advantageous.