## BioEconomy

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

The definition is too narrow as the focus relates to the use of the environment from an extractive point of view without a broader consideration of the impacts of the various initiatives on the environment and Irish society. By this I give the following examples:

- Driving intensification of farming without considering the associated costs of pollution to our water bodies, as shown by the recent EPA Report on the decline of water quality in Ireland; also, failure by the state to protect sensitive habitats (e.g. IWT complaint to the Commission, resulting in the European Commission examining Ireland's stewardship), loss of biodiversity etc. are associated consequences. The long-term costs of potable water treatment in order to remove contaminants and associated persistent chemicals used in agriculture and the cost of their long-term bioaccumulation impacts on the health of the human population need to be considered as part of the drive to greater agricultural intensification.
- Government support for aquaculture despite clear links with the destruction of salmonid species and the enormous loss in tourism revenue to the State, resulting it not only the loss of tourist anglers but Irish anglers are now spending money previously spent within the State abroad.

As a State, we espouse the image of producing high quality food and products from our high-quality environment and yet every indicator points to the fact that our environment is in decline and that as a nation we are abusing it. The quality of our water bodies is in decline, sensitive habitats are damaged, biodiversity loss is growing rapidly. Why? Some of the causes are:

- monocultures of grass; generation of increasing volumes of slurries and sludges mostly reused and disposed of on agricultural land, causing diffuse water pollution; use of chemicals to kill other plants than grass, fence removal, drainage leading to faster and faster runoff from land to water bodies etc.
- monocultures of Sitka spruce; acres of trees planted on sensitive sites, where
  the cost of extraction and value of the timber may be less than the damage to
  our road infrastructure, drainage of lands that previously stored precipitation
  leading to increased and faster responses to rainfall events resulting in
  flooding.

Sooner or later this will be exposed with a significant loss of the Irish reputation and confidence that we now enjoy from consumers of our products around the world.

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

A clear statement of the values associated with policy positions should be mandatory. An economic value needs to be placed on having a high-quality environment. Grant aid for any enterprise has to balance conservation and improvement of the environment as a measure that has to be achieved in order to qualify for any state sponsored aid. Extractive enterprises and industries should pay a charge for their exploitation and that the money raised should be **ring-fenced** for reinvestment in environmental improvements.

What lessons can Ireland take from the European approach, including to the Circular Economy?

With sustainability as a core principle, it should be possible to grow our economy by exploiting our environment without damaging it. The EU Environmental Principles are all soundly based, but they are not saving us from ourselves. I think what we need to realise is that if we are to grow the BioEconomy and be an exemplar for others we need to do more than we are currently doing and that includes what we are being required by Europe to do.

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

Clear overarching values, principles and objectives to underpin the BioEconomy policy, should place a value on our environment and link them meaningfully to benefits and indeed to penalties. Over exploitation leads to destruction, sustainable use requires resources that are in equilibrium or improving. Therefore, a National Policy Statement needs to reflect a clear objective that ensures sustainability by having clear objectives to ensure the future quality of our environment.

Air, Soil, Water, Biodiversity, Landscape are intrinsically linked and KPIs should be developed to support enterprises and without damaging the environment. Sectoral interests need to have clear sight of what they have to deliver and should be rewarded for achieving pre-stated KPIs.

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?

Yes. Put a high-level Public and private sector interdisciplinary group together with clear terms of reference and task them with achieving this in a fixed timeline. Principles are the easy bit. Delivery will be tough part.

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

By making ADHERANCE to the national policy mandatory; no 'having regard to' escape hatches and using the existing second tier of government responsible for the delivery of the key objectives, targets with built in oversight and regular reporting.

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

Waste is a resource, State support for initiatives that reuse and recycle wastes making these a preferred (i.e. profitable) option to disposal is the only way to ensure success.

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

The consumer will only purchase what's comparative from a price and quality point of view. Drive the price of bioeconomy products to be comparable to their competitors through all means possible. Use taxes to ensure this is the case. Needless to say, information, education and marketing will have to play a part in developing Public opinion.

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

Good governance as close to the top of the State will ensure success. The development of a clear policy statement that focusses on key deliverables, clear ownership of actions and KPIs. Regular reporting to the highest levels of government. Built in reviews to refine the policy and objectives. Use the existing structures of the state and ensure that there are benefits for success and consequences for failure.

Are there any other issues to be addressed through a national policy statement?

There needs to be quantum leap in our nation to make people appreciate our environment and realisation of its importance to our health and well-being. This is an opportunity to start that conversation.