Consultation and Discussion Document Response

1. Are you satisfied the outlined Pillars represent the structure of the Irish bioeconomy?

I believe the pillars that are outlined in the structure in the bioeconomy cover everything needed, however there is no need to have a smaller breakdown of sectors as it will waste time trying to define where/ which each industry falls into.

The pillars should be divided up as follows:

- Agriculture should have its own pillar
- Marine should have its own pillar
- Research Development and Innovation
- Industry and Enterprise and Consumption
- Forestry should go along with other natural resources ireland has in the Nature pillar
- Education should have its own pillar
- Community should be changed to populace to account for the entire society.
- Knowledge and skills should be moved into the Governance pillar, as that
 is where the responsibilities for such resources lie. Knowledge & Skills should
 be within the governance pillar and every other pillar as lack of knowledge of
 other sectors leads to environmental damage and other problems.

Some of these pillars are way bigger than others and should be reassigned to be more balanced.

2. Are there specific key performance indicators and/or targets the bioeconomy should be setting out to achieve to measure its implementation?

Each sector should have its own breakdown of goals however there are broad goals that every sector needs to achieve e.g. lower carbon emissions and low toxicity to the local environment.

Each individual sector should have specific targets catering to that area, that are regularly assessed to ensure that targets are being met.

Community feedback is another important indicator of the success of the bioeconomy.

- 3. What other key issues should the Governance Pillar deal with?
- Governance should interact with all the pillars should be providing knowledge and skills to all pillars and then help each of the pillars communities.

- Clear communication paths to all stakeholders involved. Additionally communicate
 not only with those directly involved, but also the general public, government and EU
 on the progress of any given project.
- Assessments and monitoring of goals and targets across pillars.
- Address any issues that arrive across pillars and facilitate those involved to find a solution.
- 4. What key issues should the Research, Development & Innovation Pillar deal with?
- Universities and further education more new futures programmes like in dcu that have changed to deal with the changing economy and environment.
- Support Enterprise Ireland
- Make sure the next generation of people educated are more knowledgeable
- More grants for research in areas relevant to growing bioeconomy
- 5. How could the RD&I bioeconomy approach be best structured to support the enhancement, application and scaling-up of biological knowledge and bioeconomy solutions?
- Research > Planning > Asset Development > Market
- 6. What key issues should the Nature, Climate & Circular Pillar deal with?
- Climate change issues e.g future planning for rising sea levels, flooding, temperature increases, food shortages etc.
- Reforestation
- Conservation
- Dealing with companies affecting climate and nature i.e companies that cause the highest amount of carbon emissions.
- 7. What key issues concerning consumption patterns need to be examined to close the gap between sustainable supply of biological resources and demand?
- Food consumption
- Food waste
- Plastic consumption
- Oil/Gas/Petrol consumption
- 8. What key issues should the Agriculture, Food & the Marine Pillar deal with?

Firstly, agriculture should be its own pillar as this is such a large industry in Ireland and one which will need additional time, funds and attention as they are also a group in society often in opposition to environmental issues. The Agriculture Pillar should be dealing with the following key issues:

- Land use e.g reforestation and crop rotation
- Feed for farms
- Grants for farmers to more to more greener ways of production
- Education and outreach

Changing climate and crop growth

Marine should also be its own pillar that also includes other water bodies e.g rivers and lakes and wastewater, and deal with the following key issues:

- Hydro Power
- Accessing viability of offshore wind farms
- Fishing / overfishing
- Pollution into water sources
- Water/marine life preservations
- Banning of materials/pollutants that can easily access water bodies e.g One, polyester in clothes leads to microplastics in water and two, plastics in toiletry products thats will damage wastewater treatment plants and sewers

Food should not be its own pillar and rather go under Industry, Enterprise and Consumption and deal with the following key issues:

- Food waste is a massive problem and needs a lot of attention put on it if it stays within this pillar there focus may be drawn in too many directions
- Reduction in meat consumption
- Encourage people to reduce, reuse and recycle all goods and products and facilitate
 this by investing in services such as tailors, cobblers, tech repair shops and charity
 shops/vintage shops.
- 9. What key issues should the Communities Pillar deal with?

The community pillar should be a part of each pillar instead of being on its own - each one of these other pillars have its own communities that need to be dealt with differently and all have different values and priorities - eg agriculture communities and large corporate communities.

There cannot be an umbrella to deal with all these different communities cause they all need to be dealt with differently to gain success in achieving a bioeconomy.

10. Are local and regional policies ensuring the consideration of bioeconomy opportunities are in scope, and are coordinated approaches on such services in place at regional assembly and local authority level?

This question is not phrased very well but from my understanding currently local and regional policies are not allowing the opportunity for a bioeconomy to come into fruition.

- 11. What key issues should the Industry & Enterprise Pillar deal with?
- The emissions this sector produces and how this industry allows for the misinformation about climate issues and science to grow and gain following e.g social media companies that allow the spread of misinformation
- Make sure that all areas of industry are growing and supported by government so they can deal with the changes of climate change and new technologies eg

renewable energy - this ensuring that jobs are not lost in companies that did innovate and change to work within a bioeconomy

12. What lead market initiatives could support entrepreneurship, development, innovation and the commercialisation of bio-based products, processes, information, and services?

This is also a poorly phrased question. I think acknowledging companies that are working to be more environmentally conscious and offering them a monetary benefit would be a smart initiative.

Also implementing a tax on companies who are high polluters, or consumers of non-renewable/recyclable products.

13. Due to the requirement for capital and operational investment, what innovations aimed at financing infrastructures and technical and economic evaluation of innovation are necessary to scale up the bioeconomy?

Invest more government funding in environmental initiatives that work toward a bioeconomy because without this change there will be no economy full stop.

- 14. What key issues should the Knowledge & Skills Pillar deal with?
- Prevent misinformation
- Skills to evolve industry more towards greener energy and supply chains
- Community engagement
- Give public clear and concise information about changes
- Give citizens access to information about skills and knowledge to future proof their homes and switch to greener modes of transport and energy supply
- 15. <u>Can the regional skills and regional enterprise approaches better support bioeconomy development?</u>

Yes definitely, when you engage with the community there is less backlash and you get better feedback on the changes that happen - it may also facilitate the government to gain ideas from the community that may have not been thought of before.

16. An important part of developing the bioeconomy is to determine the most appropriate practices, treatments, technologies, logistics and business models to valorise ecosystem services, primary and secondary biomass resources. What role do advisory systems play in addressing this challenge?

Advisory systems are very important as they facilitate discussions between all stakeholders involved and I would urge the government to get experts across fields involved such as scientists, engineers, and farmers.

17. Are there any further Pillars/Issues which this Action Plan should address?

As mentioned before there should be a pillar designated to water itself, agriculture itself, food itself, and one for natural resources eg forestry and bogs. I also think communities should be included as an element of each pillar and change the pillar "community" to "populase" to include the residents and citizens of Ireland that may not be a part of those communities and to also unite those other pillar communities and spread knowledge of them to the populace.

18. <u>Indicate what the top five priorities for action in the bioeconomy over the next three years should be?</u>

Over the next three years the bioeconomy must focus on the biggest problems ireland face at the moment, these include:

- 1. Building a sustainable energy grid that can supply energy to the rest of europe
- 2. Removing the need of plastics in clothing and toiletries to help the wastewater treatment and prevent microplastic going into bodies of water
- 3. Managing food waste
- 4. Focusing on ways to store excess energy so that no energy is wasted eg burning of blackbin materials being first to be cut off the irish grid to produce electricity even though they will not stop making heat energy so that energy produced is wasted - the burning of black bin waste is bad however its worse that we are not optimising its byproducts
- 5. Educating the agricultural communities about alternate ways of farming and ways to reduce carbon emissions as they face a lot of scrutiny for emissions, but they're work is needed and we do not want people losing jobs. There are ways to make cattle farming produce less carbon equivalent emissions and we don't have to just end/reduce cattle farming

Additional Note:

 When creating a document that is looking for feedback from the general public, please write it in a way that is comprehensible to the entire Irish population, including people who may be dyslexic or who do not speak English as their first language for example. Writing documents in academic jargon further alienates a large section of the population from the discussion and change will only occur if we all work together.