

MM324 Environmental legislation

Q1: I think these 7 pillars summarise the structure to a strong Irish bioeconomy, as the research and development is required to adapt to changing climates and the needs of Irish people while also being governed by legislation so there is no abuse of resources such as a fishing quota to prevent overfishing. The one pillar I would add to this is one for reuse of materials, although it may be included in a circular economy, I believe there should be more emphasis on this as Ireland is wasteful with resources such as our water waste.

Q2: The growth in trade of agri-food is a good measure of the bioeconomy and the funding of new technology and research, also the reduction of food waste can be measured in the aim to reach zero food waste. The increase of biofuel production by using unusable biomass.

Q3: The governance pillar should deal with the potential trade-offs between other elements of the economy such as land usage, where other industries could thrive and also the synergies associated with forestry as the best method of carbon capture is to reduce the amount of wood harvested.

https://joint-research-centre.ec.europa.eu/jrc-news/forest-based-bioeconomy-and-climate-change-mitigation-trade-offs-and-synergies-2021-05-06_en

Q4: Methods of reducing the GHG (greenhouse gas emissions) as agriculture is responsible for 40-46% of global methane emissions. The RD & I pillar should also look into making the industry more feasible for business owners such as farmers with more efficient technologies to expand their businesses.

https://scholar.princeton.edu/sites/default/files/methane_discussion_paper_nov_2021.pdf

Q5: Within the RD&I pillar, the governance of this should have a large say as appropriate funding is crucial and it should be monitored that it is divided up in the most useful channels. As Ireland have learnt in history from the famine and the dying of ash trees across Ireland, it is important to introduce suitable enhancements to the bioeconomy such as the new bamboo technology in hurley making. If trials and grants were offered to the industry, the people who know how the land is best used, only the more effective technologies will be adopted.

Q6: This pillar should focus on maintaining our natural capital and biodiversity, while overseeing the effects on the climate, and what elements of the bioeconomy could change to reduce these effects. The circular economy could also be improved to reduce the waste in the bioeconomy and see that anything that cannot be recycled is disposed of in a legal and eco-friendly manner.

Q7: It is known that people do not consume enough fruit and vegetables in their diet, yet rely on starchy crops that, with over consumption are bad for the earth and also for our health. This may be due to the fact that growing fruit and vegetables are more expensive to grow, thus expensive to buy for consumers. Income is one of the biggest factors in consumption patterns, the same can be said for a lot of the issues in the world, so to change these patterns, products need to be more affordable and accessible for all in Ireland.

<https://sdg2advocacyhub.org/index.php/chefs-manifesto/news/introduction-sustainable-consumption-patterns#:~:text=Key%20issues%20to%20address%20to,we%20cannot%20transform%20food%20systems.>

Q8: This pillar should handle the avoidance of abuse of agricultural practices and work with farmers to meet the needs of consumers to avoid food waste. In the marine sector, fishing quotas should be monitored to steer clear of overfishing while also helping the fishing market.

Q9: Community plays a large role in the bioeconomy as they are the consumers of the industry and can be consulted on how the bioeconomy could be made better and as previously stated, the community can voice their needs from agricultural and marine industries to avoid resources being wasted.

Q10: I think local and regional governments play a large role in the running of the bioeconomy as it is the local bodies that delegate the division of land, despite the national government handing a blanket ruling for each industry, it is the local and regional policies that compliment the local culture and heritage, while also ensuring a fair market in their constituency.

Q11: The Industry and Enterprise Pillar should look to promote the businesses of agriculture, clean energy, marine and climate industries. It should promote entrepreneurship in each area and look to recruit people into the sector such as agriculture as it appears a lot of farmers are leaving for more stable jobs.

Q12: N/A

Q13: N/A

Q14: The knowledge and skills pillar would be optimally applied to grow the skills in industry and work hand in hand with the research pillar to apply what has been learned about the land and how it could be best used to benefit the growth of a healthy bioeconomy.

Q15: The regional skills and regional enterprise approaches could definitely help with the growth as REP's (regional enterprise plans) are implemented locally to achieve investment and job targets. Over €126 million in funding has been approved for 79 REP's.

<https://enterprise.gov.ie/en/what-we-do/the-business-environment/regional-enterprise-plans/>

Q16: By setting out forums as mentioned in the Impact 2030 document, where people are free to join, it can be monitored that the action plan follows suit with the international guidelines and standard practices.

<https://assets.gov.ie/224616/5f34f71e-e13e-404b-8685-4113428b3390.pdf>

Q17: Despite the pillar of Industry & enterprise, I can see a need for the financial economy having a greater representation as with the bioeconomy, Ireland could grow their impact on the EU trade market as we are high in exports of fish and beef. This may fall into another action plan but I do see some need for a crossover.

Q18:

-Adopting new technology and introducing suitable enhancements to the biodiversity of Ireland.

-Ensuring a strong position in the European trade market.

-reducing and monitoring the effects of climate change in Ireland and the greenhouse gas emissions.

-Grow the plan of a circular economy in Ireland to reduce waste of energy, food and water.

-Setup a good line of communication with the community of Ireland to ensure the bioeconomy is growing in the right direction.