

Hemp Cooperative Ireland - Response to Bioeconomy Submission

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27/01/2023

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

Yes

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

Development of new industries should be encouraged, however these industries should be approached with rigour to make sure they are in line with Ireland's climate targets and beneficial to the environment. Biodiversity should be central to all measurements of successful bioeconomic developments, and should not be seen in juxtaposition with community growth/prosperity and rural development. Preservation and rewilding of degraded lands while increasing efficiency of farms and land used for biobased production.

Use of materials from our indigenous bioeconomy in Irish industry will be a key factor for measuring success. As mentioned in the attached submission, we believe that hemp can be grown, processed and used in Ireland for the benefit of all along the supply chain, while increasing on-farm biodiversity and sequestering carbon.

3. What other key issues should the Governance Pillar deal with?

The governance pillar should include a failsafe to ensure that the bioeconomy does not follow the extractive and destructive practices which have to date exemplified the Irish bioeconomy. Modern bioeconomic industries must evolve away from monocropping, land-grabs, maximum production and find a pathway to securing our land, water and air.

Hemp is an ancient crop, and being revitalised by a dedicated cohort, but sadly with 70 years of legislative baggage. It is up to those who wish to see a greener, vibrant bioeconomy to push our government to allow hemp to safely be part of the future.

4. What key issues should the Research, Development & Innovation Pillar deal with?

Again, it is vital that the bioeconomy does not simply become a hyper-efficient, sterile, soulless industry, but rather research is conducted into High Nature Value farming/production. Ireland is severely behind other EU states in rewilding, preserving natural spaces, controlling invasive species etc. If bioeconomic endeavours continue to work single mindedly towards efficiency, it is certain that the degradation of our natural resources will continue.

Industries that extract from the natural world need to ensure that they do so causing minimal damage and maximum benefit (if possible) to the environment they are engaging with. The RDI pillar can ensure this by providing sound research into HNV farming, min-till practices, engaging with the community to find out which questions need answering on behalf of the stakeholders in those industries AND then providing funding or a clear pathway to industrial success.

Hemp is an excellent crop for intercropping, storing carbon in the soil and supplying the farmer with additional income. The uses for the fiber, shiv and seed are uncontroversial and require some focussed research and product innovation to be implemented in Irish society. To ignore this huge market and instead make minor changes to existing industries is to neglect an opportunity.

Bio-based materials for construction is way behind in Ireland, as there is also a housing crisis, this should be at the forefront of research, to drastically reduce CO2 emissions from the sector, while sourcing local materials and supporting Irish farmers.

Targeted research should focus on the true Life Cycle Assessment for various crops and residual products from food production, agriculture and other underutilised areas such as from council-managed lands/ hedgerows etc.

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?

An ideal structure would involve natural historians, climate researchers, farming/producer organisations, cooperatives and representatives.

There should be a central group who manage bioeconomic research and have oversight into which emerging industries or technologies will require funding and support in the form of research.

Listening to the requests which cooperatives and stakeholder groups have is important, as is the filtering of groups which are receiving more research grants than others. For example, research into multi species swards and alternative cattle feeds are regularly encouraged, while research into radically different farming practices is thin on the ground.

6. What key issues should the Nature, Climate & Circular Pillar deal with?

This pillar should be focussed on restoring and preserving what little remains of functioning Irish ecosystems. Knowledge of how Irish ecosystems function when there is no disruption will be essential for this pillar to support the others in their actions. If we do not understand what an Irish wilderness looks like, we cannot hope to preserve 'nature'.

This pillar must therefore be founded in constantly evolving knowledge about Irish rainforests, woodlands and bogs, and how the bioeconomy can fit into the necessary actions of preserving them.

The circular part of the pillar should be actively seeking ways to return nutrients and biomatter extracted from land back to that land. The use of biorefineries and waste management strategies is essential to ensure we are not leaching our nutrients into the sea or landfills through sewage and waste management practices.

Hemp is a biobased solution for a host of unsustainable industries: plastics, textiles and construction. The materials gleaned from this natural product can be recycled in a way that oil-based plastic materials and synthetics cannot.

7. What key issues concerning consumption patterns need to be examined to close the gap between sustainable supply of biological resources and demand?

Food waste, the transformation of bio-based materials into non-biodegradable materials and the lack of control in food waste issues: supermarket culture etc.

We believe also that there should be a concerted effort to exchange synthetic and harmful materials in our economy (construction and textiles, for example) with natural alternatives and ideally, we would house industries for their creation and processing in Ireland. We have the potential to tap into a major climate solution while solving issues up and downstream of the farm at the same time.

People will use natural materials if they are presented in the same fashion as conventional. Plastic and synthetics in homebuilding, for example, can be replaced with natural materials with all of the innovation of modern architecture, while saving the consumer the heartache of using non-biodegradable materials.

Therefore training, quality information access and outreach need to form a part of this plan and include all stakeholders from Architects, Planning Departments, the construction industry and all professional bodies including the SEAI and EPA.

8. What key issues should the Agriculture, Food & the Marine Pillar deal with?

The issues raised in the description of the Irish Agriculture, Food and the Marine are woefully unimaginative. The status quo will be upheld (beef, sheep and dairy) while minute differences in efficiency of production will be lauded as climate-change busters. This pillar needs to be completely turned on its head. Farmers, fishers and foresters are locked into a destructive cycle of mono-cropping, intensive production and useless environmental actions through GLAS and other initiatives.

We need to fundamentally rethink CAP and forestry in order to avoid paying significant fines for carbon emissions. Ireland grows monocrop Sitka Spruce, producing carbon-emitting dead zones on valuable land and bogs, while patting themselves on the back for growing trees. We

grow sheep, cattle and dairy cows, keeping the land in monocrop Ryegrass plantations, and think that a multi-species sward and seaweed crunch is going to save our climate. Instead, this pillar needs to completely move away from the current model.

Supporting High Nature Value farming and holistic farming with measurable results in biodiversity, carbon storage and soil health while reducing the use of pesticides, fertilisers and slurry is essential.

Alternative crops such as hemp, flax and multi-species native woodlands, which all have markets at their disposal, need to be encouraged and fostered in the same way that high-efficiency dairy farming is. There is a clear argument to be made for hemp planted as a fodder crop for protein and calorific value, given the heavy reliance on imported soya and the sometimes questionable and unsustainable farming practices elsewhere in the world.

9. What key issues should the Communities Pillar deal with?

There are plenty of communities relying on the bioeconomy already. Supporting investment in rural areas (as Udaras na Gaeltachta do) is one way of ensuring an even spread of bioeconomic returns. As it stands, many bioeconomic communities are dominated by large cooperatives or investors, who protect their own interests at the expense of the land and communities surrounding them.

Take for example, the lack of enthusiasm for farming among young farmers. Hemp has the potential to re-engage with a young community hungry for change and innovative thinking. The idea that streamlining production methods in old industries will solve our climate issues, when they rest on hundreds of years of deforestation and overgrazing, will not change the minds of young disenchanted farmers. However, encouraging them to try novel crops, management systems and breeds will certainly revive rural Ireland.

At its core, the Hemp Cooperative ethos is to regenerate rural Ireland, this includes diversification of income streams and increased employment. This should help turnaround the existing rural decline and migration of young, skilled workers to the cities. This can only be achieved through the development of industry in rural areas, close to where the materials are produced. Biorefineries, and crop processing should be positioned within communities, to provide local jobs outside the farming sector.

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?

It depends on the industry in question: as aforementioned, it is clear that large cooperatives and investors who have the funds and time to employ a staff of legal and lobbying support have the

ear of the government and funding bodies. Wealth and funding is accumulating in certain areas, and is difficult to access for others.

The hemp industry is majorly hindered by outdated, incorrect laws concerning THC and hemp, when these should have long ago been updated and thereby serious blockades removed from the path of industry. We therefore feel that there is a lot to work on as regards regional and local support for the bioeconomy. The 'green light' to fund industrial hemp projects via Enterprise Ireland, would go a long way to encourage the industry.

11. What key issues should the Industry & Enterprise Pillar deal with?

New industries, innovative thinking, disruptive technologies. Anything that ensures a strong move away from the status quo and into genuinely effective, productive and environmentally conscious methods.

To mention again the disconnect between industry, policy and public opinion is massive: it is clear that were the bioeconomy to function in a sustainable manner and green, circular options available to the consumer, the public would engage with them and use them. The lack of availability and accessibility are major barriers to bioeconomic products being accepted by the public sphere.

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

Enterprise Ireland support for industrial hemp - related bioeconomy projects. Currently a moratorium is in place. Removing this would help 'ready to go' projects in the field.

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?

A clear pathway for bioeconomy innovators to follow. If funding opportunities and support were organised and accessible through a central bioeconomy innovation pathway, innovators could save time seeking grants and spend that time opening industries.

14. What key issues should the Knowledge & Skills Pillar deal with?

Keeping local knowledge at the forefront. We have to ensure that local practices are not lost as so many industries have slowly died due to this over time.

There are alternative methods such as agroforestry, intercropping and min-till which should be mainstreamed and made part of any discussion on how to reduce carbon losses on farms.

Knowledge is currently disseminated through forestry coops, farming reps and Teagasc for farmers. These groups need to be included in any knowledge dissemination strategies.

15. Can the regional skills and regional enterprise approaches better support bioeconomy development?

Ensuring the preservation and encouragement of local knowledge above sweeping national schemes. We have had poor results from Teagasc's forceful implementation of certain methodologies and plans, such as hormone-induced early lambing and high-maintenance cattle breeds for the west of Ireland.

LEADER and Local Enterprise Offices could provide targeted support/ grants/ etc. for bioeconomy - linked projects. Training the individuals involved in decision making on the bioeconomy and the wider benefits would better inform the system. Perhaps more emphasis on social enterprise and non-profit, given the balance needed in environmental/ rural considerations, alongside the obvious fiscal.

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?

They can play a huge role, if advice is taken from all relevant stakeholders, including industry bodies such as the Irish Bioenergy Association (IrBEA), however, this should benefit the entire industry and individuals, not just the member organisations. Greater collaboration between all the industries and representatives should be encouraged, perhaps an advisory committee created, to ensure representation across all sectors.

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

New industries and the markets for bio-based products should be explored in greater detail.

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

Opening up a bio-based market for fibre crops to improve the wasteful (and carbon heavy) industries of construction, textiles and synthetics.

Ensuring the preservation of wild spaces, terrestrial and marine: establishing protected areas.

Creating a pathway to where rewilding is subsidised

Providing pathways to farmers diversifying their farms: encouraging young farmers to engage with disruptive thinking, while regenerating and expanding the rural economy.

Ensuring waste management pathways for all industries which will be circular, or as good as.