

IFA Response to Ireland's Draft National Biomethane Strategy.

Background

IFA welcomes the opportunity to submit input into Ireland's Draft National Biomethane Strategy. The Irish Farmers' Association is Ireland's largest farming organisation with approximately 77,000 members in 940 branches nationwide. The IFA has a commodity committee to represents the main agricultural sectors, including, dairy, livestock, sheep pigs, poultry, organics production and aquaculture but also has a number of cross-sectoral committees that has overarching responsibility on issues which affect the entire agricultural sector.

Comment on the Draft Strategy

Mission

It is positive to note the mention of this strategy being "agri-led and farmer-centric" and it aligning with circular bioeconomy development and enablement of sectorial emissions targets to be met. However, IFA believe for such a strategy to work, financial considerations must also be one of the stated missions of this strategy. To develop the scale of a Biomethane/AD industry (5.7TWh by 2030) as is laid out in this document then financial certainty for all those along its value chain must be at its core . In our experience the ability of small scale financially independent investors to gain funding to partake in such an undertaking will be significantly hampered without a guarantee of an offtake price, as an example here in Ireland look at how the wind sector has developed. In other European countries where AD has been successfully developed, operational supports are a cornerstone of their industries, a point noted on page 14 of this document.

Framework for developing the national biomethane strategy

It is noted that economics is listed as one of the key pillars of this strategy. Unfortunately, without any concrete details and the expectation that end users will pick up the full extra cost of biomethane it is hard to see how this strategy document will enable Ireland to meet its biomethane target for 2030.

Although sustainability, demand, bioeconomy & circular economy, and enabling policy are undeniably crucial aspects, their efficacy ultimately hinges on the economic viability established within the "economics of biomethane" framework. Without a clear delineation of economic modelling and a robust plan for funding and financing of the sector, the efficacy of the other pillars may be compromised. Therefore, it's imperative for the strategy to prioritise laying out a comprehensive economic strategy and financing plan to underpin the successful implementation of the broader objectives.

Enabling Policy Requirements is also mentioned here as a key pillar again details on this pillar are very sparce. Lag times on current construction projects in Ireland due to planning and regulation delays would indicate that the same is likely to happen in the development of AD plants.

The document highlights the various agencies relevant to enabling the delivery of the targets (An Bord Pleanala, DAFM, SEAI, and the EPA). Reference is made on Page 32 to the Department of Agriculture Food and the Marine (DAFM) and Department of Housing, Local Government and Heritage (DOHLGH)



"developing a standardised code of practice for local authorities to be followed when assessing an AD and biorefining planning application" – but no time frame has been set. The major problem is the time that it takes to get all the Agency approvals has been measured in years rather than months. This is a serious concern as we are less than six years from 2030.

If the Government is serious about reaching the target for biomethane by 2030 then a whole of Government approach on this will be required and we recommend a single department would take full responsibility for all planning and regulation issues. Clear national guidelines should be published quickly on what is required for an AD plant to gain approval for construction. All ambiguity that may slow such projects needs to be eliminated. It should be clearly understood by both developers of an AD plant and those in local authorities who decide on these issues exactly what is required for a successful planning application.

Biomethane helps Reduce Agriculture Sector Emissions

The potential to reduce agricultural emissions through investing in "appropriate infrastructure" is mentioned in this section but again no details on any incentives or possible funding mechanisms are mentioned.

If, as the document states, this is to be "agri-led and farmer-centric" then substantial capital grants will be required for farmers who wish to develop AD on their farms. As mentioned above operational supports will also be required to enable full farmer involvement. Without these there is a fear this will become an investor/developer led AD sector, with farmers only seen as suppliers of feedstock and taking away digestate. If this is the road of travel, then the chances of reaching 5.9TWh by 2030 will be close to non existent.

Collaboration similar to the cooperative model is also mentioned, IFA believe this is something that should be further investigated and encouraged for the benefit of farmers.

Sustainable Digestate Management

The "Sustainable Digestate Management" section (beginning on Page 26) talks about digestate being viewed as a waste product and a burden for AD plants. It then proceeds to talk about "transforming digestate into a valuable biobased fertiliser which can generate a potential revenue stream for plant operators. How is the digestate "transformed"? What process is required? How is the digestate and the "transformed product" classified and regulated (or to be regulated) under the Good Agricultural Practice for the Protection of Water Regulations in Ireland? It makes sense for the "biobased fertilisers" to be treated similarly to chemical fertiliser.

This draft strategy document acknowledges the potential for the agricultural sector to transition towards utilising bio based fertilizers such as digestate as an alternative to chemical fertilisers. In Ireland, where grassland dominates (over 83%¹) with a smaller portion allocated to tillage and crop lands, this shift presents a significant opportunity. However, the discussion on the replacement of chemical fertilisers with digestate in the document appears somewhat simplistic.

One critical aspect overlooked in the draft is the regulatory hurdles associated with implementing this transition, particularly in the context of the nitrates directive. Currently, digestate is categorised as organic fertiliser, while chemical fertilisers are considered inorganic. Despite the nutrient transformation that occurs during the anaerobic digestion process, making them more readily

¹ https://www.cso.ie/en/releasesandpublications/ep/p-fss/farmstructuresurvey2016/da/lu/



available to plants, the regulatory classification still distinguishes them as separate entities. A change in this categorisation, so that biobased fertilisers are treated similarly to chemical fertilisers is supported by research completed by the EU Commission Joint Research Centre (JRC) in 2020². Further, the Dutch, Danish and Italian delegations to the EU Council of Agriculture and Fisheries meeting on 23 January 2024 presented a paper wishing to see this change also³.

It's imperative for the strategy to acknowledge and address these regulatory disparities. There needs to be a concerted effort to recognise the nuanced differences between chemical fertilisers and digestate from a regulatory standpoint. This includes outlining the necessary steps to amend existing regulations to accommodate and facilitate the widespread adoption of digestate as a viable alternative to chemical fertilisers. By addressing these regulatory challenges upfront, the strategy can pave the way for a smoother transition of agricultural practices.

Wording

On Page 9 there is a reference to "animal wastes" (last sentence of second last paragraph on the page) — what is this a reference to? If this refers to animal manures or other by-products — should it refer to "animal by-products" rather than "wastes"? The use of the "waste" term is unhelpful as it conveys a cost rather than a value. It also is important in relation to what may be regulated under the Waste Management Regulations. The word "waste" should not be used if it is referring to products that are already regulated under other regulations (such as animal by-products regulations and the Good Agricultural Practice for Protection of Waters Regulations (currently SI 113 of 2022)). More, animal slurries and manures are not "wastes" per the Brady v EPA case, 4 rather they are "bye-products". They do not come under the EU waste directive.

Again, On Page 22, top of page "...from transportation of waste feedstocks right through to delivery of gas to customers." Is this saying all feedstocks are waste? If so please consider amending as per above.

Also, On Page 34 in the last paragraph reference is made to "residual materials and other by-products, which would usually be waste products.... for instance slurry". This needs to be corrected to reflect the regulations as set out above.

On page 14, second paragraph there is mention of "liquor" what exactly is meant in this instance? Also it specifies that this should not be spread before 15th of March, is there research to back up this date or how was it arrived at?

There may be other inappropriate references to Animal manures/by-products as wastes in the document – and these should also be amended.

IFA requirements for a successful farm led AD/Biomethane industry.

The IFA Environment committee have agreed a set of requirements that we see as fundamental if widespread support of an AD industry is to happen in Ireland. For a strategy to outline a roadmap that has a realistic chance of meeting the 2030 target for Biomethane we believe each of these requirements must be met. These are as follows:

• Develop an effective National Biomethane Strategy that **allows full farm participation** in AD and the confidence to invest in AD.

² https://publications.jrc.ec.europa.eu/repository/handle/JRC121636

³ https://data.consilium.europa.eu/doc/document/ST-5502-2024-INIT/en/pdf

⁴ https://curia.europa.eu/juris/document/document.jsf?docid=142602&doclang=EN



- Full reflection of the emissions savings realised from the production of biomethane from agriculture feedstock must be allocated to agriculture in the national inventory.
- Introduce a Renewable Heat Obligation scheme (RHO) with **sustainable subsidies** as soon as possible to support the wide scale development of an AD sector. This will give greater certainty and security of revenue for farmer led projects.
- Provide capital grant funding to support the construction of viable on farm AD plants and for on farm storage of digestate from AD plants. This funding must come from the Department of Energy and Climate Change budget.
- **Government backed finance** (similar to current SBCI lending structures) to be provided to enable farmers develop AD plants.
- Introduce a **biomass mobilisation scheme** to support farmers to coordinate, mobilise and establish a sustainable feedstock supply chain for AD plants.
- Streamline current regulations to support the development of AD plants, in particular farm scale AD plants, with statutory timelines imposed on regulatory and licensing authorities. National guidelines are required so all local authorities can assess possible AD projects under the same criteria.
- Ensure the **maximum amount of farm slurries and farmyard manures** are used in AD plants in Ireland.
- Minimise the displacement of human food production for the supply of feedstocks for AD
 plants in order to safeguard Food Security.
- No agricultural feedstocks supplied to AD plants to be classified as waste.
- Where any **non agricultural materials** are used in AD plants, strict rules must be complied with, to ensure no contaminants are spread on farm land or enter the food supply.
- Establish a fair, equitable and **independent pricing mechanism to ensure a sustainable feedstock price** for farmers who wish to supply AD plants.
- All taxations rules, reliefs and exemptions that currently apply to agriculture must continue for farmers involved in AD.
- To support more circular based agricultural practices, it must be ensured that digestate from AD plants is reclassified under the Nitrates Directive and as outlined in the 2020 JRC report⁵ to ensure it does not count towards a farms organic Nitrogen load.
- Digestate from AD plants to be eligible for spreading on Organic farmland.
- At all times grass and other animal feed products must be prioritised for animals. If at any time there is potential of animal welfare issues from a shortage of fodder in the country then produce that can be fed to animals must be diverted from AD plants for use as feed for animals.
- Ensure a streamlined system is in place for the importation of animal manures and slurries and the exportation of digestate from AD plants. If built on farm these imports and exports must be treated separately when assessing those farms organic load from its farming enterprise.
- Review of Animal By Product Regulation on requirements re pasteurisation. Where only
 agricultural feedstocks are supplied to an AD facility there should be no requirement for
 pasteurisation.

⁵ https://publications.jrc.ec.europa.eu/repository/handle/JRC121636



Conclusion

IFA is fully supportive of an "agri-led, farmer centric" AD industry in Ireland to help reach the target of 5.7TWh of biomethane production by 2030. There are many areas in this strategy document that we agree with, but we have grave concerns on the lack of any financial/economic details within it.

In order to secure farmer involvement, certainty of income streams will be required when seeking finance. Without this, obtaining finance will be near impossible. This will mean AD development will be exclusively by large institutional investors and the farmer will be but a supplier of feedstock. This may suit some farmers, but many want to be fully involved in this industry. To deny them that opportunity will mean we will have an industry that will never reach its full potential.

Capital Grants will be required to enable farmer involvement in the construction and ownership of AD plants, but if, as it currently looks likely the strategy/hope is that Ireland will meet the 2030 biomethane target without any operational supports, then in IFA's view, there will be no possibility of meeting the 2030 target.

In addition to the construction of the actual AD plants, construction of storage facilities for digestate will also be required. Where, this storage is constructed on farms, for reasons such as ease of access at suitable times for spreading of the digestate, then capital grants will be required for construction of this storage. These grants should not come from the DAFM budget or through existing TAMS fundings. This, along with all capital grants in relation to development of AD must instead come from the Department of Energy and Climate Change.

When designing the feedstock mix for any future AD industry, cognisance must be taken of Ireland's tillage sector and the opportunity it will provide as both a feedstock supplier and receiver of digestate from AD plants. The increase in the amount of cover crops planted in Ireland in recent years means the availability of material from this source should be considered as a viable and sustainable feedstock. The IFA Tillage Committee have separate comments on this response in relation to AD and Tillage which can be found at <u>Appendix 1</u> below.

IFA are available to discuss our policy requirements outlined above with a view to seeing how they can be incorporated into the strategy. We would welcome further engagement before the final strategy document is agreed upon.

Yours Sincerely

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Appendix 1 Irish Tillage Sector and Anaerobic Digestion

In contrast with much of continental Europe Ireland does not any significant area of arable land devoted to production of energy crops for anaerobic digestion (AD). Primary crops such as maize, whole-crop cereal, energy beet and grass silages all offer significant potential as feedstocks for anaerobic digestion in Ireland. The introduction of these crops and also perennial grasses and legumes could bring agronomic benefits to crop rotations on tillage farms.

Perhaps most importantly, development of a wider AD network would provide tillage farmers with an alternative market to combinable crops. The area of tillage in 2024 and beyond is under significant threat due to changes in agricultural polices such as CAP and the Irelands Nitrates Action Plan. High yielding crops such as energy beet and maize for anaerobic digestion could enable tillage farmers to remain more economically competitive in future years.

Energy Cover Crops

The integration of secondary energy cover crops within crop rotations has increased significantly in Europe in recent years. This has been primarily to address questions which have been raised around the sustainability of maize production exclusively for biogas production⁶. Energy cover crops are grown intermediately between two crops and therefore do not directly compete with crops produced for human consumption or animal feed. This is an important consideration in Ireland given our low self - sufficiency in grain production for animal and human consumption at the present time.

Cover crops deliver a multitude environmental benefits for soil health. Approximately 40,000ha of cover crops are now planted in the Republic of Ireland each year, with relatively small changes in management, this land area could provide a sizeable quantity for biomass generation without compromising on production of crops for food/feed. This would also generate a secondary income stream for tillage farms when land might otherwise be bare or idle. Intermediate crops are also compliant with proposed future *RED II Legislation* by the European Union.

To date, energy cover crops have been largely categorised into two categories⁷ (i) summer energy cover crops and (ii) winter energy cover crops. In Ireland summer energy crops such could very conceivably be grown after early harvested primary cereal crops such as winter barley and particularly in southern and eastern counties where harvest now frequently commences in the last week of June and early July period. This biomass could be harvested in the early or late autumn months depending on growth rates. Winter energy cover crops could be planted in early August after cereals such as spring barley and remain in the ground over winter and the biomass harvested in early spring ahead of a spring crop being planted.

Other considerations

Digestate by-product is a valuable and nutrient rich organic fertiliser. Tillage land in close proximity to future AD developments is therefore an ideal destination for the application of digestate. The return of an adequate supply of digestate will be a determining factor in the amount of biomass that can be produced through primary and secondary crops

⁶ Herrmann, A. Biogas Production from Maize: Current State, Challenges and Prospects. 2. Agronomic and Environmental Aspects. *Bioenerg. Res.* **6**, 372–387 (2013). https://doi.org/10.1007/s12155-012-9227-x

⁷ Launay, C., Houot, S., Frédéric, S. *et al.* Incorporating energy cover crops for biogas production into agricultural systems: benefits and environmental impacts. A review. *Agron. Sustain. Dev.* **42**, 57 (2022). https://doi.org/10.1007/s13593-022-00790-8



Teagasc analysis in 2023 states that 57% of soil samples from tillage land were Index 1 and 2 for phosphate and potash and therefore will benefit from organic manure application to try and bring soil fertility to the desired optimal of index 3. Digestate is an excellent source of nutrients for the tillage sector and has been shown to have a higher percentage of available nutrients compared with other organic manures.

Increased utilisation of manures to cropland is also one of three targeted mitigation measures identified in the Teagasc MACC curve and a more widely available supply of digestate would be a significantly increase the likelihood of this target being achieved. This would also reduce the quantity of synthetic fertilisers required on tillage farms.