



**Response to Consultation by
the Department for the Environment Climate and
Communications on**

Ireland's Draft National Biomethane Strategy

Electricity Association of Ireland

Status: Consultation Response

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The Electricity Association of Ireland (EAI) is the representative body for the electricity industry and gas retail sector operating within the Single Electricity Market (SEM) on the Island of Ireland.

Our membership comprises utilities that represent 90% of generation and retail business activities and 100% of distribution within the market. Our members range in size from single plant operators and independent suppliers to international power utilities.

We believe that electricity has a fundamental role in providing energy services in a decarbonised, sustainable future, in particular through the progressive electrification of transport and heating. We believe that this can be achieved, in the overall interest of society, through competitive markets that foster investment and innovation.

We promote this vision through constructive engagement with key policy, regulatory, technology and academic stakeholders both at domestic and EU levels.

We represent the Irish electricity industry in EURELECTRIC, the representative body for the European electricity industry, and help shape the broader European response to developing policy and legislative initiatives.



Introduction

The Electricity Association of Ireland (EAI) welcomes the opportunity to respond to this consultation on Ireland's Draft National Biomethane Strategy. EAI recognise the importance of biomethane in providing a vector for hard to abate areas to decarbonise whilst also stimulating alternative income streams for farmers and benefitting the circular economy. The key to unlocking these opportunities lies within policy certainty and planning. Anaerobic digestion is a proven technology, utilised across Europe, however it is underdeveloped in Ireland. As more anaerobic digestion projects are being developed, local authorities need guidance on national policy when considering planning for these projects. This strategy will be relied on and should give sufficient guidance to local authorities in order to prevent delays within the planning system.

This consultation has identified multiple regulatory frameworks which must now consider a growing biomethane industry. This includes standards for natural gas quality, standards for construction and operation to eliminate methane leakage, certification of green gas and imports etc. A list of priority areas should be compiled to ensure they are in place as the projects come to stream. This requires cross agency cooperation rather than developing rules in a siloed manner. The Strategy Working Group should ensure it's sufficiently resourced to address regulation changes across these areas.

The delivery of the Climate Action Plan (CAP) target of 5.7TWH of Biomethane in 2030 is ambitious for an industry in its infancy in Ireland. It will require a strong price signal for investment as well as supports for those choosing to opt in. This consultation refers to the use of the Renewable Heat Obligation (RHO) as a policy enabler of the biomethane sector. As the RHO is currently being developed, we are not convinced that it will create the demand required for this sector. As stated in the consultation paper, Ireland has an underdeveloped market for biomethane. Our concern is that the market will not be able to deliver, at an efficient cost, the scale of biomethane obligated on suppliers. This may lead to importing biomethane or opting to buyout of targets. It will also push up the costs of compliance which ultimately be borne by the consumer. Renewable obligations create no clear long term volume target for biomethane, beyond 2030. Other technologies which may be more cost efficient beyond 2030 may be identified, creating investor uncertainty in the biomethane industry.

Under Scenario 3: Economic Deployment which gives the Government the best chance of meeting its 2040 biomethane production target, all policy enablers are utilised. Within this we advocate for a broad approach to policy enablers and utilising schemes which have been effective within other countries; such as a feed-in tariffs and feed-in premiums. Countries with a feed-in tariffs or a feed-in premium include France, UK, Germany, Italy, Denmark, Austria and Belgium.

The benefits for producers and off-takers are price certainty, and encouraging early movers with higher tariffs, stimulating the economy. Feed-in tariffs can also be amended over time to reflect the value of the renewable resource over time.

We encourage the DECC to consider exploring a wide range of new measures to encourage this industry, relying on existing policies alone will result in continued underinvestment.

Response to the Questions

Question 2

The Draft National Biomethane Strategy was developed around five key pillars:

- (1). Sustainability**
- (2). Demand for Biomethane**
- (3). Bioeconomy and Circular Economy**
- (4). Economics of Biomethane**
- (5). Enabling Policy Requirements**

Do you agree with these key pillars?

Yes we do, with some further comments.

Sustainability

- We see decarbonisation as a crucial component of the sustainability pillar and would like further emphasis on this component, identifying sectors where biomethane can provide a unique role in decarbonisation.

Economics of Biomethane

- There is a gap between natural gas prices and the price for biomethane. With a Renewable Heat Obligation in place, suppliers' costs will increase due to this gap. Without addressing this appropriately through subsidised costs for biomethane, customer prices will increase. The UK have sought to address this gap through a Green Gas Levy on fossil fuel exporters i.e. those who extract and sell natural gas. Whilst the share of indigenous fossil fuel is depleting in Ireland, this levy could be utilised to stimulate the biomethane economy.
- There is currently limited demand for Gas Purchase Agreements (GPAs). Whilst large gas users will need to shift to low carbon solutions to manage their ESG commitments, the current cost of biomethane provides no incentive to make these commitments.
- As stated above, other policy measures which can stimulate the biomethane economy in its infancy, such as a Feed in Tariff should be considered.

Other Pillars to Consider:

Security of Supply

- The power generation sector is currently researching the impacts of increasing Oxygen content due to biomethane on gas fired generation. This is due to the gas quality specification change to increase oxygen content to 0.5% mol, rising from 0.2% mol. The currently unquantified impact this has on operational efficiency, equipment lifespan and environmental compliance is a risk for gas fuelled electricity generation.
- Upgrades to equipment due to gas quality changes may need to be implemented, causing plants to be offline. Facilitating each generator to make necessary upgrades before biomethane is injected onto the transmission system should be seen as due diligence for the Biomethane Strategy Working Group.
- The equipment generators use is highly sensitive and fluctuations in gas quality can cause generators turbines to trip. Assessing the impact of increased biomethane injection is essential to the operation of gas units and security of supply in the electricity grid.

Strong Rural Communities

- Scenarios 1,2 and 3 have varying dependence on the role of rural communities, we see the importance of including rural communities as a pillar to this strategy.
- Rural communities will need to explore the viability of an Anaerobic Digester or produce feedstock for an AD into the future. Supports for these communities should be a pillar of the strategy.

Question 3

What key learnings should Ireland's biomethane sector ensure it follows from the growing biomethane sector in Europe? Please select all that apply.

Feedstock Mix

- It is essential to enhance the value of by-products derived from biomethane to effectively lower agricultural emissions. This could involve processes such as recovering proteins, utilising digestate as an alternative to nitrate fertilisers, and exploring the potential production of biogenic carbon dioxide.

Regulations and Policy

- Achieving these targets will require significant advancements in the agricultural and energy sectors. Creating useful frameworks for farmers and plant operators and implementing clear policies are crucial. Further details on the implementation of these policies should be included in the final strategy.
- Benchmarking against successful initiatives from abroad such as Denmark, could be useful to ensure that policy measures are being effectively implemented in a timely manner.

Supports

- As stated above, widening the scope of supports available to this industry is necessary to kickstart the sector in Ireland. Further details on funding incentives and support mobilisation would be welcomed in the final strategy.

- Addressing the sizeable price gap between biomethane and natural gas through the use of tested support schemes is necessary.

Question 4

Based on the scenario analysis completed for the Draft National Biomethane Strategy (Page 14): Which scenario do you think is optimal in terms of a biomethane sector in Ireland (this can be a combination of more than one scenario)? Please rank from 1-3.

1. Economic Deployment
2. Widespread Deployment
3. Current policies only – we do not see the RHO and RTFO creating enough incentives to stimulate the biomethane economy. Direct supports for developers are necessary.

Question 5

As shown in the Draft Strategy, biomethane is more expensive than fossil gas. Based on the analysis set out in the document, in addition to the introduction of a Renewable Heat Obligation, what support mechanism is optimal (in terms of cost, time to deliver, funding) for delivering 5.7 TWh by 2030? (Please rate 1 -3 with 1 being the most optimal).

1. Operational Support - Potential investors might be hesitant to make the initial investment because of the operational risks involved. To tackle this issue, a suggested Feed-in Tariff, drawing inspiration from successful European models and Ireland's favourable encounters with incentives for renewable electricity, seeks to offer investors a dependable revenue flow over a specified medium-term period.
2. Capital Support
3. Feedstock Support

Question 6

Sustainability of biomethane production is a key priority as set out in the Draft National Biomethane Strategy. Can Biomethane be sustainably produced in Ireland?

Yes,

- It can be sustainably produced from waste agricultural and food products, non-food plant matter such as red clover and grass (although grass is not preferable with competition for ruminant feed). If biomethane is produced from landfill and /or wastewater gases then there is the potential for the production of siloxanes which will require further, additional treatment above cellulose based feedstocks.
- Addressing obstacles to biomethane production such as planning, and permissions is necessary to ensure that sustainable growth of the industry is possible. Issues such as objections, confusion about emerging technologies, and inconsistency in decision-making among local authorities could create hurdles. We suggest that Anaerobic Digestion planning guidelines are developed and shared with local authorities to allow for a standard approach across the country.

Question 7

Feedstock utilised by AD developers will be a mix of wastes and agricultural-based feedstocks. Do you agree with the research quoted in the Draft Strategy (*page 21*) that Ireland has ample supply of feedstock to deliver on the 5.7 TWh?

Yes, we agree, noting that Teagasc have stated that red clover can produce more tonnage of biomethane per hectare than grass. The final strategy should clearly set out the most efficient feedstock for Irelands varying soil types.

Meeting the target for biomethane will require exponentially increasing our available feedstock up to 2030. There needs to be sufficient policy supports to allow for this growth in feedstock output.

Question 8

The Draft Biomethane Strategy commits to developing a 'Biomethane Charter' which aims to increase the sustainability and environmental benefits of biomethane production in Ireland. What inputs would you like to see assessed here? Please select all that apply.

Administrative barriers to the biomethane industry should be removed where possible, across planning and development. Whilst the biomethane charter may be beneficial to ensure sustainability of all projects, it should not create an administrative barrier itself.

If a Charter is created considering a wider scope charter which includes biofuels would be welcomed.

Feedstocks	Yes. <ul style="list-style-type: none">• Comparison of yield of grass (as a potential ruminant food source) versus weeds or wastes.• Non agricultural or food feedstocks such as landfill gas and/or wastewater gas and their effects
Plant Design	Yes. <ul style="list-style-type: none">• That measures will be taken to refuse entry of off specification gas to the gas network.
Digestate	Yes
Operation of the Plant	
Other (please specify)	<ul style="list-style-type: none">• Gas quality. A recognition or tie in with the CRU and/or GNI on any changes to the Gas Code of Operations that will affect the existing natural gas consumers and off takers safety and operations.

Question 9

Who should ensure adherence to the Biomethane charter?

Department of Environment, Climate and Communications		
Department of Agriculture, Food and the Marine	Yes	From an agricultural perspective
Other (please specify)	CRU SEAI	As the ultimate controller of gas quality entering the natural gas network The CRU has a lot of experience in regulating utilities, while the SEAI is involved in energy and transport.

Question 10

Do you agree that Digestate (a by-product) of biomethane can be used back into the circular bioeconomy to maximise nutrient recycling as an environmentally friendly product?

Yes, It can displace nitrate-based fertiliser sourced from natural gas. There is also scope for using biogenic carbon dioxide as a feedstock in various chemical processes.

Question 11

What is the optimal end use for Biomethane in Ireland? Please rate 1 – 5.

Biomethane will be utilised by various industries depending on prices and technology developments. The optimal end use for Biomethane in Ireland will depend on its deployment and the development of the sector over the next few years.