



Submission to the

The Commission for Energy Regulation

For

Review of Connection and Grid Access Policy

From:

**Cré – Composting and Anaerobic Digestion
Association of Ireland**

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1. Background to Cré

Established in 2001, Cré is the Composting and Anaerobic Digestion Association of Ireland. Cré (which is the Irish word for 'soil'), is a non profit association of public and private organisations, dedicated to growing the biological treatment sector. Cré supports the production of high quality outputs, assists the delivery of Government waste diversion and bioenergy targets, and promotes the creation of sustainable indigenous jobs.

Cré has a broad membership (approx. 90) base ranging from compost and anaerobic digestion facilities, waste companies, local authorities, technology providers, local authorities, consultants and third level colleges.

Cré is recognised by Government and agencies as the voice of the industry in Ireland and Northern Ireland. It is frequently called on to give the industry view on future policy and legislation. Cré also represents its members on the board of the European Compost Network and is a member of the European Biogas Association.

2. CER Consultation Document

2.1 Introduction

Cré welcomes the consultation on the 'Grid Connection and Access Policy'. Cré's submission is in relation to anaerobic digestion technology.

Cré would welcome an opportunity to meet with the Commission for Energy Regulation (CER) to discuss this submission.

Anaerobic Digestion (AD) is a proven and environmentally friendly technology that can help deliver multiple Government policies on energy, climate, waste and economic growth. It has the potential to create 2,250 direct permanent jobs, with many more in the construction phase, spread across all counties in Ireland.

For this to happen, the Department of Communication, Energy and Natural Resources must be implemented nationally a number of key policy changes such as:

1. Provide adequate support for electricity generation from AD.
2. Introduce a Renewable Heat Incentive (RHI), which includes biogas from ADCHP and injection of biomethane into the national gas grid.

Anaerobic digestion plants operations are not dependent on weather conditions and the technology operates 24/7 generating gas that is used in combined heat and power engines to generate electricity. As a result the technology is an efficient use of the grid access, compared to other intermittent technologies (e.g. solar).

Unfortunately some members of Cré who have existing anaerobic digestion plants with planning permission are being hampered from increasing the size of their plant due to solar speculators reserving grid access in an anticipation of a possible new tariff. Cré believes that a plant with planning permission should be given preference to grid access as opposed to speculators without planning permission.

In Cré's view, anaerobic digestion should not be in the group processing approach (GPA) process, due to relatively low number of applications and it would put anaerobic digestion at an unfair disadvantage.

Ireland should adopt the practices in the UK for just one grid connection where a CHP is installed and allow virtual import / export metering for the generated electricity.

This will

- Overcome the delays that developers of this technology face, having to wait for the ESB to provide the second connection.
- Allow the operator, who is generating the electricity, to benefit from it, rather than feeding it out, then importing it.
- Reduce costs for the developer / operator at planning stages.

2.2 Relevant CER Questions and Cré Responses

Should the technologies and projects currently covered under the non-GPA process be processed under the GPA process when the new connection policy is implemented?

Cré Response:

Anaerobic digestion should not be in the GPA process, due to relatively low number of applications and it would put anaerobic digestion at an unfair disadvantage.

The GPA approach for AD is not appropriate as projects do not cluster in the same way as wind or solar projects. In fact, AD plants tend to spread themselves out to avoid competition for feedstocks. Grouping with other technologies is likely to be purely coincidental and the AD projects are likely to be of a disproportionately small scale in comparison to other technologies.

Should some categories of project be processed outside the GPA process when the new connection policy is implemented?

Cré Response:

Overall the view of Cré is that a technology (e.g. Solar/wind) that have a high number of applications for grid connection should be in the GPA process.

Should the CER include planning permission in the criteria for receiving a connection offer?

Cré Response:

The CER should include planning permission as a criteria for receiving a grid connection offer. A developer who have invested in securing planning permission should get priority over speculators who don't have planning permission. However, it is important to be aware of the serious implications of the recent Court Ruling (O'Grianna & Ors v An Bord Pleanala) that will require project developers to assess the connection of the project/generator to the network.

Cré is recommending that if planning is to be linked with grid connection offers, then superior availability of grid intelligence be available to project developers at the planning stage. Some certainty is required prior to a planning process, particularly with regard to likely grid connection routes and connection points, and the commercial viability of grid connection, as the planning authorities are requesting an increasing level of integrated assessment of generator and grid connection assets. To facilitate this a 'Feasibility Study' service should be re-introduced by the network operators which should be adequately resourced to provide timely responses to developers requests for details of connection methods and costs. It is important that the grid capacity cannot be held by any project until such time that it has received final planning permission.

Have we identified the correct policy issues?

Cré Response:

Yes.

Should the GPA process be retained? And should there be more frequent rounds of offer processing?

Cré Response:

Yes the GPA process should be retained and there should be more frequent rounds of offer processing.

Should the non-GPA approach be revised?

Cré Response:
Yes.

2.3 Transition Measures

The CER is proposing short-term measures (suggested to 30/6/16) prior to the implementation of an enduring connection policy. It is hard to have confidence that an enduring policy could be decided by the CER by 30/6/16, so any transitional arrangements are likely to have a higher impact than anticipated.

Cré fully supports the incentivisation of releasing existing contracted capacity.

For smaller connections (below 2MW), a 10% increase in capacity may not be significant.

Anaerobic digestion plants does not tend to be modular in nature, in the same way that solar PV, or to some extent wind turbines are modular. As plant is running 24/7, it is not generally installed at a capacity above MEC, as is the case for wind generation.

In most cases, anaerobic digestion project designs are fixed, and sunk capital costs have already been made around a given capacity.

In the case of typical anaerobic digestion generators (say 500kW), an additional capacity increase of 50% would be needed to justify an additional generator or change of generator.

A suggested solution in this instance is to have a 2-tier approach as follows:

Existing MEC	Maximum increase in capacity
< or equal 2MW	50%
> 2 MW	10%

3. Anaerobic Digestion

Ireland has a golden opportunity to establish a new industry in rural Ireland that will create jobs and help meet our commitments for renewable energy.

Anaerobic Digestion (AD) is a proven and environmentally friendly technology that can deliver multiple energy, climate, environmental, societal and economic benefits.

It has the potential to create 2,250 direct permanent jobs, with many more in the construction phase, spread across all counties in Ireland.

AD has the capability to supply enough electricity to power 20% of Irish homes, or to replace 7.5% of the fossil-based natural gas used today via the national gas grid with renewable "green" gas.

The readily available renewable energy supply from anaerobic digestion could be the equivalent of a corporation tax incentive to attract new foreign investment into Ireland, enabling major companies such as Apple to gain marketing traction by meeting their sustainability goals.

3.1 POLICY CHANGES REQUIRED

For this to happen, a number of key policy changes must be implemented nationally. The model already exists in the EU, typically in Germany, Italy and the UK.

3. Introduce a Renewable Heat Incentive (RHI), which includes biogas from ADCHP and injection of biomethane into the national gas grid.
4. Provide adequate support for electricity generation from AD.
5. Provide incentives for the use of agricultural organic residues and manures as feedstock for AD, as in Germany.
6. All incentives should be "grandfathered", meaning investors should qualify from (9th July 2014), even if the legislative instruments are not in place.
7. Encourage the separate collection and processing of food waste as feedstock for AD in Ireland, and make it easier for AD developers to obtain long-term contracts of supply for such feedstock.

3.2 THE BENEFITS OF ANAEROBIC DIGESTION

Anaerobic Digestion (AD) produces renewable biogas from materials such as agricultural and industrial organic residues and domestic and commercial food waste. It is a proven technology widely used across the EU and the world. It provides a constant (dispatchable) supply of electricity, gas and/or heat. This means it can be used to provide a stable base-load of renewable energy to the electricity grid.

AD can help Ireland achieve its renewable energy targets for 2020 across all sectors, heat, electricity, transport. This can be achieved with no negative impact on the food supply capability in Ireland, and no significant change in land use.

Energy sourced from AD will diversify the national fuel mix, provide a more secure clean energy supply, and reduce the country's reliance on imported fossil fuels, whose prices are subject to global energy market trends.

The use of biogas from AD to provide pipeline quality renewable natural gas can enable Ireland to meet the RES-T transport target using the natural gas pipeline, a significantly underutilised national resource.

AD can make a significant contribution to the management of organic waste in Ireland as well as helping achieve national and EU waste recycling targets. Rather than sending organic waste to landfill and land spreading, AD can convert this material to renewable energy and organic-rich fertiliser.

The challenge facing the agriculture sector to moderate its GHG emissions (32% of Ireland's total) and convert to a low carbon sector in the context of major growth to achieve the Food Harvest 2020 targets, could be addressed by AD. It has the added benefit of significant job creation in the rural economy, another farm income stream and better control of energy costs for farmers.

A further benefit is the support AD provides for sustainable smart agriculture, a key component in the promotion of Ireland's food exports under the banner of the Bord Bia initiative, Origin Green.

AD provides farmers with a valuable recycled source of fertiliser, closing the loop on nitrogen and phosphorous management, and providing environmental and health benefits by replacing artificial fertiliser and avoiding land spreading of untreated manure.

Over 9000 plants have been built in Germany since the year 2000 due to the positive stimulus provided by the German government over a decade. Similarly, the AD industry has flourished in the UK in the last 5 years with over 180 commercial plants now in operation, with more than 200 others initiated in the development pipeline.

The significant plans for AD development in Northern Ireland are a direct result of the incentives available there. In contrast, Ireland only has a few small scale plants operating and in planning. The major roadblock to expansion in Ireland has been an ongoing lack of economic viability for developers and investors. Improved fiscal incentives are required to enhance the attractiveness of AD in Ireland for investment.

Ireland urgently needs prompt decisions from the Department of Communications Energy and Natural Resources regarding a renewable electricity support scheme and renewable heat incentive (RHI), to enable numerous projects currently held back, to proceed, which would deliver all the positive benefits mentioned. Leadership is needed across the political spectrum to realise that Ireland is missing a golden opportunity for jobs creation, import substitution, better energy security, sustainable waste management, rural development, and many environmental benefits.

3.3 REFERENCES AND SUPPORTING DOCUMENTATION

A 2014 European Biogas Association (EBA) report shows 68,500 jobs in the EU biogas industry and the sector produces 11,539 MW of biogas. This means that for every MW 5.9 jobs are created.

In 2011 the Joint Oireathas Committee on Communications, Energy and Natural Resources published a report 'The Development of Anaerobic Digestion in Ireland'. This report states that there is potential for 1000 AD plants of average 380kw in size. Based on these numbers and the EBA numbers, 2,250 permanent jobs could be created.

The Bord Gais Report 'The Future of Renewable Gas in Ireland' states that up to 7.5% of renewable gas demand in Ireland could come from biomethane. This would directly substitute for €170 million euro in imports.