



**Composting & Anaerobic Digestion
Association of Ireland**

Po Box 13,
Dundalk, Co. Louth
Ireland
Tel: + 353 (0) 86 8129260
percy@cre.ie
www.cre.ie

James McSharry,
The Commission for Energy Regulation,
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24.

28th June 2010

Re: Submission on Public Service Obligation Levy 2010/2011

Dear Mr. McSharry,

Cré is the Composting and Anaerobic Digestion Association of Ireland. Cré is an industry Association with over 90 members from the private and public sector in Ireland.

On 24th May 2010, Eamon Ryan T.D. Minister for Minister for Communication, Energy and Natural Resources announced a new REFIT scheme for anaerobic digestion (See Appendix). This has been a long overdue announcement as some members have built/nearly completed the construction of new anaerobic digestion plants. Over the next 12 months, a number of other members will have other plants finished too.

There are a number of factors which is encouraging the rapid development of anaerobic digestion plants such as the Government has announced many new initiatives that that will divert significant quantities of organic waste from landfills during 2010 in order to meet Ireland's obligations under the EU Landfill Directive.

These initiatives include:

- The landfill levy will be increased in a stepped effect over the next two years. In February 2010 the landfill levy increased to €30/metric ton and will increase to €50 /metric ton in 2011 and €75/metric ton in 2012;
- SI 508 of 2009 – Food Waste Regulations, which is national legislation in which major producers of commercial food waste must segregate it and sent it to anaerobic digestion and composting plants- see www.foodwaste.ie
- An incineration levy of €20-38/metric ton will be introduced.
- Section 60 Notice will restrict the amount of waste that can be sent to incineration, this has to be finalised;
- The Environmental Protection Agency Guidance on Pre-treatment of Municipal Solid Waste (MSW) to Landfill will restrict the amount of biodegradable municipal waste to landfill. It will have to be stabilized to a standard by composting/ anaerobic digestion plants to meet the requirements of the Directive and avoid the landfill levy. This comes into effect on July 1, 2010;

- The Government Green Enterprise Action Group published its report and recommended incentives to encourage the development of anaerobic digestion
- Review of Waste Management Policy- the report made several recommendations to encourage the development of anaerobic digestion.

Emerging Trends

There is significant interest among compost facilities in Ireland to expand by adding an anaerobic digestion plant to treat food waste followed by composting the digestate. Due to the interest of Cré members in this technology, Cré widened the scope to include anaerobic digestion within its remit.

With all these new policy changes in the waste sector, there are many new business opportunities for entrepreneurs. Ireland is now getting off the starting block to race ahead to process waste into valuable resources, divert waste from landfills to avoid EU fines, and most importantly, create many new green jobs. InterTradeIreland published a market report last year which outlined approximately over 1,500 direct jobs and 10,000 indirect jobs could be created in the composting and anaerobic digestion sector.

CER/10/086

However, from reading the CER paper CER/10/086, it has not recognised the new REFIT announced on 24th May within the budget for October 2010 to Sept 2011. Cré would have serious concerns that new anaerobic digestion facilities built now and over the next short while will not be able to get the new REFIT until after September 2011. Cré recommends that the CER give this situation consideration and allow new anaerobic digestion plants built/in construction to avail of the new REFIT announced once state aid clearance has been achieved.

I would welcome an opportunity to have a meeting to discuss this submission.

Kind Regards,



Percy Foster
Chief Executive
Cré

Appendix

Press Release 24th May 2010

Minister Ryan announces new Government support price for bio-energy

- New price will allow connection of over 200 MegaWatts of renewable electricity to the national grid
- Businesses can produce their own electricity and sell surplus to the grid
- Price will be a boost to the rural economy

Energy Minister Eamon Ryan today announced the Government's new support price structure for bio-energy i.e. use of natural materials for the production of electricity.

The guaranteed support price (REFIT) will range from 15 cent per kilowatt hour to 8.5 cent an hour depending on the technology deployed (see Note for Editors).

The technologies supported include Anaerobic Digestion Combined Heat and Power, Biomass Combined Heat and Power and Biomass Combustion, including provision for 30% co-firing of biomass in the three peat powered stations.

Taken together, these new Government tariffs will foster the development of a robust and sustainable biomass supply sector in Ireland. They will drive demand for biomass and support the measures already in place such as the REHEAT programme (Renewable Heat Deployment) and the Energy Crop grant schemes run by the Department of Agriculture, Fisheries and Food.

Announcing the measure, Minister Ryan said, "I have always maintained that Irish farmers could be at the forefront of the green economy and the fight against climate change. This new Government support price has the potential to contribute to economic recovery in rural Ireland as well as reducing our overall national dependence on imported fossil fuels. Business will also benefit from the ability to produce their own electricity on-site and sell the surplus to the national grid.

This is a further measure to promote the de-carbonisation of our electricity generation in Ireland. I look forward to working with farmers and the industry to help our rural economy develop."

The introduction of these tariffs will cement existing jobs in place across a range of industries in Ireland. For businesses with a substantial heat load, biomass CHP offers them the opportunity to produce their own electricity and sell the surplus to the national grid. For businesses faced with costly organic waste management bills, Anaerobic Digestion will allow them to treat their own waste on site with heat that can be used in process as well as being a valuable fertiliser. Businesses can also use Anaerobic Digestion to sell surplus power to the national grid.

"In many ways this is only the start of our work to progress bio-energy in Ireland", the Minister continued. "The Bio-energy Working Group report is currently being worked on in the Department of Energy and is currently consulting with a range of other Government Departments. This report, which will be published shortly, will make a number of further recommendations on the development of bio-energy. I look forward to the completion of this important report".

ENDS

The Tariffs are as follows:

AD CHP ≤ 500 kW 15c/kWh

AD CHP > 500 kW 13c/kWh

AD (non CHP) ≤ 500 kW 11c/kWh

AD (non CHP) > 500 kW 10c/kWh

Biomass CHP ≤ 1500 kW 14c/kWh

Biomass CHP > 1500 kW 12c/kWh

Biomass Combustion (including existing plant):

For using energy crops 9.5c/kWh

For all other biomass 8.5c/kWh

(limited to 30% of the maximum rated capacity co-firing in any plant until 2017, 40% between 2017 and 2019, and 50% thereafter)

These tariffs to be indexed and offered on a 15 year basis.

CHP utilising biomethane, displaced from the source of biomethane, will qualify for REFIT on that portion of the fuel mix deriving from bioenergy.

Limits per technology:

Anaerobic Digestion 50MW

Biomass CHP 100MW

Biomass Combustion (including co-firing):

Until 31st December 2015 160MW

From 1st January 2016 Unlimited

Notes for Editors:

REFIT (Renewable Energy Feed in Tariff) is designed to provide certainty to renewable electricity generators as to the price they receive. In operation for wind and hydro power since 2006, it operates on a sliding scale, acting to ensure a guaranteed price for each unit of electricity exported to the grid by paying the difference between the wholesale price for electricity and the REFIT price. In effect, this means that as electricity prices increase, the amount paid under REFIT falls, mitigating the effect on the consumer.

The 2007 Energy White Paper set a target of 30% co-firing of biomass in the three Peat Fired Power Stations by 2015. These three stations are Edenderry (owned by Bord na Mona) and West Offaly Power and Lough Ree Power (both owned by ESB). The total capacity of these plants is 360MW.

Co-firing at 30% would involve replacing approximately 900,000 tonnes of peat with biomass every year. No indications were given at the time of announcement, or since, as to any particular type of materials that would be used for co-firing, and given the range of materials that are potentially suitable, such decisions are, in the first instance, a commercial decision for the companies involved.

Since the White Paper announcement in 2007, Bord na Mona, and more recently ESB, have been conducting large scale trials with a variety of different types of biomass, including wood waste (primarily sawdust), forestry thinnings, and a range of energy crops, including willow and miscanthus. In 2009, for example, approximately 75,000 tonnes of different types of biomass was burned at Edenderry.

These trials have been critical in gaining an understanding of the technical and logistical issues around Co-firing, and they have also been instrumental in obtaining an insight into the cost structures associated with various different products.

These trials have also uncovered a number of technical and chemical issues around the use of a number of products, including miscanthus, and both ESB and Bord na Mona have commissioned further work to determine the extent of these issues.

The Department of Communications, Energy and Natural Resources is, through its Bioenergy Working Group, which includes industry stakeholders, developing a National Renewable Energy Action Plan. The Bioenergy Working Group is looking at the bioenergy sector in its entirety, including co-firing, biomass Combined Heat and Power, Anaerobic Digestion and renewable heating, and will be making a series of recommendations on that basis. This work involves substantial analysis and modelling of the economic, resource and environmental considerations involved.

The data, economic and technical, from the trials programme has been extensively used in the analysis of potential options for support programmes for co-firing. Detailed analysis has also been conducted on potential interactions between co-firing and other industry sectors, including existing users of biomass. Finally, careful consideration has been given to the cost implications to the consumer and to the exchequer of any new supports for renewable energy use in Ireland.

This work is coming to a conclusion, and announcements will be forthcoming on the various elements over the coming weeks.

The use of miscanthus as a fuel to date in Ireland has been minimal, due to a number of issues, including limited experience internationally with its use as a boiler fuel particularly with peat.

A Miscanthus Pilot Demonstration Programme was launched on 30th April 2010 to provide assistance for the deployment of renewable heating systems fuelled by miscanthus in commercial, industrial, services and public sectors and also community organisations and Energy Supply Companies (ESCOs), in Ireland.

Funded under the Renewable Energy Research Development and Demonstration Programme, and administered by the Sustainable Energy Authority of Ireland (SEAI), this programme is intended to support the establishment of a number of exemplar boiler sites (between five and 15 depending on the mix of size ranges and costs submitted). These exemplar sites will serve to provide important information on the supply chain logistics and suitability of miscanthus as a boiler fuel in an Irish context, as well as providing a solid basis for creating market confidence.

Anaerobic Digestion involves the digestion of organic waste material to produce a gas and a digestate. The gas is then used in onsite combined heat and power generation, but can also be cleaned, compressed and injected into the gas grid or compressed and used offsite. AD has a range of environmental and economic benefits for a number of different sectors of industry and agriculture.

The primary environmental benefits result from the diversion of waste material from landfill into digesters. This waste can range from household waste to a number of different sludges and slurries, including agricultural waste. Leaving aside the positive impacts for ground water and air quality, this process effectively captures emissions that would occur as the material degrades, and uses the gas in electricity and heat generation. This is particularly important due to the fact

that methane, one of the primary gases released from degrading biomass, is 23 times more damaging as a GHG than CO₂.

The resulting digestate can generally be land spread, and as such is a far more effective fertiliser than undigested ('raw') material, and is also significantly easier to handle given that it poses much lower risks to the environment. AD can therefore make a significant contribution towards reducing GHG emissions from agriculture and from industry, while simultaneously resolving a number of other waste management problems.

Biomass CHP involves the combustion of biomass, which can include wood, straw, energy crops (like miscanthus or willow) or biodegradable waste to produce electricity and heat.

The primary users of biomass CHP systems have traditionally been in the forestry products sector, where a relatively plentiful process waste material could be used to produce electricity and heat. Heat is often required in these facilities for process purposes, principally for drying product. There are a small number of such installations already in operation in Ireland on this basis (2), both of which have commenced operations recently in anticipation of a tariff.

While there are a small number of other forestry processing centres that may chose to pursue this technology in light of an announced tariff, the primary uptake is likely to be in other sectors. There is a possibility that some new wood fuel processing facilities may come to pass; these would take in saw log, using the waste wood to power a CHP unit, and the pulp wood to make/dry wood chip or pellet for use in heating units (domestic or industrial). There also exist substantial opportunities in a large range of manufacturing and process industries where heat is required.

Introducing Biomass CHP units in these sectors would (a) reduce their energy bills, (b) displace imported fossil fuels, and (c) support indigenous supply chains for biomass, creating employment and enterprise opportunities in rural areas, and opening up alternative land uses for farmers.

There is also the potential for District Heating schemes fuelled by biomass CHP units, a model which has proved to be highly successful elsewhere in Europe. The high cost of retrofitting these systems in existing developments has proved a barrier to date, however increasingly strict building regulations and high oil prices are likely to result in a very different business case in the coming years, particularly for new developments.