



RESS Consultation
Electricity Policy Division
Department of Communications, Climate Action and Environment
29-31 Adelaide Road,
Dublin 2,
D02 X285

(e-mailed to: ress@dccae.gov.ie)

10th November 2017

Re: Public Consultation on the Design of a new Renewable Electricity Support Scheme in Ireland

Dear Sir/Madam,

With reference to the above consultation processes, the ***Irish Waste Management Association (IWMA)*** welcomes this opportunity to contribute to the discussion.

IWMA Background

The IWMA is made up of 40 waste management companies. Further details of our association, including a list of our members is available at www.iwma.ie.

The waste sector must achieve various binding EU and national waste management targets under the regulatory control of the Department of Communications, Climate Action and Environment. Energy generating technologies such as Anaerobic Digestion and waste to energy are critical to meeting these legislative obligations. Failure to achieve these targets will result in Ireland incurring significant financial penalties. IWMA considers it vital that the future support schemes offer adequate incentives to ensure the ongoing viability of these technologies to serve the waste sector. A well-functioning integrated waste management system comprising these types of strategic waste treatment infrastructure is essential to underpin Ireland's economic growth.

Anaerobic Digestion

Anaerobic Digestion (AD) is a proven and efficient technology that delivers multiple energy, climate, environmental, societal and economic benefits. It can help Ireland meet a number of important energy and non-energy EU and national policy commitments and it has wide ranging cross-sectoral benefits.

Biogas is a valuable product of AD which will play an important role in helping to achieve our EU Renewable Energy Targets for 2020. Biogas can be converted to energy via an on-site Combined Heat & Power Plant (CHP) and electricity generated from the CHP process can

be used in neighbouring industrial or commercial enterprises or can be fed into the national grid. The surplus heat generated can be used in industrial processes or for district heating systems. Alternatively the biogas can be upgraded on-site for use as a natural gas substitute to help achieve our renewable heat and transport targets. The upgraded renewable gas can be injected directly into the gas network to maximise efficiency in distribution and usage.

AD provides a constant supply of electricity, gas and/or heat. It therefore can be used to provide a stable base-load of renewable energy to the grid. It has the potential to supply enough electricity to power 20% of Irish homes, or to replace 7.5% of the fossil-based natural gas used via the national gas grid with renewable 'green' gas, saving Ireland €200 million in imported fuel.

As well as producing heat and power that can be fed into our communities, AD has an important role to play in the fight against climate change as it can reduce Greenhouse Gas Emissions (GHG) which Ireland has international commitments to decrease. Landfilling and landspreading of organic wastes generates uncontrolled emissions of methane to the atmosphere as the waste degrades. By diverting these wastes to AD, the organic materials are processed in a totally enclosed system which prevents the uncontrolled release of methane. Replacing fossil fuels with renewable energy generated in this manner also reduces GHG emissions. 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 targets, could be addressed by AD.

AD not only recovers the energy from organic waste, but it also produces a nutrient rich digestate that can be suitable for use as an organic soil conditioner or biofertiliser for agricultural and horticultural purposes thus reducing reliance on artificial fertilisers that are becoming increasingly expensive to manufacture. The nutrients contained in digestate are more amenable to plant uptake than other organic fertilisers and thus its use has water quality, environmental and health benefits as it decreases organic pollution potential as well as reducing risk of spreading microbial contamination.

If the full potential of AD development is realised, 2,250 direct permanent jobs could be created across Ireland, with many more generated in the construction phase (Ref: 'The Development of Anaerobic Digestion in Ireland' – Report prepared by the Joint Committee on Communications, Energy and Natural Resources, 2011, and the 2014 European Biogas Association Report). Employment would also be created in support industries such as engineering and manufacturing and other local professional services. There would be new business opportunities for sectors that can provide services to the AD industry and the development of the AD sector would also promote more balanced regional economic development as revenue from the plants is likely to be spent locally.

Compared to most EU countries, the AD sector is severely under developed in Ireland. Only several small scale AD plants are operating and these primarily process agricultural and/or industrial sector organic residues. There are no large scale AD plants in operation dedicated to processing the organic fraction of domestic and commercial waste. In contrast to this a stimulating regulatory and financial framework have had a big influence on the successful and widespread development of AD facilities in many other European countries. The most significant development constraint in Ireland has been an ongoing lack of economic viability for developers and investors. Improved fiscal incentives are urgently required to enhance the attractiveness of AD in Ireland for investment.

Waste to Energy

Complimentary to Anaerobic Digestion is energy recovery from residual municipal waste (which remains after the source separation of organic waste) in Waste to Energy (WtE)

facilities. Over 400 WtE plants are currently operating within the EU. These facilities receive about 78 million tonnes of waste per year, representing a calorific heat value of between 470 and 1,240 PJ – enough to heat London for 5 years. WtE can produce both heat and electricity from the energy produced from waste, meaning they can contribute to both renewable heat and electricity targets.

The primary purpose of waste-to-energy facilities is to safely treat the residual waste that cannot be recycled in a sustainable way while producing energy from it. WtE also helps to divert waste from landfills, thus reducing impacts on land, air and groundwater quality. Valuable ferrous and non-ferrous metals and where possible, a range of aggregates, are also recovered for recycling from the residual bottom ash.

This aligns with the basic objectives of EU waste policy to minimize the negative effects of the generation and management of waste on human health and the environment. This includes turning waste into a resource based on strict application of the waste hierarchy, limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

National waste policy and waste plans also closely reflect these goals. In order to fulfil European and National policy objectives, Ireland's Regional Waste Plans identify the need for 300,000 tonnes thermal treatment (e.g. WtE) capacity for non-hazardous waste in addition to that already developed in Meath and Dublin.

The development of this additional capacity will help to reduce Ireland's reliance on the export of residual municipal waste. Over 500,000 tonnes of residual municipal waste was exported in 2015, which equates to approximately 33% of the available residual waste market in Ireland. This represents a loss to the economy of approximately €50 million in terms of energy resource and gate fees. It also poses a risk to Ireland's ambition to become self-sufficient in waste treatment and leaves Ireland vulnerable to market shocks, price increases and regulatory controls.

In addition to fulfilling waste management goals, WtE represents a secure, cost effective and sustainable energy source. About 50% of the energy produced by WtE plants comes from carbon-neutral biomass. Unlike other renewables their capacity is reliable, controllable and predictable. A WtE facility can also provide system services, making it unique in that it can both generate renewable electricity and support the integration of renewables onto the system.

The deployment of WtE facilities will not be viable without the help of renewable heat tariffs. The Greater Dublin Area has attracted large scale investments in WtE and Cork has attracted interest in that area at planning stage. In tandem with these developments, the country needs a number of regional WtE facilities at a smaller scale to avoid waste being transported across the country and exported to other parts of Europe. RESS can assist Ireland's self-sufficiency in waste management by supporting the development of WtE facilities that would not be viable without such supports.

Main Points Raised by IWMA Members

Competitive Bidding

For competitive auctions to successfully support the development of different technologies, dedicated auctions for each category are required as opposed to the technology neutral auction favoured in the Consultation document. For instance, AD and WtE will be excluded in a technology neutral auction but these technologies deliver more cross-sectoral benefits relative to lower cost technologies. The value of these benefits would not be accounted for

in a competitive auction with other technologies. Furthermore, the participation of smaller project promoters is highly challenging in competitive auctions.

Levelling Cost of Energy (LCOE)

AD and WtE encompass a wide range of applications and plant scales. For waste management facilities, the LCOE will vary depending on the scale of the facility, its location, the input feedstock, operating costs, and the regulatory environment. In addition, waste management facilities deliver many cross sectoral benefits (as outlined above) which are not captured in an LCOE analysis. These benefits are not delivered by other renewable energy technologies.

Community Involvement

The community ownership proposals are tailored towards utility-scale standalone generation sites. The measures are not appropriate for many bioenergy or waste to energy projects. In AD and WtE, community involvement can spread beyond ownership options to community contribution both in the supply of waste (farmer groups, local business, household food waste etc) and the deployment of electricity, heat and gas. Community investment schemes could lead to complex financing and result in funding structures that are not beneficial to the community. The IWMA recommends that tax incentivisation would be a better investment trigger for many people that would offer protection against unfavourable funding structures.

REFIT 3

As a result of the REFIT 3 tariff being too low in Ireland, there have been few applications for support under REFIT 3 by AD plant developers. Consequently, the Department of Communications, Energy and Natural Resources reduced the allowance under REFIT 3 for AD from 50MW to 15MW reallocating the budget for 35MW to biomass instead. The REFIT 3 scheme closed on 31st December 2015 and there is currently no replacement scheme in place to support electricity generation from biogas which has exacerbated uncertainty in the market and further destabilised investor confidence. The REFIT 3 was not successful to stimulate an anaerobic digestion industry so any new tariffs should be higher than those that were in the REFIT 3 scheme.

Circular Economy

The proposed RESS scheme does not appear to consider The Circular Economy Package. The proposed RESS scheme appears to focus on the renewable energy benefits and not all the other benefits that AD and WtE can provide.

Responses to Specific Questions

Q1a. The emerging policy includes a measure whereby all capacity available under the new RESS (with the exception of small scale developments) should be allocated through a competitive bidding process via auctions. Do the respondents agree with the competitive auction based approach? If not, what alternative model would you propose and why?

In principle yes but for competitive auctions to successfully support the development of different technologies there needs to be dedicated auctions for each technology type. For instance, AD and WtE will be excluded in a technology neutral auction. However, AD and WtE deliver more cross-sectoral benefits relative to lower cost technologies and the value of these benefits would not be accounted for in a competitive auction with other technologies.

AD and WtE encompass a wide range of applications and plant scales and LCOE analysis will vary depending on the scale of the facility, its location, the input feedstock, operating costs, and the regulatory environment. In addition, waste management facilities deliver many cross sectoral benefits the value of which are not captured in an LCOE analysis. These benefits are not delivered by other renewable energy technologies. Therefore, LCOE analysis is not considered to be the most representative method for comparing waste management facilities that generate electricity with other renewable technologies.

Q1b. Do respondents agree with the use of Uniform-Price cost of support for RES-E projects in the main RESS capacity auctions, as a mechanism to keep costs to the consumer to a minimum?

This would not be the most effective approach if AD and WtE technologies must compete with lower cost technologies as the uniform price of support would unnecessarily increase the support payments to lower-cost technologies.

Q2. The analysis suggest that a Floating Feed in Premium (FIP) is the primary financial support mechanism for the main RESS, as evidence indicates this is the most cost effective approach.

Do you agree with this proposal versus the other mechanisms identified?

Yes, provided adequate allocations are put in place to support and promote a diversity of technologies.

Q3. What are respondents views on a proposed price cap (maximum €/MWh) within the uniform price proposal? What alternative approach would you propose and why?

Price capping should be suitable to the technology class and should be high enough to allow for a normal functioning market to reach a fair price.

Q4a. In order to keep costs to the consumer to a minimum, a Principal Category, encompassing all viable technology options leading to the most cost effective projects, is provided for. The outcome of this initial auction will inform the design of future auctions. Do you agree with this approach? What alternatives would you propose to this approach and why?

The IWMA does not agree with this approach. There should be technology-specific auctions to ensure balanced competitions rather than awaiting the outcome of an initial auction that would only suit the lowest cost technologies. All viable technologies need to be evaluated based on multiple value criteria not just electrical cost. Furthermore it would not be reasonable to allow entire industries stagnate while a scheme is being revised.

Q4b. Would you support separate technology specific auctions for emerging technologies, at a greater cost to the PSO, and if so what percentage of the overall scheme capacity (MWh) would you allocate to this category?

The IWMA agrees with a technology-specific approach. We recommend that 30-40% of each auction round should be dedicated to technology-specific categories.

Q5. Separate to the Principal Category RESS, a dedicated Community Category volume of renewable capacity (MWh) allocated for community-led renewable projects is envisaged in the preferred approach. The initial proposal is that between 10-20% of the total capacity (of new MWhs) of each auction is ring-fenced for community-led projects.

Do you agree with this proposal? What changes would you propose to this proposal including reference to the viable level of ambition for community-led projects?

The IWMA recommends the initial capacity should be 5-10% until this approach is proven to be viable in Ireland.

Q6. Do you agree with the proposal to further develop opportunities for micro-generation, outside of the main RESS?

Respondents are asked for their views on how best to support micro-generation.

It is impractical for renewable projects of under 1 MWe to compete in the RESS auctions. However, it is important to promote small/micro scale generators and the best way to do this would be to offer a FIP for a range of technologies (solar, wind, AD, biomass). As the costs of these technologies are different the FIP should be set according to the technology. Applicants should show that they have consented planning and a grid offer before applying for a FIP. Projects should also have to produce electricity within a defined time period (which will vary from technology to technology). The DCCAE could allocate a specific capacity and FIP rate on a yearly basis, and adjust the FIP rate in response to applicants to the previous year. If the scheme is oversubscribed in a year the FIP rate could reduce the following year, if it is undersubscribed the FIP could increase.

Q7. Do you agree with capping the amount of support received by each RES-E project that clears in a RES-E auction? What changes would you make to the proposal to set this cap by the level of support (€/MWh) determined in the auction and the cleared volume of the project (MWh).

Support caps seem an appropriate way to ensure consumer costs are not disproportionately affected, or projects over-incentivised.

Q8. Do respondents agree with the proposal to hold periodic auctions e.g. every two years, over the course of the lifetime of the scheme, to take advantage to falling costs and reduce the impact on the electricity consumer? What changes if any would you make to this proposal?

Auctions should be held annually to ensure flexibility in addressing any market failures and to avoid peaks and troughs in development. It is unacceptable to have two-year gaps if the outcome of previous auctions is unsatisfactory. It is also advisable to have a systematic annual consultation with advance signalling of changes or proposals for the forthcoming auction round.

Q9. Do you agree that planning approval, grid connection, bid bonds/penalties and community participation criteria should be met before projects can apply for support under the new RESS?

What other pre-qualification criteria would you like to see introduced?

The IWMA agrees with implementing these criteria, however, bid bonds may be a barrier to entry for smaller promoters so an alternative penalty system based on development completion timeframes or progress milestones may be fairer. There needs to be mechanism for refunding grid connection deposits of unsuccessful RESS auction bids.

Q10. DCCAE welcome the respondents' views on the PSO levy supporting a baseline 40% RES-E. Do you think the PSO should support higher levels of ambition?

Yes the PSO should support a baseline of 40% and also be cognisant of 2030 targets which will need a higher baseline.

Q11. It is proposed that highly efficient CHP plants may be able to avail of financial support under a renewable electricity support scheme (RESS) for electricity generated (through the technology neutral competitive auction process described) and under a renewable heat incentive (RHI) for the heat produced. Do respondents agree with this approach?

Yes, the IWMA agrees with this approach.

Q11a. What are respondents' views on an alternative approach whereby renewable energy CHP plants receive support from the RESS or the proposed RHI but not both, and that the project promoter should decide which support scheme best suits the proposed development.

The IWMA does not agree with this alternative approach.

Q12a. What should the minimum size of project be, below which a community investment offer does not need to be made (e.g. 100kW, 500kW, 1MW)?

Community investment opportunities should be implemented for large scale geographically extensive electricity generation projects. It is not appropriate for more localised AD or WtE projects or auto-production sites and could result in financing complexity.

Due to administration and transaction costs alone, any criteria introduced should not apply below 1MW, to ensure that there is an appropriate quantum of investment required to justify the structures of community investment.

Q12b. What minimum share should be offered to the community for investment (e.g. 20%) and should there be a maximum amount any one individual can purchase?

Meaningful community involvement should not be limited to investment alone. For example in AD and WtE projects, community benefit could involve waste contribution / use of heat via district heating or subsidised electricity supply etc. We are aware of at least two large AD developments¹ in Ireland have been granted planning permission and industrial emissions licences without third party appeals, so it is clear that there are other ways to successfully engage with local communities.

Q12c. What is the appropriate distance from the project for the initial offer (e.g. 5km)? Views are welcome on subsequent offers to District Electoral Division (DED) then neighbouring DEDs etc.

5km is a very small radius to attract investment. The appropriate distance should be assessed on a case by case basis due to geographical location and consideration. The IWMA advises against any iterative steps (i.e. staged offers by an expanding geographic radius) that create additional delays and costs to come to the same outcome.

Q12d. What are respondents' views on whether additional financial supports are necessary in order to enable mandatory investment opportunities for citizens and communities?

Community investment schemes could lead to complex financing and result in funding structures that are not beneficial to the community. The IWMA recommends that tax incentivisation would be a better investment trigger for many people that would offer protection against unfavourable funding structures. Relief similar to that available under EII (Employment Investment Incentive) at present should be made available. To make this a more inclusive proposition, it should not be a requirement that tax is paid at the higher rate to obtain this income tax credit.

¹ Huntstown AD plant in Dublin and Little Island AD plant in Cork, both planned by Stream Bioenergy.

Q12e. Other comments on the mandatory investment offer requirement are welcome.

No comment.

Q13a. Do you agree with the emerging proposal that a Floating FIP is made available for smaller community projects?

Yes, we agree.

Q13b. What should the minimum size project be below which the FIP will not be available?

This should not be limited by size.

Q14a. Do you agree with the emerging proposal to support community-led projects with grants and soft loans through various stages of a projects development?

Yes, we agree.

Q14b. What size of loans for development and construction would you consider to be appropriate to support?

Any other comments on the proposed use of grants and soft loans?

No comment.

Q15. In respect of Grid Access, DCCAE and SEAI are keen to receive feedback on the policy proposal to facilitate grid access for community-led renewable electricity projects.

Grid access should be equally available to all projects, otherwise the principle of community led projects could be open to abuse and could lead to abuse of the system.

Q16. DCCAE and SEAI welcome feedback on the role of the proposed Trusted Intermediary.

The proposed trusted intermediary should be equally available for all projects if required.

Q17. DCCAE and SEAI welcome feedback on the proposed Framework for Trusted Advisors.

The proposed trusted advisors should be equally available for all projects if required.

Q18a. Do you agree with the proposal that community benefit payment be based on best practice principles?

Yes, we agree.

Q18b. Do you agree with the proposed €2/MWh level of community benefit?

Do you have any other comments on the proposed community benefit good practice principles?

The proposed level of community benefit should be good value for the consumer and avoid an increase charge on the PSO.

Q19. What are your views on the definition of ‘community renewable electricity projects’, ‘community-led community projects’ and ‘developer-led community projects’?

Community involvement should be linked to the circular economy package and not just linked to finance.

Q20. What are your views on proposing additional financial measures to enable citizens to invest in projects (e.g. tax incentives, green bonds etc.).

The IWMA recommends that tax incentivisation would be a better investment trigger for many people. Relief similar to that available under EII (Employment Investment Incentive) at present should be made available. To make this a more inclusive proposition, it should not be a requirement that tax is paid at the higher rate to obtain this income tax credit.

We trust that you will consider these points carefully in the preparation of the new RESS scheme. The **IWMA** is available at your convenience for further engagement in relation to any of the issues raised in this correspondence.

I would be grateful if you could please acknowledge receipt of this submission.

Yours Sincerely,



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IWMA Secretary

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