



Regional Approaches to Stimulating Local Renewable Energy Solutions



Western Development Commission/RASLRES

Response to consultation on the implementation of RHI in Northern Ireland

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1. CONTEXT FOR SUBMISSION

The Western Development Commission (WDC) is a statutory body promoting economic and social development in the Western Region of Ireland (includes the counties Donegal, Sligo, Leitrim, Roscommon, Mayo, Galway and Clare). The WDC is involved in policy analysis and development, the promotion of regional initiatives and the operation of the Western Investment Fund¹.

The WDC has been actively involved in the renewable energy sector since 2003, and specifically involved in the bioenergy heat market since 2006 delivering a range of development projects and policy analysis. The WDC was a member of the National Bioenergy Working Group under the Department of the Communications, Energy and Natural Resources (2008 – 2010) and served upon the Supply Chain and Market Development Sub-groups.

Currently WDC is lead partner of the EU funded bioenergy project RASLRES (*Regional Approaches to Simulating Renewable Energy Solutions*). RASLRES² is a €2.8 million EU bioenergy project funded under the Northern Periphery Programme of INTERREG IVB. RASLRES aims to increase the deployment of biomass fuels in rural communities and grow the number of local businesses involved in the bioenergy sector. With the WDC as lead partner, the project partners include: Action Renewables, Northern Ireland; Environmental Research Institute, North Highland College, Scotland; and Municipality of Norsjö, Sweden.

The RASLRES project aims to:

- build awareness of opportunities for rural communities to produce and supply locally produced biomass (wood, seaweed and energy crops) to towns and cities
- provide business development support to rural biomass producing communities
- support development of local biomass supply chains through direct business and community engagement

In the Western Region RASLRES focuses on support to the wood energy sector by delivering practical services to market players and by informing policy development. RASLRES adopts a full supply chain approach - looking at the energy chain from supply (i.e. fuel producers/processors) to demand (i.e. energy users). The services to the sector include:

- provision of technical and business advisory support services to selected clients progressing wood energy projects in the region
- generation of market information and intelligence to support the sector e.g. resource forecasting from private sector forestry, assessment of energy crop potential
- accessing of international expertise and facilitation of networking with EU markets

¹ Please see www.wdc.ie for further information.

² Please see www.raslres.eu for further information.

2. MARKET DEVELOPMENT: ISSUES FOR CONSIDERATION

The WDC welcomes the opportunity to submit a response to the consultation on the NI RHI and considers this engagement process a highly progressive action for the bioenergy sector of the island of Ireland.

Before addressing the specific questions of the consultation, the WDC wish to outline a number of priority issues for consideration in the development of the bioenergy sector. Strategic market interventions, such as the RHI, must be cognisant of the wider market environment in order to design and deliver an effective, value for money scheme which results in sustainable market growth.

The WDC identifies the following as priority market development issues to achieve sustainable supply chain growth in the bioenergy sector:

- *Flexibility of Approach:* High level targets, be they national or EU, must be translated into a regional and local context if they are to drive delivery of market growth rates. The regions have varying levels of competitive advantage in bioenergy resources e.g. in ROI significant wood resource in the western counties, energy crop potential in the southern tillage areas. Therefore regions must develop their bioenergy resources in the most effective and appropriate manner given their conditions and characteristics. The development of local loops of demand and supply typically result in sustainable, efficient deployment of resources.
- *Supply Chain Approach:* A supply chain development approach is necessary to tackle the barriers to growth and achieve sustainable development of the sector. The piloting of supply chain demonstration projects serves to build market confidence and expertise. Such projects will highlight current gaps and limitations to the policy framework and thereby inform policy makers on the design of national policy.
- *Partnership Approach:* The WDC advocate a supply chain approach to support the development of the bioenergy sector. The successful delivery of this approach is dependent on effective cross-agency and departmental working arrangements, and partnerships between public and private stakeholders. Effective supply chain interventions must be dealt with through partnership i.e. linking of demand- and supply-side support programmes delivered by various agencies and departments into present a coherent and comprehensive sectoral intervention.

The RHI will be a key market intervention to stimulate growth and overcome market barriers. The barriers to bioenergy development in the ROI market are presented as follows and mirror barriers in the NI market:

- *Market awareness and confidence:* Many energy users are simply unaware of the technology and the fuel supply options available. In addition there can be a lack of market confidence in the technology and fuel supply chain because it is new to the region. For the market to develop there needs to be greater confidence in the reliability and convenience of the supply chain.
- *Market development:* In order to grow the market, the technical, design and practical skills in the installation, operation and conversion of fuel resources to energy must be developed.

The business case and fuel supply models must be understood. The investment process is typically more complex than in the fossil fuels markets and specialist expertise may be required. This investment is therefore more time consuming and risky than an investment in established fossil fuel technologies.

- *Integrated supply chain:* There is a low level of awareness of the market opportunities, and limited knowledge and technical expertise of the fuel supply chain amongst potential suppliers/producers. New investment in equipment and infrastructure will be required in order to respond to market opportunities. In the Western Region many of the plantations that are most suitable for wood energy production are dispersed and small in scale and therefore must be 'clustered' to make market entry commercially viable.
- *Supportive policy, finance and regulation:* Supportive planning policies will help to increase the rate of market development. For instance there is a lack of awareness among potential users as to the planning requirement for a wood heat facility. Similarly, better understanding of the benefits of bioenergy systems and technology is needed to improve their passage through the planning process.

3. CONSULTATION RESPONSE

General comments

- To ensure sustainable market growth, the policy analysis for the RHI must assess the **fuel supply implications** of the projected rates of market deployment. To maximise the economic benefits of market growth, the NI market must stimulate local fuel supply chains in as far as is practically possible given the resource base, and then assess import scenarios from ROI, GB and beyond.
- The policy analysis must assess the implications of the scheme on a cross-border basis with the ROI and also with the GB market. Fuel supply from the ROI will be a notable factor to NI market growth and presently the **heat market functions on a cross-border basis**, for instance Rural Generation Ltd has a very strong market presence within the ROI. The evident cross-border market links must be accounted for in the policy frameworks to ensure sustainable markets across jurisdictions. Such trade issues also have impacts on the sustainability criteria for the industry.
- As noted above, bioenergy policy interventions are typically most effective when delivered at a regional and/or local level. The RHI is tailored to the NI market conditions. This is a critical factor in ensuring the on-going suitability and effectiveness of the scheme. Maintaining the administration and on-going management of the RHI within NI will potentially serve to **safe guard the continuation of this 'tailoring' process** and potentially allow for more timely/suitable responses to any market changes. In addition a delivery agent based in NI may result in indirect positive industry benefits such as **creating market visibility** for the sector and **building a base of industry expertise**. This would be a notable 'added value' impact of the RHI.
- The Renewable Energy Strategy Group should seek to apply the principles of a full supply chain approach, partnership and industry consultation, and continued flexibility of response as reflected in the tailored NI RHI policy.

Specific Responses to Consultation Questions

3.1 Do you agree with the decision to introduce a RHI tailored for Northern Ireland instead of pursuing other options considered? If not, please elaborate.

Yes, this is an effective market intervention to stimulate market growth.

3.2 Do you agree that Ofgem are best placed to administer the NI RHI? If not, who should administer the NI RHI?

No, and the reasons are stated in the general comments above.

3.5 Are there any further issues, at this stage, which you think DETI should also consider?

No

3.6 Do you agree with the proposed eligible technologies and standards? If not, please explain.

The RHI is a progressive policy through the inclusion of bioliquids. Market interventions such as RHI should aim to ensure that all available bioenergy fuel streams are deployed to maximum efficiency and benefit, and seek to minimise any energy losses for the generation process. To that end, the inclusion of heat generated from landfill and anaerobic digestion, together with CHP which is receiving ROCs, would be considered necessary.

3.7 Do you agree with the proposed tariff levels and standards? Where you disagree with the proposed approach evidence should be provided to the contrary.

The WDC has not had the capacity to fully evaluate the options at this time. However the trade impacts of the proposed tariff levels between NI and GB, and relationship with the ROI market, must be addressed to understand the full impacts of the RHI.

3.8 Do you agree with the Department's rationale for tariffs? If not, please provide comments on the assumptions contained in the economic appraisal on the technical performance and cost of heating technologies and fuels.

Based on WDC fuel price research and through client projects, the price assumptions within the Cambridge Report should be subject to further validation and assessment. Work under RASLRES would indicate that the cost of biomass in NI is greater than in the UK market. The NI fuel market is constrained by supply resources e.g. low forestry cover, and influenced by the price of fuel in ROI.

3.9 Do you agree that all heat should be metered under the NI RHI? If not, please explain.

Yes

3.10 Do you expect any obstacles or difficulties in metering heat output? Please give details.

In general no, however it is critical to put in place an effective administration process and ensure appropriate calibration and independent verification of meters. Such key points of user-interface with the technology must operate effectively to ensure market confidence.

3.12 Do you agree that sustainability reporting should be introduced as part of the NI RHI?

Yes, sustainability reporting is necessary. Project >1MW are most suitable; project and market scale are key considerations in the design of the reporting system.

3.13 Have you have any views on how sustainability reporting should be handled by DETI?

The reporting must reflect the EU sustainability criteria currently in-train. Sustainability reporting must be recognised and accepted by industry as a valuable factor which supports long term industry development; it cannot be an administrative burden or hindrance to project development. The size of individual projects and the overall market scale must be considered in its design and implementation. In addition efforts should be made to incorporate and build on existing relevant schemes e.g. Forest Stewardship Council (FSC).

3.14 Do you have any comments on the accessibility arrangements for the NI RHI?

Administration within NI would possibly support accessibility of the scheme, and as above potentially has positive indirect industry benefits by building expertise and industry visibility.

3.15 Do you agree that regular planned reviews should be undertaken? If not, please explain.

Yes, review of the scheme is required to allow for evaluation of outputs and process, and facilitate any modifications to ensure on-going relevance and effectiveness in the market place. However it is critical that the review process is viewed constructively within the industry and does not serve to introduce uncertainty into the market. Bioenergy projects are based upon long term contract (anywhere in the region of 3 to 15 years depending on the technology); the review process should not decrease the 'bank-ability' of projects with financiers.

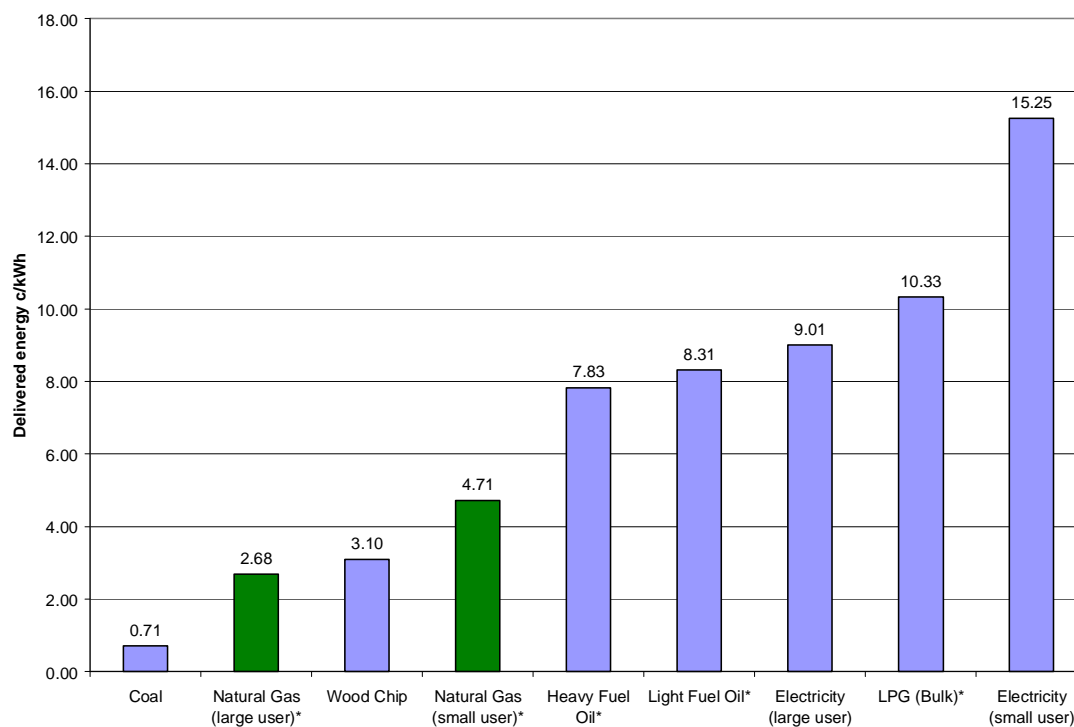
3.16 Do you agree that the tariff levels should be guaranteed for the life-time of the installation at the point of accreditation?

Yes, as above, projects must pass the due diligence process of financiers and market certainty must be maintained to encourage new entrants to the market.

4.1 Do you agree that the heavy industrial sector should be treated separately under the NI RHI? If not, please explain giving evidence to the contrary.

No, as based on RASLRES research this sector represents a key market segment for commercially viable bioenergy projects. To promote regional economic competitiveness, private industry should have appropriate access to a range of potential fuel options and thereby address issues of fuel security and diversity. The energy market must have a balanced portfolio of fuels. Regional competitiveness is supported by decreasing dependency rates on imported fuels and maximising the opportunities for commercially viable indigenous fuel production. For particular large energy users (based on issues such as site characteristics, energy load profile), bioenergy fuels are price competitive with natural gas; the energy investment decision must reside with the energy users. By way of illustration please see the following chart on comparison of commercial and industrial fuel costs.

Comparison of commercial and industrial fuel costs (July 2011)



* includes carbon tax

Source: SEAI, *Commercial and Industrial Fuels Comparison Energy Costs*, July 2011

4.2 What is your view regarding heavy industrial sites being awarded relevant tariffs on a case-by-case basis, following consideration by DETI of the need, value for money and sustainability of the proposal?

As above, heavy industrial sites should be facilitated to participate in the bioenergy market as per other market segments. The energy market place must present a number of fuel options in the interest of fuel security and diversity. The policy issues of long term regional competitiveness should not be de-coupled from the energy debate; local production of fuels is potentially a significant driver of economic growth and reduces dependency on imports.

4.3 Do you agree with the criteria set by DETI for this sector?

No

4.4 Do you agree that co-firing should be allowed in this sector and, if so, should it be time limited?

Co-firing biomass and fossil fuels is typically part of a mature bioenergy market. Modelling of the fuel supply chain is required to assess the viability and potential impacts of co-firing demand. In addition it is important that heat generated during the process is used to increase overall efficiency of the process. RASLRES research has shown that co-firing of biomass fuel generally has a lower economic multiplier than renewable heat deployment based on clusters of industrial/commercial heat users and local supply chains. Policy analysis must take due cognisance of the capacity of the RHI to act as a driver for wider economic growth in NI, and assess what profile of bioenergy sector will result in the maximum benefits for society and the economy.

6.1 What impact do you think the implementation of the NI RHI will have on the future development of the natural gas market? Please provide evidence of any impact.

As noted in section four, energy users should have access to a range of fuel options and make energy decisions based on a 'level playing field' for all fuel types. Presently it is not clear that such conditions exist within the energy market. Further market modelling may inform on the interactions between bioenergy and natural gas markets; both fuel streams are critical for the NI economy and an appropriate 'energy mix' must be assessed.

6.3 What is your view on the proposal that AD systems which avail of the NIRO will be excluded from receiving payments for useful heat output under the NI RHI?

Support to AD under RHI is welcomed. Further analysis on the interactions of the ROCs and RHI schemes is required to fully assess how a balance between electricity and heat supports can be reached.

6.4 Would you support a reduced ROC level in order to avail of the RHI also?

As above, in general this is welcome and further modelling to assess appropriate levels is required to present a workable proposal.

7.1 What key actions should the Renewable Heat Strategy Group consider in supporting the development of the renewable heat market?

Actions for consideration include:

- Agreement on a time-bound RHI action plan to provide clarity and certainty to the market
- Incorporation of market analysis based on a full supply chain approach, including fuel supply chain modelling to assess potential balance between local fuel production and import scenarios
- Adoption of a process that supports on going partnership and consultation across the full bioenergy supply chain and other relevant stakeholders
- Design of RHI delivery process to ensure continued tailoring to the NI market
- Incorporation of issues to address cross-border market aspects with GB and ROI
- Agreement on the sustainability criteria and the application within the market

7.2 Is there a need for ongoing engagement with external stakeholders as renewable heat policy is developed?

Yes, as noted above partnership is a fundamental principle to achieving effective bioenergy policy frameworks and deployment.

7.3 Do you wish to be considered to potentially give evidence on renewable heat to a future meeting of the Renewable Heat Strategy Group?

The WDC would welcome the opportunity to share market and policy analysis for the Western Region of Ireland, and assist the RE Strategy Group as is appropriate.