

District Heating Consultation  
Energy Division  
Department of Communications, Climate Action and Environment  
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Submitted by email to: [DistrictHeating@dccae.gov.ie](mailto:DistrictHeating@dccae.gov.ie)  
Submitted on: 28<sup>th</sup> February 2020

### **Re: Fingleton White's Response to the Consultation to Inform a Policy Framework for the Development of District Heating in Ireland**

Fingleton White welcomes the opportunity to comment on the public consultation on District Heating in Ireland.

Fingleton White provides multidiscipline engineering services for the energy industry throughout Ireland and the UK. It operates across multiple sectors including gas, bioenergy, hydro, solar, CHP, industrial heat and water.

District Heating is an important component in helping Ireland meet its energy and climate targets. Heat networks can support the further development of HE CHP to generate low carbon heat and electricity from both bioenergy and natural gas. These heat networks can be low temperature for space heat but also higher temperature for industrial process heating.

Natural gas will continue to play a part in the electricity grid during the energy transition but must be utilised in a more efficient way so as not to undermine the carbon reduction benefits that are gained from renewables. Heat networks can allow the efficiency of gas fired electrical generation be improved. For example, a CCGT operates at an efficiency of 58% while a HE CHP will have an efficiency of 80%. It is therefore important that future gas fired electrical generation are located where an economically justifiable heat demand exists. The heat from these plants can support the industrial process heat requirements of Irish industry.

#### **Regulation**

SI No. 426 of 2014 – EU Energy Efficiency Regulations 2014, Part 5 covers combined heat and power and district heating. One of the requirements is installation level cost benefit analysis. Paragraph 11 is shown below;

*(11) Where required to support an application to the **Environmental Protection Agency** under the Act of 1992, a cost-benefit analysis shall be carried out by an economic operator when the economic operator plans to carry out one of the following:*

- (a) to install a new thermal electricity generation installation with a total rated thermal input exceeding 20 MW that is not already a cogeneration unit;*
- (b) to substantially refurbish an existing thermal electricity generation installation with a total rated thermal input exceeding 20 MW and the refurbished unit will not be a cogeneration unit;*

- (c) to install or substantially refurbish an industrial installation with a total rated thermal input exceeding 20 MW generating waste heat at a useful temperature level and where the waste heat is not being used to satisfy economically-justified demand;*
- (d) to construct a new district heating and cooling network or to install a new energy production unit with a total rated thermal input in excess of 20MW in an existing district heating or cooling network or to substantially refurbish an existing such installation and waste heat is not being used from nearby industrial installations.*

Even though this has been in Irish legislation since 2014, it does not appear to have been implemented by the EPA or the SEAI. It is important that these installation level cost benefit analyses are immediately implemented as part of the relevant applications to the EPA.

### **Planning**

There is a legal barrier to the development of district heating which needs to be addressed. The legal opinion is that anyone, statutory body, non-statutory body, or a private individual carrying out works on the public road, where land is registered to the centre of the road, has to obtain a wayleave/permission for those works from the registered landowner. This would mean a private district heating project would have the unacceptable risk of not being able to obtain the necessary landowner permissions and not having recourse to any powers of compulsory acquisition of land or right over land in respect of the construction or operation of the pipelines.

In order to facilitate development, there are two options,

- New legislation
- Amendment to existing legislation which will give the Local Authority the full powers to determine what infrastructure can be installed in a road.

### **Research**

Research into the ability of heat networks to support industrial sites meet their high temperature heat requirements in a low carbon way. Small high temperature heat networks could allow the viability of HE CHP plants to be developed to meet the industrial process heat needs of a number of local industrial users.

Fingleton White are happy to discuss our views in more detail in person or at future workshops.

Regards,

  
