

District Heating Consultation  
Energy Division  
Department of Communications, Climate Action and Environment  
29-31 Adelaide Road  
Dublin 2  
D02 X285 By email: [DistrictHeating@dccae.gov.ie](mailto:DistrictHeating@dccae.gov.ie)

28 February 2020

**Re: Consultation to Inform a Policy Framework for the Development of District Heating in Ireland**

Dear Sir/Madam,

Ibec, the group that represents Irish business, welcomes the opportunity present its views and recommendations on a Policy Framework for the Development of District Heating in Ireland.

Ibec is the largest business representative organisation in Ireland. We speak for businesses across a range of industrial, commercial and non-profit sectors. The organisation and its sector associations strive for business conditions that enable sustainable economic growth.

**Overview**

Ibec fully supports the transition to a low carbon economy and the ambition to make Europe the first climate neutral continent by 2050. In May 2019 Ibec published its own low carbon roadmap<sup>1</sup> setting out vision, pathway and energy scenario for 2050. Ireland will need to reduce space and industry heat emissions by 75-99% by 2050 (on 1990 levels) to meet our climate ambition. This will be extremely challenging. The sector remains heavily dependent on imported fossil fuels and emissions in the sector are rising. The costs of transition are significant. And industrial heat users have limited abatement opportunities.

Ibec has long been of the view that district heating roll-out has the potential to deliver significant energy efficiency and decarbonisation gains in our heating sector. The consultation document accurately sets out the benefits and the opportunity for deployment in Ireland.

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<sup>1</sup> <https://www.ibec.ie/connect-and-learn/media/2019/05/27/ireland-needs-to-build-a-new-low-carbon-economy>

While Ireland has very low levels of district heating at present, we believe that with the correct policies and supports, Ireland could make significant gains in coming years. The great benefit of district heating, as noted in the consultation document, is that it offers “a relatively low resistance path to decarbonisation without relying on large volumes of individual consumer decisions”.

While the 2015 analysis cited in the consultation suggested Ireland’s low density made the large scale roll out of district heating unviable, the new analysis commissioned by the Irish District Energy Association (IrDEA) demonstrates considerable scope for network roll out across the country. The IrDEA Heat Atlas for Advanced Heat Supply Planning for Ireland indicates that up to 35% heat demand in Ireland’s towns, cities and villages has a heat density that could be met by district energy projects. Ibec welcomes the Department’s acknowledgment of this work and its findings.

Ibec is especially interested in the potential for district and/or industrial heat networks to avail of waste heat from industry, thermal power generation, data centres and waste to energy systems. Under Article 23 of the recast Renewable Energy Directive Ireland has an obligation to increase the share of renewable energy supplied for heating and cooling by an indicative 1.3% as a yearly average for the periods 2021-2025 and 2026-2030 (Art 23(1)). The legislation allows for up to 40% of this increase to be met by waste heat. This source of heat is currently not recognised in any Irish energy policy as a viable source of heat, even though it is indigenous, abundantly available and zero carbon.

Given the relatively high capital costs involved and lack of regulatory certainty, some form of Government intervention and/or low-cost financing will be necessary to fund district heating networks. Planning and legislative changes are also needed to drive the industry forward and alleviate some of the risks involved. Please see our answers to the consultation questions below.

### **Questions on Research**

#### **Q1: What additional research do you think needs to be carried out to support the development of district heating in Ireland?**

There is some uncertainty in industry on how district heating fits within the current emissions reporting framework. For example, what happens if prospective heat network customers fall within the scope of the ETS and are then served by heat from non-ETS sources. The interaction of ETS/non-ETS sources of heat needs to be properly researched.

Research may also be required to identify planning and financial barriers to district heating network roll out, including issues regarding road access and opening licenses.

Research on the operation and energy/carbon savings of the projects mentioned in the consultation would be welcome and help set out the benefits and opportunities for further DH deployment.

**Q2: How should research (including the upcoming comprehensive assessment) be used to inform/support the development of district heating in Ireland?**

Ibec welcomes the development of a new Comprehensive Assessment. We note the benefits of using *heat per km<sup>2</sup>* or the PETA approach to test heat density as a guide for the viability of district heating. This is more appropriate than the *heat per km* approach used in the 2015 study.

**Q3: Are there relevant existing research projects into district heating, in the Irish context, which are not referenced in this document?**

**Q4: Can further research contribute to encouraging areas of compact urban growth to develop district heating projects?**

#### **Outline Questions on Regulation**

**Q5: What elements of Article 24 of the recast Renewable Energy Directive should be implemented in the near term (i.e. by the mid-2021 transposition deadline)?**

Ireland has an opportunity with the transposition of the recast Renewable Energy Directive 2018/2001 to adopt a world class regulatory environment for the roll out of district heating.

This includes measures to properly take account of the value of waste heat as a renewable energy source as defined in the Directive. As noted above, under Article 23 of the recast Renewable Energy Directive Ireland has an obligation to increase the share of renewable energy supplied for heating and cooling by an indicative 1.3% as a yearly average for the periods 2021-2025 and 2026-2030 (Art 23(1)). The legislation allows for up to 40% of this increase to be met by waste heat. This source of heat is currently not recognised in any Irish energy policy as a viable source of heat, even though it is indigenous, abundantly available and zero carbon.

We agree that not all the provisions in Article 24 are appropriate for Ireland given the very low levels of district heating penetration. It is possible that overly complex regulatory requirements could further inhibit roll out.

We do support the transposition of Article 24 (1) below

**1. Member States shall ensure that information on the energy performance and the share of renewable energy in their district heating and cooling systems is provided to final consumers in an easily accessible manner, such as on the suppliers' websites, on annual bills or upon request.**

At this stage we believe the most pressing regulatory requirement is the need to transpose aspects of Article 23 which relate to mainstreaming renewable energy in heating and cooling. This is required to implement aspects of Article 24 in a meaningful way. We recommend that Article 23 (4) (a) and (b) below be transposed by the mid-2021 transposition deadline. This will ensure waste heat contributes towards the renewable heat targets.

**4. Member States may implement the average annual increase referred to in paragraph 1 by means, inter alia, of one or more of the following options:**

**(a) physical incorporation of renewable energy or waste heat and cold in the energy and energy fuel supplied for heating and cooling;**

**(b) direct mitigation measures such as the installation of highly efficient renewable heating and cooling systems in buildings, or the use of renewable energy or waste heat and cold in industrial heating and cooling processes;**

**Q6: What elements of the Article 24 of the recast Renewable Energy Directive should be implemented in the medium term (i.e., by 2025)?**

This will depend on the extent to which the industry develops in Ireland over next five years.

**Q7: Who should have the right to own the district heating networks?**

In our view the starting position should be the development of a competitive market. Competition should be promoted across all aspects of district heat from construction to ownership and operation. We believe both public ownership, private ownership or a mix of the two should be possible. Ireland's regulatory framework should be developed to enable these models.

We believe a public-private joint venture Special Purpose Vehicle SPV would allow the private sector to bring development experience and resource to the project, while ensuring public sector involvement and diversification of risk and capital exposure. If there is a market failure and or overriding public good this would require greater levels of public involvement.

On this issue, we recommend that the Department carefully considers the OECD Guidelines on Competitive Neutrality<sup>[1]</sup>, which have been further refined in the Irish context by the Competition and Consumer Protection Commission (CCPC). The primary aim of neutrality guidelines which are aimed at policymakers is to ensure that State Owned Enterprises (SoEs) which may include local authorities are on a level playing field with private enterprises. This includes ensuring that SoEs are subject to the same procurement arrangements as other industries. As such rather than determining a predicated ownership model the Department should consider a competitive tendering process based on a range of metrics e.g. cost, delivery capability, technical specifications etc.

**Q8: Should there be a district heating market regulator?**

Like other energy and utility markets, effective oversight for district heating will be required in the areas of consumer protection, safety and pricing. While a dedicated regulator might not be needed, some competent state body or agency should be identified to provide this oversight. The Department should consider the capacity of the CRU to take on district heating in the future. Given that district heating networks can also be used for energy storage, the CRU is perhaps the most appropriate body. It is important however that this process does not slow or delay viable projects in the near term. Opportunities for district heating deployment and emission reduction are already being missed.

**Q9: Should there be guidelines/Code of Practice around district heating and if so, who should be responsible for their development and implementation?**

Education and awareness are crucially important. It is important that proposed plans for district heat networks are accompanied by clear and widely publicised information explaining the rationale and benefits of district heating.

It is important that Technical Guidelines and a Voluntary Code of Practice are established to ensure consumer protection and minimum standards for all aspects of DH design, construction, installation, contracts, operation and maintenance. We recommend the Department examine this matter with representatives from industry

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<sup>[1]</sup> <https://www.oecd.org/daf/ca/50250955.pdf>

and prospective heat suppliers. We note that the IrDEA has commenced work on developing appropriate guidelines/Code of Practice specifically for the Irish market. This could serve as a good starting point. Ultimately a body will be required to ensure compliance of standards and consumer protection.

In addition, 24(10) of S.I. No. 426 of 2014 European Union (Energy Efficiency Regulations 2014) states that guiding principles for the preparation of installation level cost-benefit analysis are required for DH network development<sup>2</sup>. These should be developed and made publicly available.

### **Questions on Planning**

**Q10: What changes, if any, are required to existing planning and building regulations in order to support the development of district heating? What changes might be required in order to promote the type of high-density development that is seen as providing the most suitable conditions for development of district heating?**

Over the last decade we witnessed numerous examples of where a lack of coordination and climate smart planning has led to missed opportunities for emission reduction and energy efficiency. Too often major infrastructure projects and developments are pursued without considering – in advance- the current and future energy requirements and the opportunities for mitigation. District heating is perfect case in point.

As is the case in other jurisdictions, Ibec recommends that for new development in areas where density is suitable for district heating, the planning authority should be encouraged to consider district heating as an option. While connection to a district heating network is not appropriate for all development types, it is important that opportunities to avail of or supply useful waste heat are not overlooked.

Ibec also recommends that district heating projects be included in the scope of the Planning and Development (Strategic Infrastructure Act) 2006. As energy infrastructure is already included in the seventh schedule to the Act, the incorporation of heat network energy infrastructure would be a natural next step in facilitating such development in planning terms. The projects if considered to be Strategic Infrastructure would then be assessed according to three criteria:

- whether the development is of strategic economic or social importance to the State or the region;

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<sup>2</sup> S.I. No. 426 of 2014 European Union (Energy Efficiency Regulations 2014), <http://www.irishstatutebook.ie/eli/2014/si/426/made/en/pdf>

- whether it contributes substantially to fulfilment of National Planning Framework (NPF) objectives or any regional spatial and economic strategy in force; and
- whether it has a significant effect on the area of more than one planning authority.

**Q11: Is there potential for the revised building Regulations to act as a driver for district heating?**

**Q12: Given the importance of the public sector taking a lead role in developing district heating in Ireland, as highlighted in the 2015 Comprehensive Assessment, what, if any, additional powers are required by local authorities in order to ensure they have the necessary vires to develop and operate district heating networks?**

As referenced in the response to Q10 above, it is important to incorporate heat network energy infrastructure in the Strategic Infrastructure Act.

#### **Outline Questions on Financing**

**Q13: What sources of financing are currently available to the Irish district heating market?**

The high capital cost involved, and regulatory uncertainty means district heating networks are not yet commercially viable without some form of state support. The Climate Action Fund is supporting the roll out of two projects. But we cannot rely on this to support future district heating projects. While the Support Scheme for Renewable Heat includes district heating in its scope, it excludes ETS site participation and is not of sufficient scale to finance large industrial and community projects.

**Q14: What are the most appropriate financing mechanisms for developing district heating in Ireland?**

The type of financing will be largely dependent on the type of scheme. We believe there could be a role for all the funding mechanisms mentioned in the consultation draft. The appropriateness of a funding mechanism will depend on the particularities of a District Heating scheme's goals and risk profile.

Ibec notes that in time an upward carbon price as proposed in the Climate Action Plan and a rising ETS carbon price should drive greater interest in district heating. We recommend revenues raised by the carbon tax be used to help support the uptake and development of low-carbon heating solutions like District Heating.

**Q15: What are the most appropriate business delivery models for the Irish context?**

**Q16: In addition to those listed above, what are the other main challenges to raising non exchequer financing for district heating projects in Ireland? What measures should Government consider putting in place in order to mitigate these challenges?**

Notwithstanding the predicted competition for non-exchequer sources of funding given the scale of the decarbonisation challenge, there are several risks surrounding the development of DH networks with the potential to impact the ability to finance projects. Measures to mitigate these risks include providing certainty around DH utilities authority to open roads, install infrastructure and supply energy in the same way that other utilities do and therefore include easement rights, rights to install pipes etc.

**Q17: Other than providing direct exchequer funding, what incentives might Government consider implementing in order to drive the development of district heating? For example, should major energy users be allowed to offset their carbon taxes on energy demand by supplying waste heat to local communities?**

Yes. Allowing energy users to offset carbon taxes by making use of waste heat that would otherwise be wasted could help with district/industrial heat network roll out. However, such a system would need to be carefully designed. When designing any financial incentive, safeguards need to be introduced to prevent unintended consequences e.g. rewarding inefficient heat production and use.

#### **Final comments**

Ibec would be happy to meet to provide any clarification that may be required.

Yours sincerely,

[Redacted Signature]

Senior Executive, Energy and Climate Policy

