



Yvonne Murphy (Chief Executive Officer) and Dr David Connolly (Chairperson)
Irish District Energy Association
Opening Address to Joint Oireachtas Committee on Environment & Climate Action
Tuesday 20 June 2023

Introductory Remarks

I would like to extend my thanks to the Chair and to the members of the Committee for inviting us to come and speak with you this morning. I am joined by my colleague Dr David Connolly PhD to represent the interests of Ireland's district energy sector. Dr Connolly is one of the co-founders of the Irish District Energy Association (or 'IrDEA') and he continues to play a leading role as our current Chairperson.

I am IrDEA's first Chief Executive Officer and have served in that capacity since the beginning of this year. Prior to my appointment, we operated on a voluntary basis with the support of contracted administrative, research, and communications services. The fact that we have begun to evolve, and grow is indicative that we envision significant growth for the sector in the coming years.

We made a short submission in advance of today's proceedings to give a brief overview of our focus as an organisation and a basic sense of how we believe district energy can aid the decarbonisation of the Irish heat sector. Our opening statement is intended to add to what we have set out there and we look forward to engaging with the Committee to expand on both this morning.

Background

The Irish District Energy Association (IrDEA) was founded in 2018. Our key purpose is to promote the development of low-carbon district energy in Ireland. This includes both district heating and cooling, albeit that the greater focus at present is on the heating side of things. We are the only association in Ireland dedicated to supporting and representing the interests of the district energy industry. Our stated mission is to see district heating grow to account for at least 30% of heat demand in Ireland by 2050.

We are a membership-based organisation, with core funding supplied primarily through annual fees paid by our members. As of June 2023, we have 27 members in our ranks, among whom is a broad variety of specialism, expertise, commercial focus, and size. Our members range from locally focused energy cooperatives, local authorities, academic institutions, and consultancies to largescale utilities and multinationals. As such, we span the value chain and project life cycle of district energy projects in Ireland, with many of our members also having experience and interests in different jurisdictions across Europe and further afield. We believe the depth of expertise in our ranks is one of our greatest assets as an association.

District Energy

District heating can deliver low-carbon heat at scale, with in the region of 70 million district heating customers across Europe, a figure that continues to grow. Other countries have shown a consistent ability to grow district heating from an almost zero base to large shares at a constant growth of 1% of heat demand per year. There is no reason we cannot become a part of this trend.

The SEAI's National Heat Study (2022) identified that 54% of buildings in Ireland are suitable for district heating. To give a sense of the decarbonisation potential of this, urban buildings alone in Ireland account for around 4 Mt of carbon and half of Ireland's heat demand in buildings overall. If district heating were to be introduced for these buildings, it would reduce all of Ireland's energy-related carbon emissions by over 10%.

Another benefit of supporting the scaled rollout of district heating is its suitability to harness waste heat. More heat is currently wasted in Ireland than is needed to heat all our buildings. We estimate that district heating networks can supply heat today with 60-90% less carbon than natural gas. Over time, this carbon footprint can be reduced further to zero by deploying a range of heat sources, including heat pumps, solar, bioenergy, geothermal.

One of the great benefits of district heating is this can be done while ensuring affordable and secure heat sources for consumers. For example, approximately two-thirds of all homes in Denmark are connected to district heating, 90% of which saw no increase in heat price in 2022 at a time when gas and oil consumers were experiencing significant price rises. Although the Danish model is unlikely to be replicated in Ireland, this shows that decarbonisation and affordability can go hand in hand. This would not only positively affect heat consumers but could have a broader benefit for the wider economy by stabilising energy sector prices, moderating inflation, and helping businesses to stay competitive.

District Heating in Ireland

At present, less than 1% of heat demand in Ireland is supplied by district heating, yet industry is tasked with meeting Climate Action Plan targets of 0.8 TWhr by 2025 and 2.7 TWhr by 2030. To achieve this, we must address the key policy barriers to de-risk projects and unlock the significant investment potential in the sector. These include:

- By far the most urgent is the need for a regulatory regime to facilitate district energy developers laying the pipework in public roads.
- Capital Support for infrastructural investment to ensure the correct balance of public and private contributions for this key and long-term infrastructural development (50-year replacement rate)
- Electricity Cost Support, including:
 - A cap on the ratio between the cost of electricity and gas, and
 - A cap on the overall price of electricity to protect consumers from price spikes.
- Equalisation of grant schemes to ensure a level playing field for district heating.

Conclusion

There is over 500 TWh of district heating in Europe today, we just need to add 2.7 TWh to this to meet our 2030 goals. The technology exists, the supply chain exists, and the skills are very transferable from oil and gas, so we stand ready to deliver if the policy framework and support is put in place to rapidly grow our sector.

We would again like to thank the Chair and members of the Committee for the chance to come and speak with you today about our sector and the tremendous potential for district energy in Ireland and look forward to the discussion to come.

IrDEA Members

Asper; Claremorris and Western District Energy Co-Operative; Codema; Covanta (Dublin Waste to Energy Ltd); Danfoss; Dublin City Council; ESB; Ethos Engineering; Euro-Fluid Handling Systems; Fichtner; Fortum; Frontline Energy; HeatGrid Ireland; Hevac; Indaver; Kaizen Energy; Kilwex; Kingspan; MKO; Optit; Rehau; SSE plc; Technological University Dublin; Tipperary Energy Agency; Unitherm HS; Veolia; XD Consultants.

