

Positive innovation

Talan successfully developed a roadmap with the Irish District Energy Association (IrDEA) to inform the expansion of their district heating capabilities.



THE CHALLENGE

Ireland faces a significant challenge in meeting its climate targets, particularly for the decarbonisation of heat, which accounts for nearly 38% of Ireland's total energy-related CO₂ emissions. District energy has been identified as a key technology to advance emissions reduction objectives in the built environment. However, its deployment currently remains low, serving less than 1% of heat demand.

Key policy areas in need of support to **unlock deployment** include the development of dedicated legislation, comprehensive consumer protection regulations, robust technical standards, and broadly available funding mechanisms.

Without urgent policy intervention, Ireland risks missing its 2030 target of reaching 2.7 TWh of district heating output.

Our roadmap for Northern Ireland could:

Alleviate the fuel poverty that 29% of the population face.

Reduce the ~ 1.300 annual deaths from poor air quality.

Create 100–150 new roles in the Dublin District Heating System.

THE SOLUTION

The IrDEA, in collaboration with Talan, developed a **comprehensive roadmap** for the rollout of district heating informed by the IrDEA membership and international best practice. The roadmap outlines a phased approach to policy and market development, drawing lessons from both emerging and mature district energy markets including England, Scotland, Germany, the Netherlands, Denmark, Sweden, and Finland.

Key recommendations include:

Funding Reform: Adapt existing schemes like the Support Scheme for Renewable Heat (SSRH) and introduce dedicated grant funding for feasibility studies, construction, and commercialisation.

Legislative Action: Enact primary legislation to establish licensing, technical standards, and consumer protection.

Ownership Flexibility: Encourage mixed ownership models (public, private and joint ventures) to stimulate investment and innovation.

Consumer Protection: Implement voluntary standards initially, with plans to mandate protections such as dispute resolution, price transparency, and metering.

Regulatory Oversight: Integrate district energy into existing competition law and empower the Commission for Regulation of Utilities (CRU) to oversee compliance.

THE IMPACT

If implemented, the roadmap could transform Ireland's district energy landscape by:

- Enhancing Energy Security: District energy networks offer flexibility and resilience, supporting grid stability and reducing reliance on imported fossil fuels.
- Creating Jobs: The expansion of district energy infrastructure is expected to generate hundreds of skilled and unskilled jobs, particularly in urban centres like Dublin.
- Improving Air Quality: Transitioning from solid fuels to renewables via district energy could prevent up to 1,300 premature deaths annually.
- **Reducing Emissions:** District energy could meet over 64% of building heat demand, significantly contributing to net-zero goals.
- Alleviating Fuel Poverty: By offering low-cost heating, district energy can help reduce the 29% energy poverty rate recorded in 2022.

