



Roinn Cumarsáide, Gníomhaíthe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

The Climate Action Regional Offices are an initiative of the Government of Ireland funded by the department of Communications, Climate Action and Environment and managed through Local Authorities.

February 28th 2020

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

Public Consultation Submission

Oifig Réigiúnach um
Gníomhú ar son na hAeráide
Rialtas Áitiúil
Réigiún Cathrach Bhaile Átha Cliath

Climate Action
Regional Offices
Local Government
Dublin Metropolitan



Prepared by:

Dublin Metropolitan Climate Action Regional Office (CARO),
Block 1, Floor 6,
Civic Offices,
Wood Quay,
Dublin 8.

1. Introduction

The CAROs were established in 2018 in response to Action 8 of the 2018 National Adaptation Framework (NAF) – *Planning for a Climate Resilient Ireland*.

The offices are mandated to co-ordinate engagement across the varying levels of government and help build on experience and expertise that exists in the area of climate change and climate action. The offices have a role in driving climate action at both regional and local levels, including implementation of local adaptation plans / Climate Change Action Plans.

The composition of the four Climate Action Regions has been determined by the geographical and topographical characteristics, vulnerabilities and shared climate risks experienced across local authority areas. The four CARO regions, constituent local authorities and associated lead authorities are as follows:

Climate Action Region	Local Authority function area	Lead Authority
Dublin Metropolitan	South Dublin, Fingal, Dun-Laoghaire-Rathdown, Dublin City	Dublin City Council
Eastern and Midlands	Carlow, Cavan, Kildare, Kilkenny, Laois, Leitrim, Longford, Louth, Meath, Monaghan, Offaly, Roscommon, Tipperary, Waterford, Westmeath, Wexford, Wicklow	Kildare County Council
Atlantic Seaboard North	Donegal, Sligo, Mayo, Galway City & County	Mayo County Council
Atlantic Seaboard South	Clare, Limerick, Kerry, Cork City & County.	Cork County Council

In accordance with the National Adaptation Framework - Planning for a Climate Resilient Ireland 2018 (NAF) each Local Authority was required to make, approve and submit a local adaptation strategy to the Department of Communications, Climate Action and Environment by September 30th 2019. Local Authority Adaptation Strategy Development Guidelines were published in December 2018 to guide the preparation of the strategies. The steps to be taken in developing an adaptation strategy included convening an adaptation team, assessing the current adaptation baseline, identifying future climate impacts, vulnerabilities and risks, identifying adaptation actions and drafting, implementing and monitoring the strategy. All thirty one LA strategies were approved and submitted to DCCAE for final approval.

Local authorities play a pivotal role in planning for, and responding to, climate emergency situations. Given their close relationship with the community, local authorities can react faster and more effectively to local climate events than other government agencies. This has been demonstrated in their response to extreme weather events in Ireland over recent years. They have essential local knowledge of the natural and manmade environment and have a critical role to play in managing climate risks and vulnerabilities, and identifying adaptation actions within their administrative areas. They also deliver key services to the public either directly or in partnership with other Government Departments such as housing, planning, sanitation and maintenance of local roads, parks and waterways.

Given the evolving climate action policy context in Ireland and internationally, there is recognised potential for increased local authority led integration between climate action and spatial planning policy. This is the main focus of this submission.

It is considered that City / County Development Plans and other local authority plans, such as Strategic Development Zone (SDZ) Planning Schemes and Local Area Plans (LAPs), can play a key role in signposting and enabling evidence based policy responses, to both climate change mitigation and adaptation. This includes enhancing an evidence based approach to developing district heating policy, which can enable local projects at appropriate locations across Ireland i.e. cities and towns etc. The role of spatial planning in developing district heating in Ireland, is addressed in Section 4 of the public consultation document.

2. The Policy Context

❖ National

The National Planning Framework states that *'the planning process provides an established means through which to implement and integrate climate change objectives, including adaptation, at local level. Planning legislation also requires different levels of the planning process to address climate change'* (Government of Ireland, 2018).

Strategic Outcome No.6 of the National Planning Framework is to 'Transition to a Low Carbon and Climate Resilient Society'. The NPF also states that; 'in addition to legally binding targets agreed at EU level, it is a national objective for Ireland to transition to be a competitive low carbon, economy by the year 2050. The National Policy Position establishes the fundamental national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050' (Government of Ireland, 2018). This is based on an aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors. The Climate Action Plan 2019 also states 'this is a strong foundation on which to build a Climate Action Plan committed to achieving a net zero carbon energy systems objective for Irish society and in the process, create a resilient, vibrant and sustainable country' (Government of Ireland, 2019).

As is stated in the district heating public consultation document, 'the National Planning Framework supports the development of district heating networks in Dublin, Cork, Galway,

Waterford and Kilkenny, where technically feasible and cost effective'. (Government of Ireland, 2019).

The **Climate Action Plan 2019 To Tackle Climate Breakdown**, was published by the Government in June 2019. There are a range of actions in the Climate Action Plan that are specific and/or relate to local authorities, a number of actions also relate to the Climate Action Regional Offices (CARO). The role of spatial planning in addressing climate action is also addressed in the Plan. It is stated that 'there is a need to combine measures to influence the spatial pattern of development, urban structure and overall mobility, with low carbon technology measures' (Government of Ireland, 2019).

The public consultation document lists the Climate Action Plan actions relating to district heating. It is noted that the development of Decarbonising Zones also have relevance to the development of local district heating projects; the development of these zones are also included as an action in the Climate Action Plan:

Action 165: Extend flagship low-carbon projects in other towns and villages.
Sub-Action: Each local authority will identify and develop plans for one 'Decarbonising Zone'.

❖ *Regional*

The **Regional Spatial & Economic Strategy (RSES)** for the Eastern and Midland Regional Assembly area, the Northern and Western Regional Assembly area, and the Southern Regional Assembly area, have all been made and are in effect. As a result, the constituent local authorities within the Regions are required to restart, review, or vary their City / County Development Plans. There are a number of climate action related Regional Policy Objectives (RPOs) included in all three RSES's. The RSES's are also underpinned by a climate action focus covering key areas such as compact growth, integration of land use and transport, brownfield / infill development, renewable and low carbon electricity and heating generation, employment and enterprise development, infrastructure development and green infrastructure strategies.

A key pillar of the National Planning Framework and the RSES's are the development of **Metropolitan Area Spatial Planning Framework (MASP)** for Dublin, Cork, Limerick, Galway and Waterford metropolitan areas, and in the case of Dublin and Cork, to also address the wider city region. The MASPs will: (a) identify key change parameters i.e. population, employment, housing, retail, travel patterns, development and amenity areas etc., (b) identify the sequence of infrastructure prioritisation, delivery and co-ordination, and (c) deliver compact growth regeneration and growth. It is considered that the development of renewable and low carbon energy projects, including the delivery of local district heating projects, could also be supported through the development of the MASPs.

❖ *Local*

All thirty-one Local Authorities were required to make, approve and submit a local adaptation strategy / Climate Change Action Plan, to the Department of Communications, Climate Action and Environment by September 30th 2019. Local Authority Adaptation Strategy Development

Guidelines were published in December 2018 to guide the preparation of the strategies. The four Dublin local authority Climate Change Action Plans (CCAP) 2019-2024, address both mitigation and adaptation; this results from the ongoing work of Codema – Dublin’s Energy Agency, in addressing local authority climate change mitigation efforts.

The Dublin local authority CCAPs address the five key theme areas of – Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management and have four key targets:

- 33% better energy use by the Council by 2020;
- 40% reduction in the Council’s greenhouse gas emissions by 2030;
- To make Dublin a climate resilient region, by reducing the impacts of future (and current) climate change-related events; and
- To actively engage and inform citizens on climate change.

Across the four Dublin local authority CCAPs, the following specific actions relate to spatial planning and the preparation of City / County Development Plans:

- SDCC CCAP: Action E4: Evidence-based Climate Change Chapter in County Development Plan 2022- 2028
- DCC CCAP: Action E4: Evidence-based Climate Change Chapter in City Development Plan 2022-2028
- Fingal CCAP: Action E4: Outputs and recommendations from the Fingal Spatial Energy Demand Analysis (SEDA) 2016 to inform the review of the Fingal Development Plan 2017-2023
- DLRCC CCAP: Action E4: Evidence-based Climate Change Chapter in County Development Plan 2022-2028

3. District Heating and Local Authority Spatial Planning Policy

The consultation document includes a number of outline questions on Planning. It is considered that having regard to the Core Strategy, settlement hierarchy across City / County Development Plans, and relevant zoning objectives (in particular city / town centre, employment, regeneration zonings etc.), there is an opportunity to profile energy character areas, Decarbonising Zones etc., that may be suitable for developing a robust and evidence based policy to enable larger energy generating projects, in particular district heating, solar, wind (in the urban context), biomass, thermal / electricity storage etc. These areas could be spatially represented as appropriate, to inform spatial planning policy relating to climate change mitigation, adaptation and represent the co-benefits of both.

There is recognised potential and precedence in evidence based spatial planning policy relating to district heating, within the Dublin local authorities. There are currently two district heating projects linked to spatial planning policy in Dublin, the Dublin District Heating System

(Waste to Energy) and the Tallaght District Heating System (data centre waste heat). Planning policy relating to these two projects is included from City / County Development Plan, Strategic Development Zone to Local Area Plan level. These projects received combined funding of €25 million from the Climate Action Fund in 2018. There has been significant advances in exploring district heating potential and related policy development in Dublin, as undertaken by Codema. This includes projects in both DCC and SDCC and involvement in EU best practice projects such as [HeatNet](#) and [Celsius](#). Codema has also undertaken a Spatial Energy Demand Analysis for the four Dublin local authorities, a [Transition Roadmap for Developing District Heating in South Dublin](#), and has also mapped waste heat sources in Dublin.

Through the preparation of new City/County Development Plans, Strategic Development Zone Planning Schemes, Local Area Plans etc., the development of a spatially represented district heating policy (energy character areas, Decarbonising Zones etc.), can act as an enabler to 'kick-start' local projects, and is an important starting point for advancing pre-planning discussions with landowners, advancing internal and external stakeholder support and demonstrates local authority leadership in seeking external funding / support for district heating projects.

With regard to the role of spatial planning and kick-starting local district heating projects, the [Clonburris Strategic Development Zone Planning Scheme](#) includes an [Energy Masterplan](#). The Masterplan was developed to explore the viability and economic analyses of a range of sustainable energy options for the SDZ area, including energy efficiency, energy storage, and renewable heating, cooling and electricity. These energy options vary from 'kick start' local networks or district energy schemes, to more localised, block and individual building level opportunities. The Clonburris and Kishogue urban centres were also identified as potentially viable areas for local heat networks. The Clonburris Energy Masterplan recommends that all major developments within these two urban centres should be designed to be able to connect to a local heat network in the future if, or when such a network becomes available in the future. This Masterplan also identifies a range of delivery models and financing structures for such local heat networks.

The [Draft Tallaght Local Area Plan 2020-2026](#), includes a standalone chapter addressing both climate change adaptation and mitigation. With regard to enabling district heat networks in the Tallaght town centre area, the Draft Plan states that 'Major development sites within the Plan area which are adjoining/adjacent to any such decentralised energy (heat) network or other significant heat source as identified above, should be designed to be capable of connection to a decentralised energy (heat) network and any land required for the heat network must be protected' (South Dublin County Council, 2019).

Current UK best practice examples in the development of district heating planning policy includes: [A Guide for Local Authorities on Planning for Climate Change](#) published by the Town and Country Planning Association (TCPA), [The London Plan, Islington District Heating Planning Guidance](#).

Having regard to the above, there are a number of key considerations for further robust review and consensus, having regard to integrating spatial planning policy and district heating projects, including:

- Can energy character areas, Decarbonising Zones etc. be mapped in City/County Development Plans, Strategic Development Zones Planning Schemes, Local Area Plans etc. taking account of large energy users, anchor loads (i.e. hospitals), heat supply sources including waste heat etc?;
- Should larger development proposals in city / town centres, regeneration areas, etc. include a communal heating system by way of connecting to a local existing or planned heat network, use other secondary heat sources such as Combined Heat and Power etc?;
- Where a local district heating network is planned but not in place, should larger developments be district heating enabled i.e. details of future proofing of the building fabric, providing space in basements / plant rooms for heat exchangers, safeguarding of pipework / infrastructure routes up to the site boundaries to facilitate future connection to a local district heating network?;
- Should developments whereby the primary operation on site generates waste heat, capture waste heat and provide / future proof utilisation at local level etc?; and
- Key considerations for compiling planning standards for district heating schemes include: early pre-planning engagement, the preparation of an Energy Statement relating to DH potential, the development of on-site infrastructure such as energy centres etc, pipe routes and safeguarding wayleaves up to site boundaries, future-proofing built fabric, technical skills required in assessing district heating planning proposals, condition wording and compliance procedures.

4. Conclusion

Addressing climate change is a challenging and multi-faceted policy agenda and spatial planning affords an established and timely opportunity, with particular regard to the upcoming review of City / County Development Plans.

The CARO recognises an expanding role for GIS / Geospatial tools and analysis at a local authority level / sectoral level in enhancing climate action policy. Evidence based district heating policy can also, act as a road map and enabler for project delivery and unlocking funding opportunities, such as the Government's Climate Action Fund and other EU funding and support mechanisms.

The Climate Action Regional Offices welcome the publication of this Policy Framework for the Development of District Heating in Ireland, and to working with the range of identified stakeholders in the implementation of the final Policy.