

## Overview of National DHC Market

Country	Ireland
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#	Name and reference of measure	Type of measure	Responsible organ	Existing or planned?
1	Building Regulations 2008, Part L	Regulatory requirement	DCENR	Existing
2	National Climate Change Strategy	National Policy Document	DCENR	Existing

DCENR: Department of Communications, Energy and Natural Resources

### Summary of the National DH market

The DH market in Ireland is in its infancy. There are a relatively low number of small scale systems operating or under development. The majority of these DH systems serve only a single development. They do not compare with the municipal utilities which are commonplace throughout Europe.

To date, the largest DH network being planned in Ireland is the Dublin DH network by Dublin City Council (DCC). It is currently at conceptual design stage, although some distribution pipework has been installed. Plans for a similar municipal system in Cork City have also been discussed and a feasibility study has been completed.

In terms of national policy there are currently no laws or schemes supporting DHC specifically. However there are a number which indirectly support DHC, the 2 most effective being:

1. Building Regulations Part L and
2. National Climate Change Strategy.

**Part L “Conservation of Fuel and Energy” of the Building Regulations 2008** (applicable to new dwellings) specifies that a minimum of 10 kWh/m<sup>2</sup>/annum contributing to energy use for domestic hot water heating, space heating or cooling energy be provided from renewable energy technologies. Alternatively 4 kWh/m<sup>2</sup>/annum of electrical energy, or a combination of these which would have equivalent effect. CHP plants are given credit as renewable energy technologies, so a DH system which takes its heat from CHP will contribute to meeting the requirement.

Ireland’s national CHP targets were set out in the **National Climate Change Strategy**. This paper set a target of 400 MW<sub>e</sub> by 2010 and 800 MW<sub>e</sub> by 2020 of installed CHP capacity. At the end of 2008 the total installed active CHP capacity was 298.7 MW<sub>e</sub>, an increase of 30 MW<sub>e</sub> against the installed (active) capacity in 2006.

In the short term, with the construction slow down, drop in energy prices and difficulty in accessing finance, it is unlikely that many new DH schemes will be built in Ireland. In the medium to long term, as energy prices recover and more legislation is enacted to reduce greenhouse gas emissions, the use of DH in high density areas should increase, especially where located close to an existing cheap heat source, such as a Waste-to-Energy plant, power station or industrial CHP.

Some of the main obstacles to development of DH systems in Ireland are:

- Ireland’s low urban population density, compared to continental Europe where apartment living is far more common.
- Competition from gas fired central heating with individual burners per dwelling.
- Contractual and operational requirements for supplying electricity and heat to multiple users, with the Electricity Regulation Act prohibiting the use of private wire networks.

Systems of note operating in Ireland include:

- **Heuston South Quarter**, Kilmainham, Dublin 8.
- **The Point Village**, North Wall Quay, Dublin 1.
- **Charlestown**, Finglas, Dublin 11.
- **Lansdowne Gate** – See Example 2 in Part 3 “Local success stories”.
- **Elm Park**, Merrion Road, Dublin 4.
- **The Elysian Tower**, Cork City.
- **City Square**, Watercourse Road, Cork City.
- **New Street**, Dublin 8.
- **Charlotte Quay Apartments**, Ringsend Road, Dublin 4.

Systems of note under development in Ireland include:

- **Dun Laoghaire Golf Course**, Co. Dublin.
- **Dundalk Sustainable Energy Zone**, Dundalk, Co. Louth.
- **Spencer Dock**– See Example 1 in Part 3 “Local success stories”.
- **The SERVE Project** (Sustainable Energy for the Rural Village Environment) in North county Tipperary.

Some Irish Feasibility Studies of note include:

- **Cork Docklands District Heating**  
<http://www.corkdocklands.ie/infrastructure/corkdocklandsdistrictheatingfeasibilitystudy/>
- **Dublin District Heating** – See Example 1 in Part 3 “Local success stories”.  
[http://www.dublinwaste.ie/District\\_Heating\\_Feasibility\\_Study.html](http://www.dublinwaste.ie/District_Heating_Feasibility_Study.html)

The main precedent for DH in Ireland is now shutdown:

- **Ballymun** District Heating system. This scheme served seven 13-storey tower blocks (a total of 2,820 flats) that were constructed in the early 1960s and had little or no thermal insulation. Heat was provided by 45MW light fuel oil and gas boilers. As part of the Ballymun Regeneration Programme, the DH system has been decommissioned. The system was supply orientated, which resulted in very high heat usage in the apartments because of poor temperature control. This was due to its low specifications, operation and maintenance rather than a failing of the technology itself. The failure of this DH system and its consequent bad name and association with social housing significantly detracted from the image of DH over the past 20 years.