



**Pilot Actions to Develop a Functioning Market for Energy
Performance Certificates**

(BUDI)

**MARKET ANALYSIS RESULTS & EXPERIENCE
IN GREATER DUBLIN AREA**

SUMMARY

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1 Introduction

1.1 Region Summary

The Greater Dublin Area (GDA) is located on the east/east midlands of Ireland. GDA includes County Dublin and its 3 neighbouring counties Meath, Wicklow and Kildare. Dublin comprises of 4 Local Authority areas: Dublin City Council, Fingal County Council, South Dublin County Council and Dun Laoghaire Rathdown County Council. The population of the GDA is approximately 1.4 million and the area coverage is 6,982 km².

2 Market Analysis

2.1 Procedures for Building – Erection, Renovation, Selling and Renting

2.1.1 Erection of new buildings

The law governing the planning system is set out in the Planning and Development Acts 2000 and 2001 and the Planning and Development Regulations 2001 to 2002.

The *Building Control Act, 1990 (No. 3 of 1990)* covers the responsibility of enforcement and inspection of the Building Regulations.

Planning permission is required from the Local Authority for the development of land or property unless the development is specifically exempt from this need.

2.1.2 Renovation of larger buildings

The renovation of larger buildings is governed by the same legislation for the development of new buildings. However, not all renovation work requires planning permission. Development can be exempt if it is of a minor nature or where certain thresholds, e.g. height or size are not exceeded.

2.1.3 Selling and renting of buildings and dwellings

Property Sales

Most property sold in Ireland is sold by private treaty. Real estate agents, auctioneers and property advisors offer professional assistance to both the purchaser and seller. The purchasing of a building is normally facilitated by a financial institute (bank). The sale of the property is registered at the Land Registry or noted at the Registry of Deeds office, depending on the type of title the property has.

Property Rental

The Residential Tenancies Act came into force 1st September 2004 and applies to the mainstream private rented sector and excludes amongst others, business premises and a dwelling let by; or to a public authority. For commercial letting, the Landlord and Tenant Act 1931 provides the tenant very important tenant rights in particular reference to the duration of occupancy.

2.2 Calculation Methods for Energy Performance of Buildings

The development of calculation methods for energy performance of buildings in Ireland is still at a draft stage. A joint Working Group was established in 2003 to oversee and plan the implementation of the EPBD in Ireland. The Working Group has published a Draft Action Plan for Implementation of the EPBD in Ireland.

The existing methodology for calculating the energy performance of a building in Ireland is the Heat Energy Rating (HER). The HER of a building is a measure of the annual energy output from the appliance or appliances that provide space and water heating for the building. The rating is specified in terms of energy output of the appliances per unit floor area per year (kWh/m²/yr). The HER method will possibly form the basis of the “calculation engine” on which future building energy rating calculation methods in Ireland are based on.

The BER of new buildings will be based on energy use calculations using data derived from drawings and specifications. For existing buildings, the BER will be based on energy use calculations using data obtained from a physical survey. Different formats for the BER certificate will be used for residential buildings and non-residential buildings (including public service buildings) and will possibly be based on the CEN standard. It is envisaged that the same format will be used for both new and existing buildings within the same functional class. The certificate will consist of a simplified rating scheme, for example; A to H with accompanying quantitative indicator, probably expressed as kWh/m²/yr of delivered energy. The BER may incorporate a CO₂ indicator.

BER requirement will apply to new residential buildings from the 1 January 2007, other new buildings (including non-residential buildings and public service buildings) from 1 January 2008 and existing buildings from 1 January 2009.

2.3 Existing Minimum Energy Performance Requirements

The Irish building control system is centered on the Building Control Act, 1990 (No. 3 of 1990). The Act provides for the making of Building Regulations covering building standards and quality of construction, and sets out the works and buildings that may be the subject of Regulations and the purposes for which Regulations may be made. The Regulations apply to the construction of new buildings and to extensions and material alterations to existing buildings and certain Parts of the Regulations apply to changes of use of existing buildings.

The Technical Guidance Documents, commonly known as TGDs, give practical guidance on performance levels to be achieved, and on appropriate design and construction methods and practices. The following technical guidance documents relate to existing minimum energy performance requirements in Ireland:

1. Part L - Conservation of Fuel and Energy (1997)
Part L - Conservation of Fuel and Energy Dwellings (2002)
2. Part F - Ventilation (2002)
3. Part J - Heat Producing Appliances (1997)
4. Building Regulations S.I. No. 260/1994 – Efficiency Requirements for new Hot Water Boilers Fired with Liquid or Gaseous Fuels is another applicable document to the Energy Performance of Buildings Directive.

Elemental U-values should not exceed the following limits for domestic buildings:

Roofs:	0.25W/m ² K
Walls:	0.37 W/m ² K
Ground Floors:	0.37 W/m ² K

Elemental U-values should not exceed the following limits for non-domestic buildings:

Roofs:	0.35W/m ² K
Walls:	0.55 W/m ² K
Ground Floors:	0.45 W/m ² K

“Adequate means of ventilation shall be provided for people in buildings, including adequate provision for the removal of water vapour from kitchens, bathrooms and other areas where water vapour is generated” and “adequate provision shall be made to prevent excessive condensation in a roof or in a roof void above an insulated ceiling.”

2.4 Existing Experience with Energy Performance Certificates & Boiler/AC inspection

The concept of “energy rating” of dwellings has been in operation on a voluntary basis for several years in Ireland

The principal voluntary methods in Ireland are:

- Heat Energy Rating (HER) method

- Irish Home Energy Rating (IHER) scheme
- National Home Energy Rating (NHER)
- National Irish Centre for Energy Rating Ltd (NICER)

It is estimated that annual sales and rental transactions of residential buildings in the GDA will require 62,700 energy certificates and approx. 230 estimated experts. This is based on full-time assessors, allowing for varying assessment times for existing and new buildings.

It is proposed in the Draft Action Plan for the Implementation of the EPBD in Ireland that assessors be drawn from the existing base of building professionals, e.g. Engineers, Surveyors, Architects, Building Services Engineers, etc. The estimated cost of Building Energy Rating is estimated to be €300 per house. This may vary; it may be lower for housing estates and apartments and may be more significant for existing buildings. The estimated turnaround time is two weeks for housing.

Boiler and AC inspection in Ireland is also voluntary. Boiler inspections were encouraged through the National Boiler Awards. The National Boiler Awards were launched by the Irish Energy Centre in 1996 with the aim of creating a greater awareness and appreciation of the key role that boilers and the people who operate, manage and service them play in creating a cleaner environment.

2.5 Communication with Relevant Actors

CODEMA have carried out informal meetings with SEI and with the relevant actors in government. We hope to carry out a formal meeting in the coming months.

CODEMA has identified important target groups in the GDA.

Relevant Actors	Names
Housing Associations	Napco
Auctioneers Estate Agents	Irish Auctioneers and Valuers Institute DTZ - Sherry Fitzgerald Lisney Hamilton Osbourne King Gunne
Local Authority Departments	DCC Housing, Social and Community Services Department <ul style="list-style-type: none"> • Architects Division • Housing Management Services • Quantity Surveyors Division DCC Planning and Economic Development Department <ul style="list-style-type: none"> • Building Control • Planning Enforcement
Architects	Howley Harrington O Mahoney Pike Solearth Architects
Developers	Ballymore Construction
Property Managers	WYSE
Property Investors	Not yet identified

CODEMA organised and held a ‘Workshop for Public Authorities’ on 20th May 2005. The Public Authority present was DCC Planning & Economic Development Department – Building Control Dept. 3 presentations were made by CODEMA staff, followed by a discussion session. Information packs, including presentation material and the BUDI information folder were distributed at the event. CODEMA hopes to hold similar workshops for the other identified Local Authority Departments and also for key Estate Agents.

CODEMA has an advert and articles booked in summer issues of 2 magazines ‘Construct Ireland’ and ‘MOVING iN’. We hope these adverts will attract the attention of developers and property investors in the GDA.

CODEMA plans to hold a training workshop for Public Authority personnel in Autumn 2005, the topic covered shall be the HER calculation methodology.

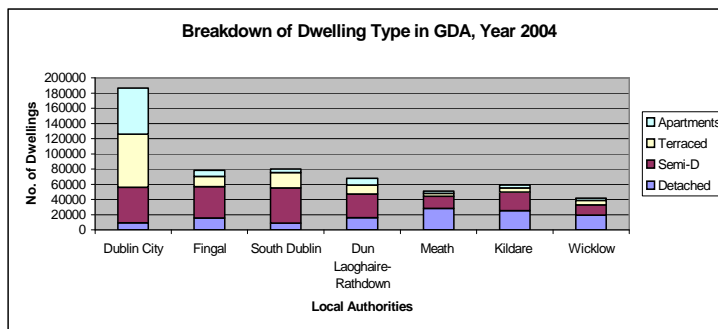
2.6 Estimation of Numbers of Certificates

A market analysis of all buildings concerned by the EPBD was carried out.

Residential Sector

In the Greater Dublin Area there are **577,538** residential buildings (single family houses & apartments).

There are **91,529** apartments in the GDA



It is estimated that annual sales and rental transactions of residential buildings in the GDA will require 62,700 energy certificates and approx. 230 estimated experts.

Public Buildings Sector

The definition of Public Buildings is based on Article 7.3 of the Directive 2002/91/EC:

“Buildings....occupied by public authorities and by institutions providing public services to a large number of persons and therefore frequently visited these persons”

There are **76,312** Public and Commercial buildings in the Greater Dublin Area.

Public & Commercial Buildings

	Dublin	Meath	Kildare	Wicklow
Hospitals	35	1	1	4
Hotels	144	140	24	33
Restaurants	578	32	44	41
Pubs	822	235	212	173
Education Buildings	633	127	128	108
Museums	4	1	8	6
Local Authority Buildings	89	21	23	18
Commercial buildings	52,600	2,500	2,800	14,700
Courts	13	4	4	6
Total	54,829	3,040	3,221	15,071

It is estimated that annual sales and rental transactions of public and commercial buildings in the GDA will require approx. 12,591 energy certificates and approx. approx. 181 estimated experts.

INDICATOR TABLES PER REGION

Table 2.6.1: Residential Buildings

Residential Building Types	No. of Existing Buildings	New Build (per annum)	Rented (per annum)	Sold (per annum)	Estimated Certs/Yr	Estimated Experts
single houses (1-2 dwellings)	471,905	17,758	5,345*	34,509	62700-	230-
multi-family houses (3-10 dwellings)	-	-	-	-		
greater residential buildings (> 11 dwellings)	91,529	8,157	8,746*	14,095		

* There are unregistered rented houses, which are not accounted for in the above figures- as no data is available

Table 2.6.2: Non Residential Buildings (Public Buildings & Other Commercial Buildings)

Non-Residential Buildings Types	No. of Existing Buildings	% Rented (per annum)	% Sold (per annum)	No. of New Build (per annum)	Estimated Certs/Yr	Estimated Experts
Public Buildings & Other Commercial Buildings	76,161	12.5%**	4%**	300	12,591	181

**The above percentages are estimates as there are no hard data available on commercial sales and rentals