

BER Foundation Course

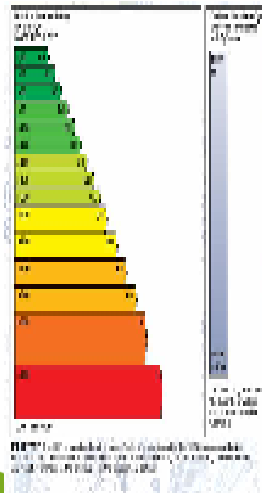
Peter Keavney
Galway Energy Agency

Killeshin Hotel , Portlaoise – 1st April 2011

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OVERVIEW

- ☞ *Dwellings only*
- ☞ *WHY this Course*
- ☞ *WHO should be Trained*
- ☞ *LA Benefits*
- ☞ *Course Content Outlined*
- ☞ *Where – Course Delivery*
- ☞ *Future Developments*
- ☞ *Discussion*
- ☞ *Questions & Answers*



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Local Authority Social Housing
Workshop on upgrading and Building Energy Rating



- ☞ *Policy/Legal/Technical Aspects of BER*
- ☞ *Using BER Software/Workbook as a Tool*
- ☞ *BER Assessor v's Project Evaluation*
- ☞ *Housing Project Proposals - Capital/Grants*
 - *Refurbishments, Energy Upgrades*
 - *BER Design Tool, New Build*
- ☞ *LA – Inhouse Capability/Knowledge Base*
- ☞ *LA – BER Housing Inventory/Database*
- ☞ *Standard Housing Upgrade Measures*
- ☞ *Preparation Works for BER Certification*

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WHO - BER Foundation Course

- ☞ *New Build, Design, Policy and Legislation*
 - DoS/(Head of Housing)
 - Architects/Architect Technicians
 - Housing Engineers/Officers/Energy Officers
 - Clerk of Works/Planning/Legal Officer
- ☞ *Refurbishment/Upgrades/Maintenance*
 - All above, and
 - Housing & General Maintenance Staff (Compliance/Specifications)
 - External Contractors (Trades, Minor Contracts)
- ☞ *RAS, Affordable Housing Schemes ?*
- ☞ *Buildings, other than Dwellings*

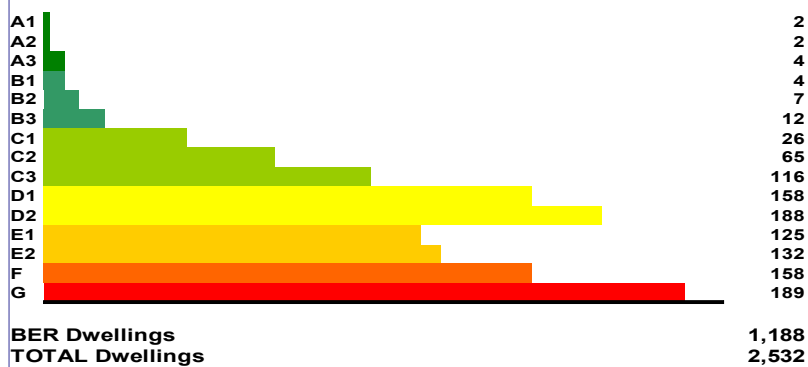
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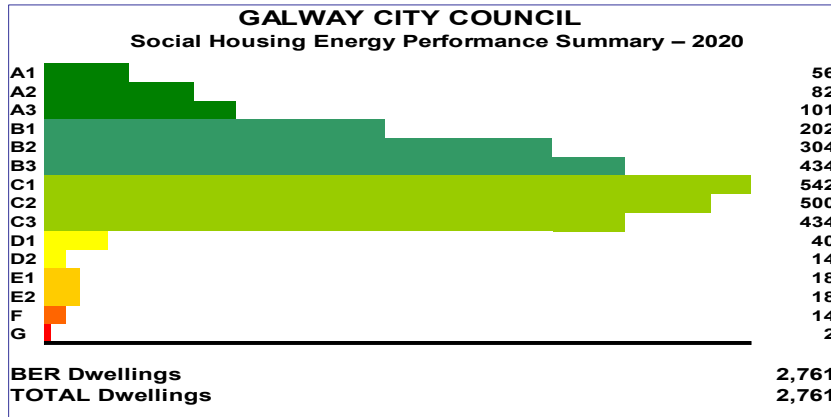
Impacts & Benefits

- ☛ In-house Capability – Cost Savings
- ☛ Reduced Consultancy Fees
- ☛ Assists with Workload of LA BER Assessor(s)
- ☛ Reduced costs of BER Certificates
- ☛ Housing Stock/Asset Management
- ☛ Structured Monitoring & Reporting
- ☛ Improved Capital Project Proposals
 - ID Needs and Quantified Upgrades
- ☛ Provides input to LA BER/Housing Policy

GALWAY CITY COUNCIL
Social Housing Energy Performance Summary - 2010



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Energy Upgrade Summary
Average per Dwelling

Item	Upgrade Measure	BER Primary $kWh/m^2/year$	BER Rating	CO ₂ Emissions $kgCO_2/m^2/year$	Capital Cost €
	Existing	450.40	G	115.59	
1	Attic Insulation	402.44	F	102.91	1,400.00
2	Wall Insulation	314.80	E1	79.73	920.00
3	Heating	199.43	C2	52.14	3,000.00
Savings		250.97		63.45	5,320.00
		55.7%		54.9%	

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Example - Average per Dwelling

“BEFORE”

Building Energy Rating (BER)

450.4 kWh/m²/year

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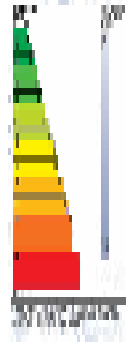
Carbon Dioxide Emissions

115.59 kg CO₂/ m²/year

16.2 tonnes CO₂/year

Annual Costs

€ 3,568.77 per year



“AFTER”

Building Energy Rating (BER)

199.43 kWh/m²/year

C2

Carbon Dioxide Emissions

52.14 kg CO₂/ m²/year

7.3 tonnes CO₂/year

Annual Costs

€ 1,622.60 per year

BER Foundation Contents

- Overview of Residential Sector in Ireland
- EU & National BER Policy, Legislation
- Building Regulations PART L 2008/2011
- Technical Information and Assessment
 - Construction, Insulation & Fabric Elements
 - Heating, Hot Water Ventilation & Lighting Systems
 - Fuels, Renewable Technologies & Emissions
- Practical Data input to BER Software/Workbook (DEAP)
- Case Study Examples – Energy Upgrade Models
- Insight to SEAI BER Support, Registration, etc

BER Foundation Course OTHER

- **2 Day Course Delivery**
- **Central Delivery – e.g. Tipperary Institute (TI)**
- **Delivery at any LA Offices (10 staff +)**
- **Course Supported by Tipperary Institute**
 - *Recognised as Experience towards TI BER Certificate Course*
- **Costs – Production, Materials, Venue and Time/Travel**
 - Estimated €160 – 220 per Delegate

Future Workshop Developments

- Trades/Installers – Quality/Specifications/H&S)**
 - *e.g. Attic Insulation, Heating Upgrade*
- Attic Frost Protection (Linked to BER Survey)**
 - *LA Policy, Prevention Measures, etc*
- Limitation of Dampness & Mould Growth**
 - *Adequate Ventilation Techniques*
- Water Conservation Measures**
 - *In conjunction with Domestic Meter Installations*
- Switching Electricity Suppliers**
 - *LA Charge on Domestic Units*

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CONTACT DETAILS

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