



Social housing retrofit program and Energy Efficiency Regulations update

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Improving the Social Housing Stock Main Aims

- 'C1' Target rating
- Prioritize Vacant Housing to return to use



Main Measures

- Attic Insulation
- Wall Insulation
- Temperature & Zone Controlled Heating
- Boiler Replacement
- Pre-lagged water cylinder installed
- Draughtproofing & sealing gaps
- Room Heating Stove replacing Fireplace
- Replace windows and doors (as required)
- No funding for oil fired CH where solid fuel back boiler is intended to be main heating source



Issues found 2010

Achieving Target

- The main concern from last year is applications failed to achieve C1 target. Pre BER required this year. Funding will only be paid out on BER certificates registered with SEAI.
- In 50% of applications oil boilers were installed to achieve C1 target on Dual fuel systems and then never used. Funding will not be granted by Dept. for installation of boiler where a dual fuel system exists. LAs will be expected to upgrade solid fuel dual systems out of their own resources.
- Some authorities insist on a C1 when leasing properties and then accept a D or F for refurbishment of their own properties, Funding will not be provided for properties with a G or F rating.
- Some LAs came under pressure last year from councillors achieve a short turnaround time resulting in a shallow retrofit and not achieving C1. Councillors are not likely either to accept a poor energy rating. Sufficient time should be provided to achieve the C1 retrofit. Duration of retrofit will not affect funding provided
- Funding this year is on a sliding scale. Where dwellings are not able to achieve a C1 a sliding scale of funding will be provided. Architectural Advisors should be contacted where it is not possible to achieve a C1.
- In some cases in 2010 it was found that LAs were replacing windows or boilers that were relatively new. The sliding scale is designed so that maximum funding is available for dwellings that achieve the greatest improvement. Ie. Older properties with F and G ratings should be targetted first.

Issues found 2010

Implementation

Lack of resources eg clerk of works and expertise (BER assessors) in some Town Councils and Local Authorities last year delayed implementation and less than optimum retrofits were achieved. This year it is recommended that resources are shared on a County basis so as availability of resources is maximised.

- All LAs are now required to issue a BER to tenants in order to lease properties
- Radon works should also be assessed. Funding is available for this.
- LAs should provide a line item description for each scope item.
- 18000 euro is ceiling for refurbishment for short term voids < 6months. It is recognised that other pre-letting works may also be needed - 3000 euros is available for this.
- For Long term voids > 6 months budget to be agreed with architectural advisor. Ceiling = 35000 euro (15 K RETROFIT, 30K OTHER works)

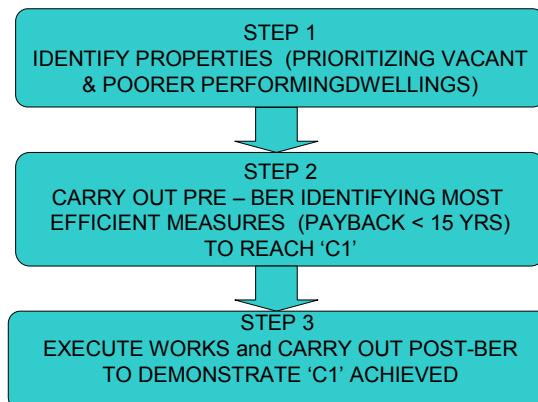
Payback Chart

Improvement Measures (Typical)	Energy Saving (kWh/m2/Yr)	Revised Energy Rating (kWh/m2/yr) /BER Rating	Annual Energy Saving (kWh/yr)	Capital Cost (Euro)	Energy Savings PerAnnum (Euro)	Paybac Period (Years)
Add 250mm additional glass Fibre insulation to the attic	24	326/E1	1,968	€990	€130.87	7.56
Inject full fill cavity wall Insulation to all external walls	32	294/D2	2,624	€1,740	€174.50	9.97
Install 100% low energy fixed lighting bulbs	12	282/D2	984	€180	€149.57	1.20
Replace existing boiler with high efficiency boiler (95%).	31	251/D1	2,542	€3,000	€169.04	17.75
Provide programmable 7 day Timer and zone thermostat or TRVs to all radiators	15	236/D1	1,230	€400	€81.80	4.89
Hot water cylinder Independently zoned and thermostat	9	227/D1	738	€675	€80.63	8.37
Provide factory insulated cylinder	13	214/C3	1,066	€550	€70.89	7.76
Replace existing single glazed windows with double-glazed units (U value =1.4)	35	179/C2	2,870	€9,000	€190.86	47.15
Draught-proofing measures to reduce air changes per hour and provide adequate ventilation	15	164/C1	1,230	€420	€81.80	5.13
Insulate primary pipework	5	159/C1	410	€300	€27.27	11.00
TOTALS				€17,255	€1,157	14.91

**Grant Funding Available for Casual Vacancies and Works Eligible for Funding Grant
Funding Available**

Grant Funding Level	Works Description	Exchequer Grant Ceiling	Minimum % Contribution from Local Authority's own resources
C.V. 1	An overall energy saving of more than 300 kWh per m² per year <i>(Note: The Department expects that this band of funding would deliver improvements from a BER of G to C1 or better.)</i>	90% or €18,000, whichever is the lesser, and of which a maximum of €3,000 is available for non-energy efficiency works.	10%
C.V. 2	An overall energy saving of between 200 and 300 kWh per m² per year <i>(Note: The Department expects that this band of funding would deliver improvements from a BER of F to C1 or better.)</i>	90% or €15,500, whichever is the lesser, and of which a maximum of €3,000 is available for non-energy efficiency works.	10%
C.V. 3	An overall energy saving of between 100 and 200 kWh per m² per year <i>(Note: The Department expects that this band of funding would deliver improvements from a BER of E or D to C1 or better.)</i>	75% or €11,500, whichever is the lesser, and of which a maximum of €3,000 is available for non-energy efficiency works.	25%
C.V. 5	An overall energy saving of between 50 and 100 kWh per m² per year <i>(Note: The Department expects that this band of funding would deliver improvements from a BER of D to C1 or better.)</i>	50% or €6,000, whichever is the lesser, and of which a maximum of €3,000 is available for non-energy efficiency works.	50%

Flow chart for LA to achieve 'C1' Target



Supporting References

- DEHLG
 - Technical Guidance Circular from 2010
 - TGD L, F, J, D
 - Heating and Hot Water-Achieving Compliance with Part L
 - DEHLG/SEAI/NSAI Retrofitting Code of Practice (To be published)
 - Energy Efficiency in Traditional Buildings (Advice Series)
- SEAI
 - DEAP
- NSAI IAB
 - IAB Certs
 - NSAI Air Tightness testers certification
 - NSAI Window energy performance scheme (WEPs) SEAI Docs including HES scheme SA4
- Other
 - Energy Saving Trust website www.est.co.uk

Procurement Proposal

- Proposal is an open (or restricted) tender competition, leading to the establishment of a framework, whereby all participants in the framework enter into a **Framework Agreement for Construction Work (PW-CF9)** and the **Term Maintenance and Refurbishment Works Contract**. Neither of these agreements establish a commitment to carry out work but set in place the contractual arrangements that will apply if work is ordered by means of issuing a Task Order
- Having established the framework (e.g, of 10 contractors), It is envisaged tendering for specific works to say 3 contractors (on a rotational basis), and the contract being awarded to the contractor submitted the lowest price by means of issuing a Task Order under the TMC.
- The advantage of this approach is that the onerous process involved in procurement is dealt with once and by those skilled to do so, that contract arrangements are put in place, that tendering for the specific works can be handled at local or junior level, and that works can be actioned by the issuing of a Task Order.
- The **Framework Agreement for Construction Work (PW-CF9)** is referenced, and is included in the contractual arrangements because it includes a mechanism for evaluating the performance of contractors using a 'yellow card' and 'red card' arrangement that is objective and transparent that allows the Employer to exclude any participant receiving a 'red card' from the Framework.
- The ideas above will need to be developed with standard documents and guidance being prepared. To this end the Department will establish a small expert group. The intent is to consult widely before completing the task, and hope that a fully functional arrangement will be in place by the 3rd quarter of the year.

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Sean Armstrong, 28/02/2011



Building Standards Guidance (Work in Progress)

- Retrofit COP
 - Contract in place with BRE.
 - Guidance to be provided on Fabric, Building Services, Ventilation, Heating Systems, Dwelling Types
 - Public Consultation to take place end 2011
 - COP to complete early 2012



Building Standards Guidance (Work in Progress)

- TGD J "Heat Producing Appliances" review to take place 2011 to include consideration of Carbon Monoxide issues.
- Key Considerations wrt CO are:
 - Installation
 - Installation of heat producing appliances as per TGD J
 - Installation by appropriately qualified installers. Gas installations should be installed by Registered Gas Installers(CER Legislation)
 - Permanent ventilation for open flued appliances
 - Spillage tests
 - Maintenance
 - Annual servicing of boilers
 - Annual cleaning of chimneys
 - Maintaining ventilation openings
 - CO Detectors (to be considered in TGD J review)
 - Detectors should be certified to EN 50291 with fault indication and end of life indication
 - Where installed they should be located at ceiling height in room with combustion appliance and at breathing height in habitable rooms. Further guidance location in BRE Document GBG 30.
 - Typical life of detectors is 5 years
 - Guidance should be provided to tenants on action to take on alarm
 - Note: UK Approved Document J has introduced CO detectors at end of 2010 for rooms with solid fuel appliances
 - Further information on Carbon Monoxide and withdrawn detectors available on www.carbonmonoxide.ie

Other Building Standards work 2011

- Part L expected to be signed April
- Part J review to take place
- Retrofitting COP to be developed
- Towards Carbon Neutral Consultation
- Part L Buildings other than Dwelling RFT 2011. Publish 2012
- Recast EPBD implementation plan to go for consultation
 - Voluntary EU harmonised label non residential 2012
 - Inclusion of BER in adverts by 9th Jan 2013
 - DECs to apply to all buildings visited by public (including commercial) >500m² by 9th Jan 2013
> 250m² by 9th July 2015
 - Nearly Zero Energy Buildings -Public End 2018
-All by End 2020



