

**Identification of housing requirements  
across NI**

**Invest in homes & neighbourhoods**

**Improve people's homes**

**Transform people's lives**

**Enable sustainable neighbourhoods  
& regeneration**

# Energy Efficiency Good Practice Guide

**Robert Clements**  
**Energy Conservation Unit**

**Housing**Executive  
HOME ENERGY CONSERVATION AUTHORITY

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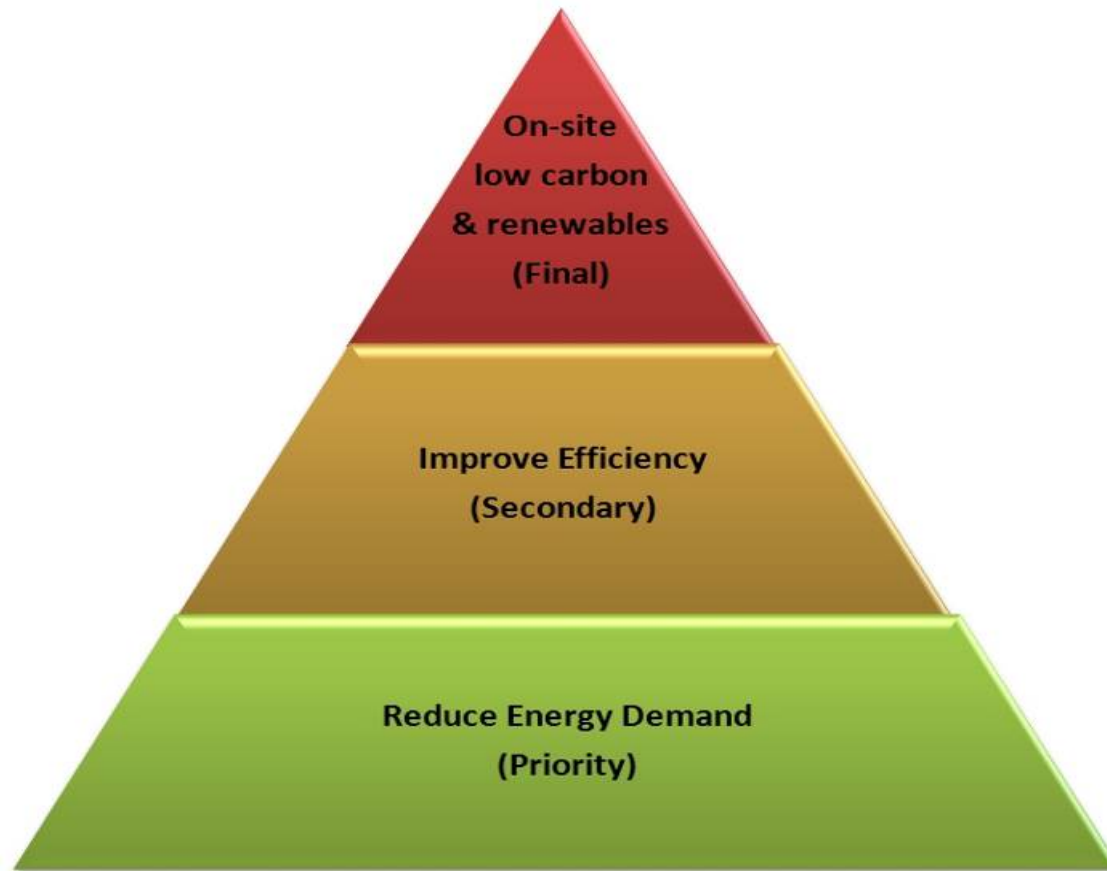
- 1. NIHE Energy Journey**
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# NIHE journey of energy efficiency



- **Home Energy Conservation Authority**
- **Practical, cost effective, significant improvement**
- **Improved energy efficiency/SAP**
- **Fuel Poverty – 42%**
- **The future – fabric first**

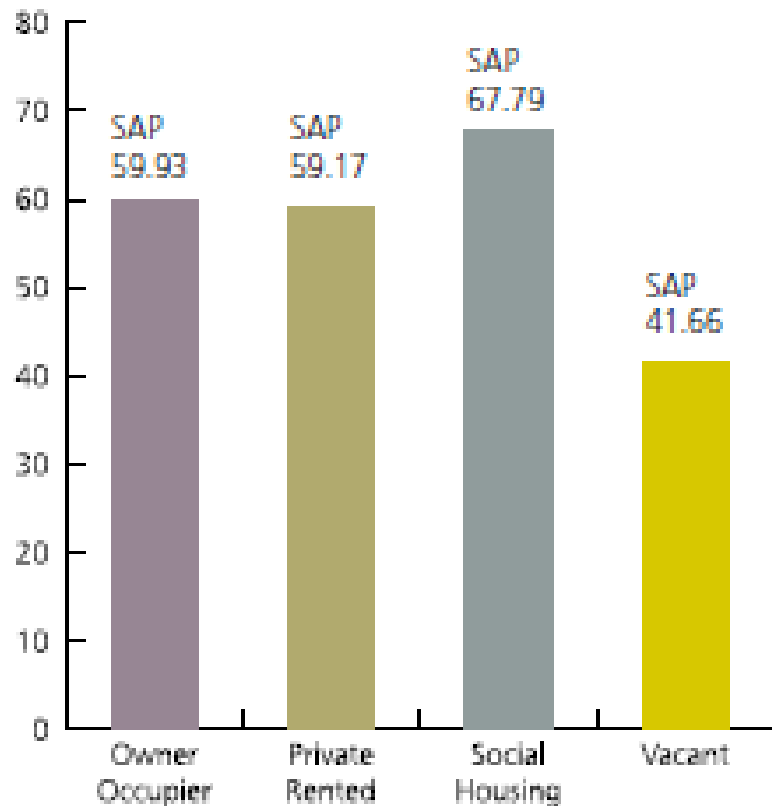
# Strategic Context



## Hierarchy of Energy Efficiency

# Analysis across all tenures

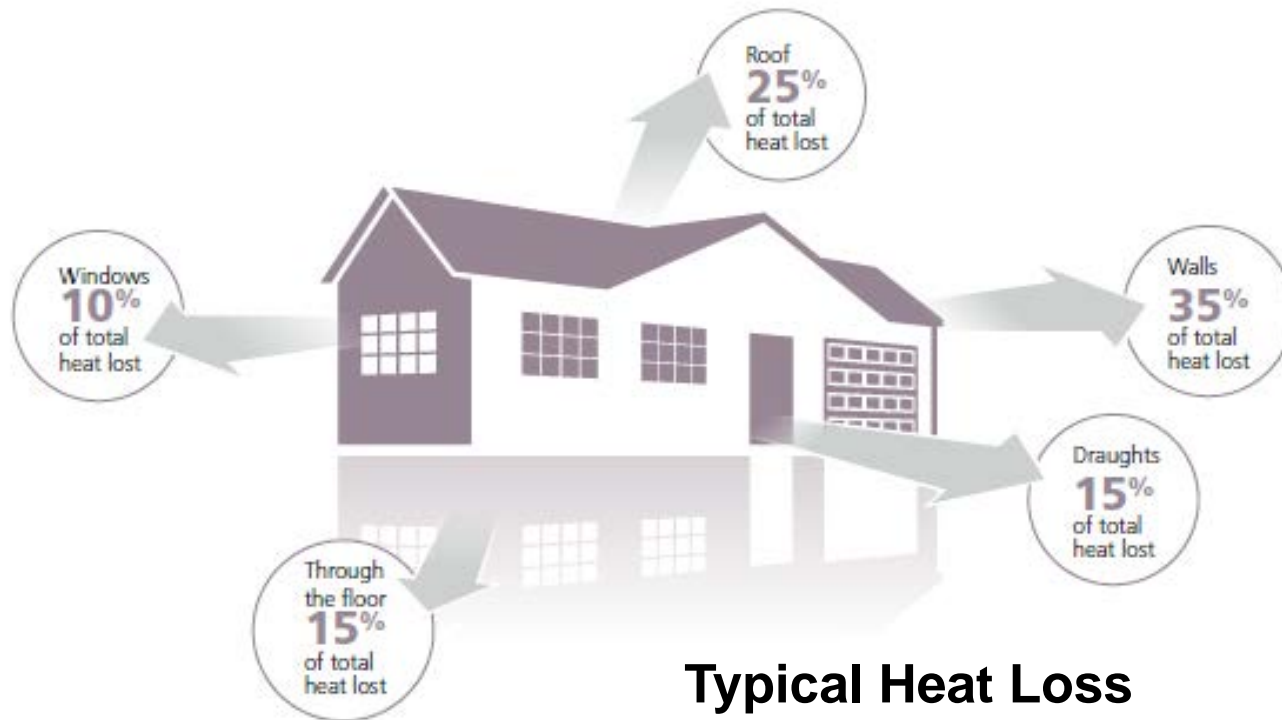
Analysis of SAP09 ratings relative to EPC Bandings A-G



Fuel Poverty as % across tenures:



# Envelope First & Efficient Heating



# What's Different

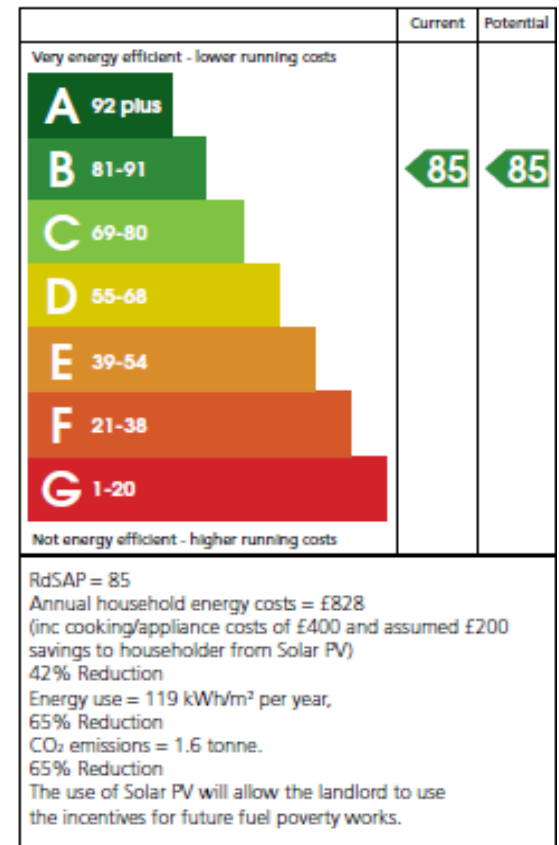
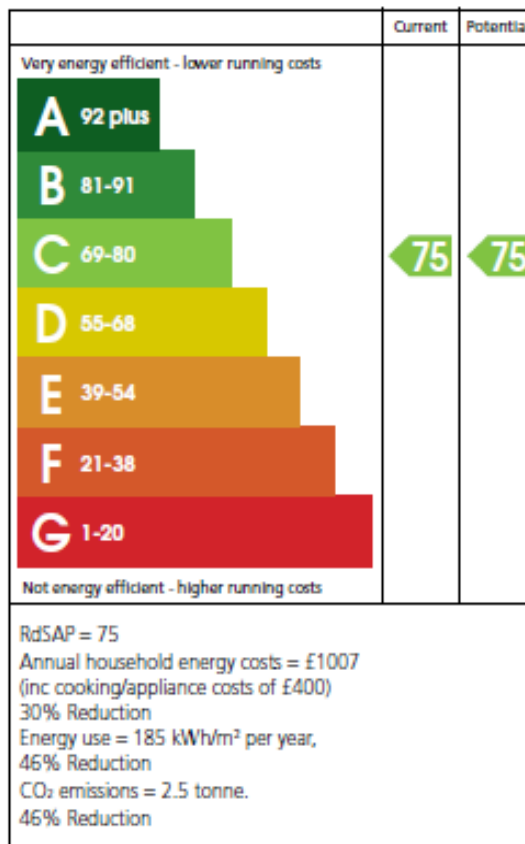
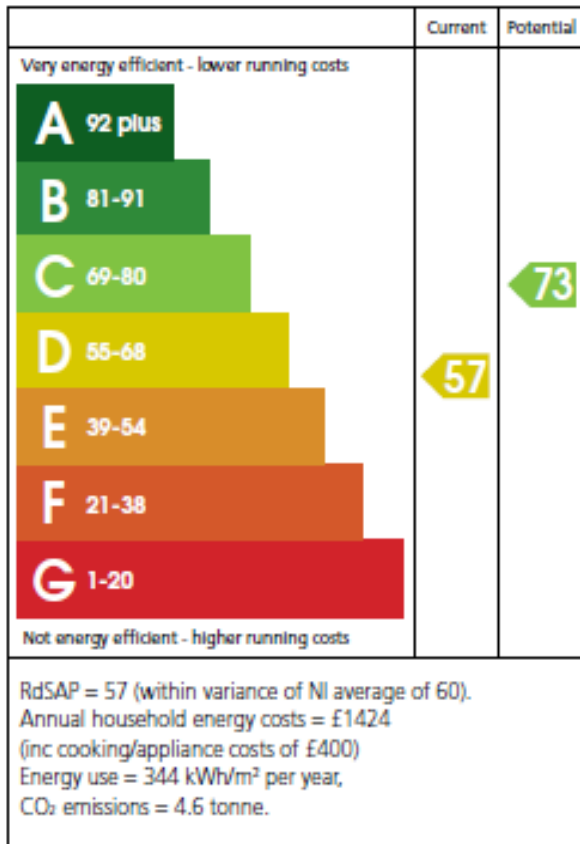
1. Decent Homes Standard Plus for thermal comfort
2. Envelope first & Efficient Heating
3. VFM options
4. Promote air tightness and ventilation
5. Consider renewables **AFTER** envelope – use grants!
6. Finance – Priority of Refurbishment
7. Householder – Behaviour Change



# Case Study – Worst Case

Replacement Element	Typical Existing Spec £	Revised Spec £	Remarks
Cavity Wall extraction & installation, if required	NA	2000	e/o spec
Loft Insulation up to 300mm (under completed heating scheme) Top up from 100mm existing.	500	500	
Replace Windows & Doors	3000 (Double G)	4000 (Triple G) <sup>18</sup>	e/o spec
Airtightness Measures	NA	1500	e/o spec
Positive Ventilation System	500	500	
Upgrade heating system for zoning	1000	1000	
<b>Sub Total</b>	<b>5000</b>	<b>9500</b>	

# Case Study: Before, After & PV



# Case Study

Based on a low rise mid terrace townhouse ...

Existing



energy efficiency  
with  
no change



£0

as existing



£1424

annual household  
energy costs

& Envelope 1st  
& heating



energy efficiency  
with  
returbishment works



£5,500

ave cost of works  
loft, airtightness, ventilation  
system, zone heat, CWI  
(exc triple glazing)



£1007

annual household  
energy costs

& Renewables



energy efficiency  
with  
returbishment works  
& solar PV panel



£11,000

ave cost of works  
loft, airtightness, ventilation  
system, zone heat, CWI  
(exc triple glazing)  
+ 3kw Solar PV

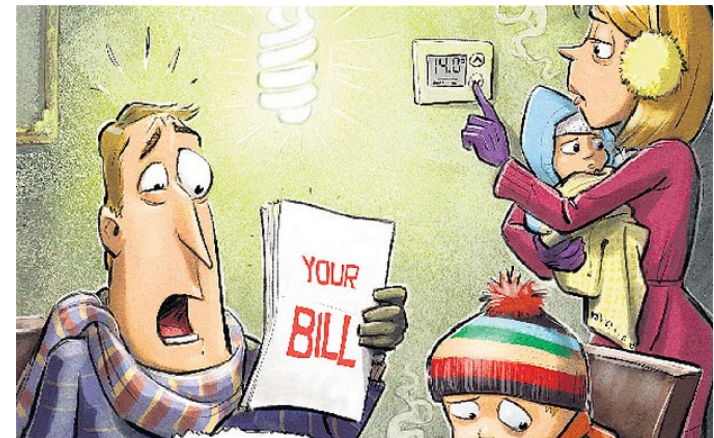


£828

annual household  
energy costs

# Concluding Recommendations

1. Policy follow hierarchy of energy efficiency
2. Envelope First & Efficient Heating
3. Funding – Priority of Refurbishment
4. Householder Behaviour Change
5. Industry Training
6. Green loans



# *& finally... Questions*



robert.clements@nihe.gov.uk