

ENERGY AUDIT REPORT

House No. 1 - End of terrace House - 1980 - Unkown Block Construction - 95.8m² (1030ft²)



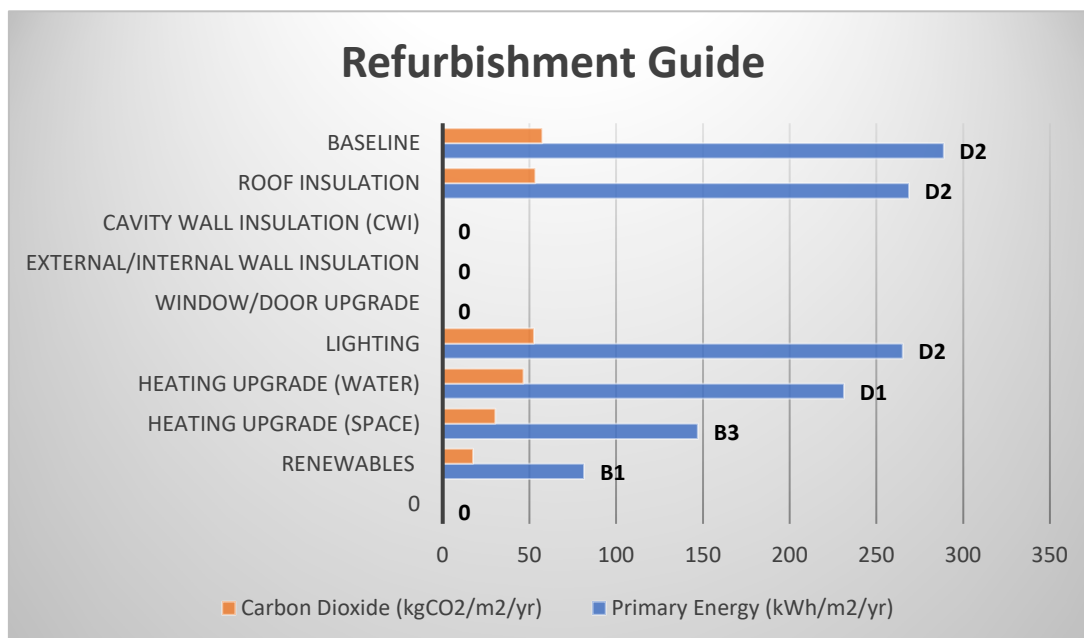
Greystones/Delgany, County Wicklow

Existing Building Details			
Building Elements		Insulation Thickness (mm)	U-Value (W/m ² .K)
Walls	Other	50mm	1.1
Roof	Pitched Roof insulated at ceiling	50mm-100mm	0.49
Floor	Solid Floor	Unknown	0.7
Windows	Double Glazed Air filled	N/A	2.8
Doors	Glazed Door	N/A	3

Existing Heating Characteristics			
Heating System		Energy	Efficiency (%)
Primary Heating System	Gas boiler, primary pipework uninsulated	Mains Gas	73%
Secondary Heating System	closed stove	Multi fuel	60%
Domestic Hot Water	Heated with Primary heating system & Electric immersion		
Cylinder	Cylinder with loose jacket (50mm)		
Controls	Programmer only		

Domestic Retrofit Guidelines (Step by Step)			Energy Consumption (kWh/m ² /yr)	Carbon Emissions (CO ₂) (kgCO ₂ /m ² /yr)	Building Energy Rating (BER)	
Energy Efficient Measures			Target U-Value (W/m ² .K)	Current Usage (288.81)	Current Emissions (57.41)	Current BER (D2)
1	Roof insulation	Loftwool Insulation top-up to achieve minimum 300mm across all roof area.	0.13-0.16	268.79	53.36	D2
2	Cavity Wall Insulation (CWI)	Pump Existing cavity with a bonded bead insulation	N/A			
3	External/Internal Wall Insulation	Install Wall Insulation (internal or External), thickness -100mm	N/A			
4	Window/Door Upgrade	Replace existing glazing with Double/Triple glazed,(low E) units	N/A			
5	Lighting	Install energy efficient light bulbs (LEDs)	N/A	265.09	52.64	D2
6	Heating Upgrade (Water)	Install Kronotherm HP	N/A	231.38	46.58	D1
7	Heating Upgrade (Space)	Install Condensing Gas Boiler	N/A	147.11	30.32	B3
8	Renewables	Install 3.7 kWp Solar PV system	N/A	81.49	17.42	B1

ENERGY AUDIT REPORT



Estimated Costs Summary				
Measures		Estimated Costs (€/m ²)	Estimated Total Costs (€)	
1	Roof Upgrade	15 - 20	€ 1,259	
2	Cavity Wall upgrade	7 - 10	€ 0	
3	Wall Insulation	90-140	€ 0	
4	Window/Door upgrade	250 - 350	€ 0	
5	Lighting	20/fitting	€ 240	
6	Heating Upgrade (Water)	8,000 (System)	€ 8,000	
7	Heating Upgrade (Primary)	3,000 (System)	€ 3,000	
8	Solar PV	7,000 (3.7 kWp System)	€ 7,000	
9	Demand Controlled Ventilation	3,200 (System)	€ 0	
10	0	0	€ 0	
Total			€ 19,499	
Estimated Total Cost to Homeowner including Individual SEAI Grants			€ 16,099	
Savings Summary				
BER Rating	Energy Savings (kWh/m ² /yr)	Energy Savings (kWh/yr)	Cost Savings (€/yr)	Simple Payback, including Grant Funding (years)
B1	207.32	19,861	€ 1,788	9

Audit site visit completed on 28.05.21, Audit report edited on 02.06.21