

Summary for Input Data



Property Reference	existing plots 1 and 2	Issued on Date	19/12/2023
Assessment Reference	00001	Prop Type Ref	
Property			

SAP Rating	46 E	DER		TER	
Environmental	37 F	% DER < TER			N/A
CO ₂ Emissions (t/year)	5.67	DFEE		TFEE	
Compliance Check	See BREL	% DFEE < TFEE			
% DPER < TPER		DPER		TPER	

Assessor Details	Mr. Neil Stallard	Assessor ID	F053-0001
Client	IS, Ian Smillie		

SUMMARY FOR INPUT DATA FOR: Existing Dwelling

Orientation	North
Property Tenure	1
Transaction Type	5
Terrain Type	Rural
1.0 Property Type	Bungalow, Detached
2.0 Number of Storeys	1
3.0 Property Age Band	D
4.0 Sheltered Sides	0
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation

7.0 Electricity Tariff	Standard
Smart electricity meter fitted	No
Smart gas meter fitted	No

7.0 Measurements		Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	Ground floor:	33.60 m	68.00 m ²	2.40 m

8.0 Living Area	20.00	m ²
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Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area(m ²)	Nett Area (m ²)	Shelter Res	Shelter	Openings	Area Calculation Type
External Wall	System Build	Other	2.17	0.00	80.64	68.91	0.00	None	11.73	Calculate Wall Area

Description	Construction	Kappa (kJ/m ² K)	Area (m ²)
Internal Wall	Plasterboard on timber frame	9.00	45.00

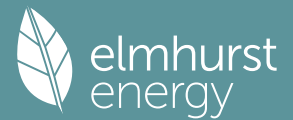
Description	Type	Construction	U-Value (W/m ² K)	Kappa (kJ/m ² K)	Gross Area(m ²)	Nett Area (m ²)	Shelter Code	Shelter Factor	Calculation Type	Openings
External Roof	External Plane Roof	Plasterboard, insulated at ceiling level	0.83	9.00	68.00	68.00	None	0.00	Calculate Wall Area	0.00

Description	Type	Storey Index	Construction	U-Value (W/m ² K)	Shelter Code	Shelter Factor	Kappa (kJ/m ² K)	Area (m ²)
Heatloss Floor	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.66	None	0.00	0.00	68.00

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m ² K)
windows	SAP table	Window	Double glazed	≥ 16 mm	Air Filled	0.76	PVC	0.70	2.70
front door	SAP table	Solid Door							3.00

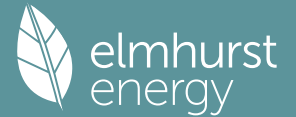
Name	Opening Type	Location	Orientation	Area (m ²)	Pitch
north	front door	External Wall	North	1.89	
north	windows	External Wall	North	3.80	
south	windows	External Wall	South	3.70	
south	front door	External Wall	South	1.89	

Summary for Input Data



west	windows	External Wall	West	0.45
14.0 Conservatory		<input type="text" value="None"/>		
15.0 Draught Proofing		<input type="text" value="100"/>	%	
16.0 Draught Lobby		<input type="text" value="No"/>		
17.0 Thermal Bridging		<input type="text" value="Default"/>		
Y-value		<input type="text" value="0.20"/>	W/m²K	
18.0 Pressure Testing		<input type="text" value="No"/>		
Test Method		<input type="text" value="Blower Door"/>		
19.0 Mechanical Ventilation				
Mechanical Ventilation				
Mechanical Ventilation System Present		<input type="text" value="No"/>		
20.0 Fans, Open Fireplaces, Flues				
21.0 Fixed Cooling System		<input type="text" value="No"/>		
22.0 Lighting				
Lighting Capacity Calculation		<input type="text" value="List of Lights"/>		
		Name	Efficacy	Power
		Lighting 1	80.00	5
			Capacity	Count
			400	10
24.0 Main Heating 1		<input type="text" value="Database"/>		
Percentage of Heat		<input type="text" value="100.00"/>	%	
Database Ref. No.		<input type="text" value="17538"/>		
Fuel Type		<input type="text" value="Heating oil"/>		
In Winter		<input type="text" value="83.30"/>		
In Summer		<input type="text" value="80.50"/>		
Model Name		<input type="text" value="Greenstar Danesmoor System Utility"/>		
Manufacturer		<input type="text" value="Bosch Thermotechnology"/>		
System Type		<input type="text" value="Regular boiler"/>		
Controls SAP Code		<input type="text" value="2113"/>		
Delayed Start Stat		<input type="text" value="No"/>		
Oil Pump Inside		<input type="text" value="No"/>		
Flue Type		<input type="text" value="Balanced"/>		
Fan Assisted Flue		<input type="text" value="No"/>		
Is MHS Pumped		<input type="text" value="Pump in heated space"/>		
Heating Pump Age		<input type="text" value="2013 or later"/>		
Heat Emitter		<input type="text" value="Radiators"/>		
Flow Temperature		<input type="text" value="Unknown"/>		
25.0 Main Heating 2		<input type="text" value="None"/>		
26.0 Heat Networks		<input type="text" value="None"/>		
	Heat Source	Fuel Type	Heating Use	Efficiency
			Percentage Of Heat	Heat
				Heat Power Ratio
				Electrical
				Fuel Factor
				Efficiency type
	Heat source 1			
	Heat source 2			
	Heat source 3			
	Heat source 4			
	Heat source 5			
28.0 Water Heating				
Water Heating		<input type="text" value="Main Heating 1"/>		
SAP Code		<input type="text" value="901"/>		
Flue Gas Heat Recovery System		<input type="text" value="No"/>		

Summary for Input Data



Waste Water Heat Recovery Instantaneous System 1	No
Waste Water Heat Recovery Instantaneous System 2	No
Waste Water Heat Recovery Storage System	No
Solar Panel	No
Water use <= 125 litres/person/day	No
Cold Water Source	From mains
Bath Count	1

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder

Hot Water Cylinder	Hot Water Cylinder
Cylinder Stat	No
Cylinder In Heated Space	No
Independent Time Control	No
Insulation Type	Foam
Insulation Thickness Type	38 mm
Cylinder Volume	140.00 L
Pipes insulation	Uninsulated primary pipework
In Airing Cupboard	No

31.0 Thermal Store

None

34.0 Small-scale Hydro

None

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

Typical Cost	Typical savings per year	Ratings after improvement	
		SAP rating	Environmental Impact
£4,000 - £6,000	£71	E 49	E 39
£3,500 - £5,500	£162	D 55	E 40
£15,000 - £25,000	£536	C 76	E 42

Dwelling Address	
Report Date	19/12/2023
Property Type	Bungalow, Detached
Floor Area [m ²]	68

This document is not an Energy Performance Certificate (EPC) as required by the Energy Performance of Buildings Regulations

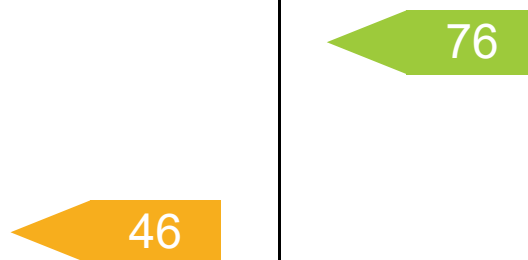
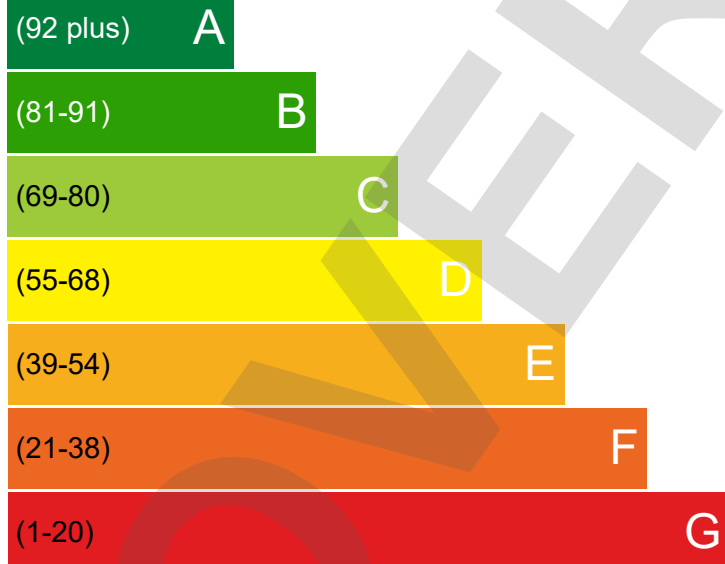
Energy Rating

The current energy rating represents the overall energy efficiency of the dwelling. The potential energy rating is the overall energy rating of the dwelling after all of the recommend measures provided on the next page have been installed. A higher score represents a more energy efficient dwelling with lower fuel bills.

Most energy efficient - lower running costs

CURRENT

POTENTIAL



Least energy efficient - higher running costs

Breakdown of property's energy performance

Each feature is assessed as one of the following:



Feature	Description	Energy Performance
Walls	Average thermal transmittance 2.17 W/m ² K	Very Poor
Roof	Average thermal transmittance 0.83 W/m ² K	Poor
Floor	Average thermal transmittance 0.66 W/m ² K	Poor
Windows	Fully double glazed	Poor
Main heating	Boiler and radiators, oil	Average
Main heating controls	Room thermostat and TRVs	Average
Secondary heating	None	
Hot water	From main system, no cylinder thermostat	Poor
Lighting	Good lighting efficiency	Good
Air tightness	(not tested)	

Primary Energy use

The primary energy use for this property per year is 335 kilowatt hour (kWh) per square metre

Estimated CO₂ emissions of the dwelling







The estimated CO rating provides an indication of the dwelling's impact on the environment in terms of carbon dioxide emissions; the higher the rating the less impact it has on the environment.

The estimated CO emissions for this dwellings is: **5.7** per year

With the recommended measures the potential CO emissions could be: **4.8** per year

Recommendations

The recommended measures provided below will help to improve the energy efficiency of the dwelling. To reach the dwelling's potential energy rating all of the recommended measures shown below would need to be installed. Having these measures installed individually or in any other order may give a different result when compared with the cumulative potential rating.

Recommended measure	Typical Yearly Saving	Potential Rating after measure installed	Cumulative savings (per year)	Cumulative Potential Rating
Solar water heating	£71	 3	£71	 E 49
Photovoltaic	£162	 6	£232	 D 55
Wind turbine	£536	 24	£768	 C 76

Estimated energy use and potential savings

Estimated energy cost for this property over a year

£1341

Over a year you could save

£768

The estimated cost and savings show how much the average household would spend in this property for heating, lighting and hot water. It is not based on how energy is used by the people living at the property.

Contacting the assessor and the accreditation scheme

Assessor contact details

Assessor name	Mr. Neil Stallard
Assessor's accreditation number	
Email Address	

Accreditation scheme contact details

Accreditation scheme	
Telephone	
Email Address	

Assessment details

Related party disclosure	
Date of assessment	19/12/2023
Date of certificate	19/12/2023
Type of assessment	SAP, existing dwelling