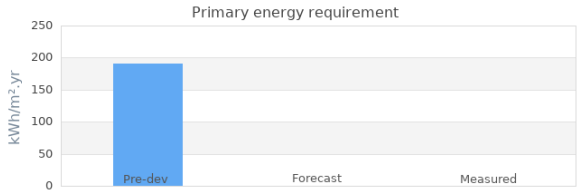
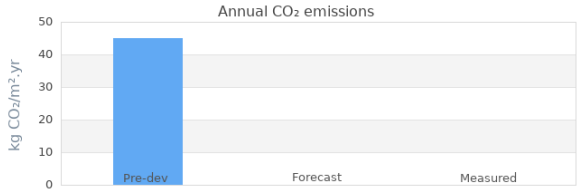
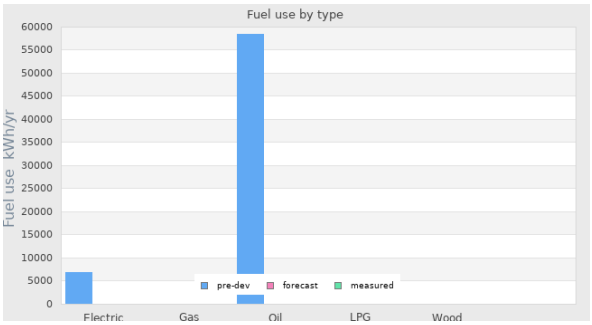
https://www.lowenergybuildings.org.uk/

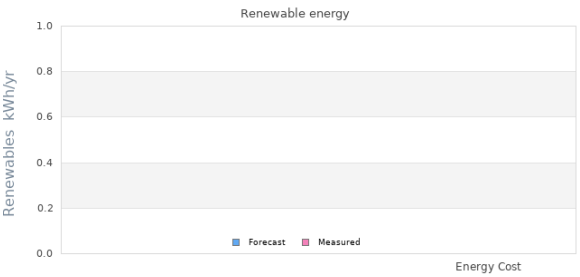
Project name RetroPHit 07 - a rural stone house

Project summary A rural, stone built Grade II listed house in a Conservation Area









Project Description

Projected build start date	
Projected date of occupation	
Project stage	
Project location	, Herefordshire, England
Energy target	
Build type	
Building sector	
Property type	
Existing external wall construction	
Existing external wall additional information	
Existing party wall construction	
Floor area	455 m²
Floor area calculation method	APPROX

Project team

Organisation
Project lead
Client
Architect
Mechanical & electrical consultant(s)
Energy consultant(s)
Structural engineer
Quantity surveyor
Other consultant
Contractor

Design strategies

Planned occupancy
Space heating strategy
Water heating strategy
Fuel strategy
Renewable energy generation strategy
Passive solar strategy
Space cooling strategy
Daylighting strategy
Ventilation strategy
Airtightness strategy
Strategy for minimising thermal bridges
Modelling strategy
Insulation strategy
Other relevant retrofit strategies
Other information (constraints or opportunities influencing project design or outcomes)

Energy use

Fuel use by type (kWh/yr)

Fuel	previous	forecast	measured
Electric	6892		
Gas			
Oil	58500		
LPG			
Wood	1		

Primary energy requirement & CO2 emissions

	previous	forecast	measured
Annual CO2 emissions (kg CO2/m².yr)	45	-	-
Primary energy requirement (kWh/m².yr)	191	-	-

Renewable energy (kWh/yr)

Renewables technology	forecast	measured
-		
-		
Energy consumed by generation		

Airtightness (m³/m².hr @ 50 Pascals)

	Date of test	**Test result**
Pre-development airtightness	-	-
Final airtightness	-	-

Annual space heat demand (kWh/m².yr)

	Pre-development	forecast	measured
Space heat demand	-	-	-

Whole house energy calculation method	
Other energy calculation method	
Predicted annual heating load	-
Other energy target(s)	

Building services

Occupancy	
Space heating	
Hot water	
Ventilation	
Controls	
Cooking	
Lighting	
Appliances	
Renewables	
Strategy for minimising thermal bridges	

Building construction

Storeys	

Volume
Thermal fabric area
Roof description
Roof U-value
Walls description
Walls U-value
Party walls description
Party walls U-value
Floor description
Floor U-value
Glazed doors description
Glazed doors U-value
Opaque doors description
Opaque doors U-value
Windows description
Windows U-value
Windows energy transmittance (G-value)
Windows light transmittance
Rooflights description
Rooflights light transmittance
Rooflights U-value

Project images


Pick
an
English
example