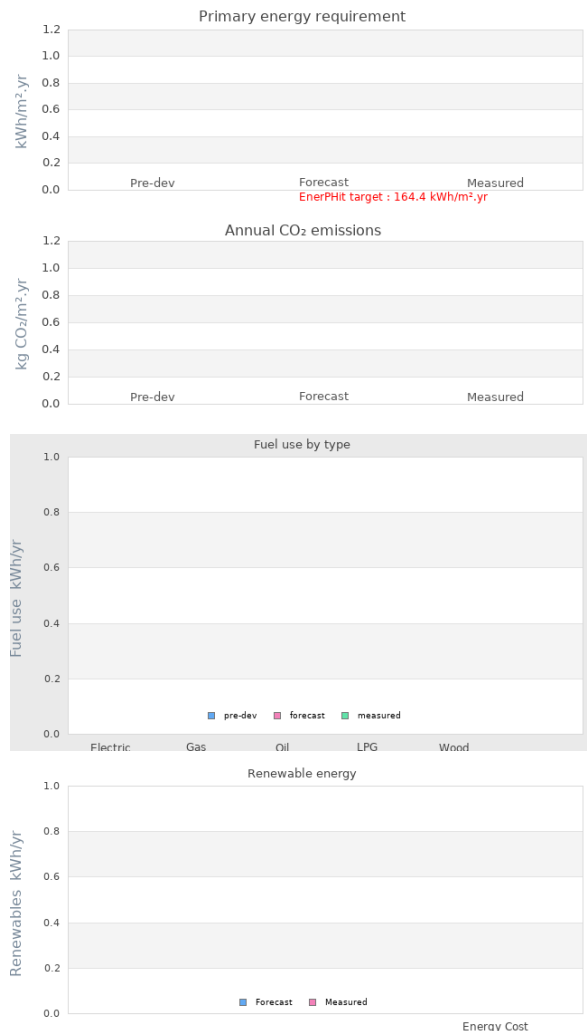


Project name Old Byres EnerPHit

Project summary The Old Byres is an existing brick and flint wall barn in East Sussex, which has been retrofitted to EnerPHit standard, via the Certified Component approach.



Project Description

Projected build start date	01 Mar 2015
Projected date of occupation	01 Jan 2016
Project stage	Occupied
Project location	Hooe, East Sussex, England
Energy target	EnerPHit
Build type	Refurbishment
Building sector	Private Residential
Property type	Detached
Existing external wall construction	
Existing external wall additional information	
Existing party wall construction	
Floor area	169.2 m²

Floor area calculation method

PHPP

Building certification

Passivhaus certified

Project team

Organisation

Project lead

Client

Private

Architect

Mechanical & electrical consultant(s)

Green Building Store

Energy consultant(s)

Enhabit

Structural engineer

Hockley & Dawson

Quantity surveyor

Other consultant

Passivhaus Certifier: Cocreate

Contractor

Langtorr

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			
Gas			
Oil			
LPG			
Wood			

Fuel	previous	forecast	measured

Primary energy requirement & CO2 emissions

	previous	forecast	measured
Annual CO2 emissions (kg CO2/m ² .yr)	-	-	-
Primary energy requirement (kWh/m ² .yr)	-	-	-

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	-	52	-

Whole house energy calculation method

PHPP

Other energy calculation method

Predicted heating load

25 W/m² (demand)

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







