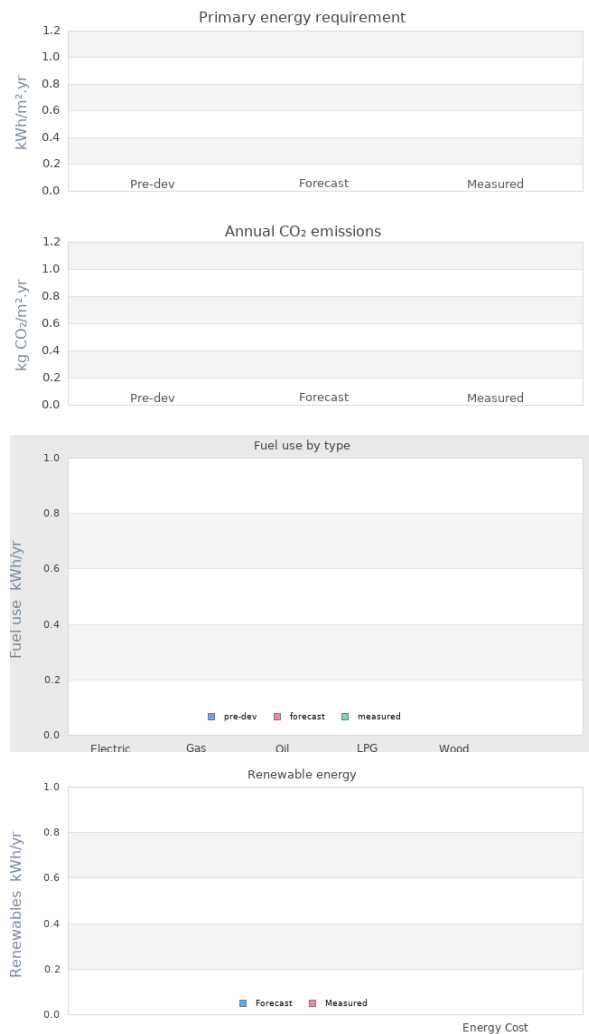


## Project name King Street, Great Yarmouth

**Project summary** Using our innovative TCosy deep retrofit system, we successful retrofitted this block of terraced flats for Great Yarmouth Borough Council. This particular block was chosen for the project due to its traditional 1950s style - a common typology across the UK.



## Project Description

|   |                                  |
|---|----------------------------------|
| Projected build start date                    | 01 Jan 2019                      |
| Projected date of occupation                  | 01 Jan 2020                      |
| Project stage                                 | Occupied                         |
| Project location                              | Great Yarmouth, Norfolk, England |
| Energy target                                 | EnerPHit                         |
| Build type                                    | Refurbishment                    |
| Building sector                               | Public Residential               |
| Property type                                 | Mid Terrace                      |
| Existing external wall construction           | Softwood frame                   |
| Existing external wall additional information |                                  |
| Existing party wall construction              |                                  |

|                               |                    |
|-------------------------------|--------------------|
| Floor area                    | 152 m <sup>2</sup> |
| Floor area calculation method | PHPP               |

## Project team

Organisation Beattie Passive

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 |
|-----------------|----------|----------|----------|
| <b>Electric</b> |          |          |          |
| <b>Gas</b>      |          |          |          |
| <b>Oil</b>      |          |          |          |
| <b>LPG</b>      |          |          |          |
| <b>Wood</b>     |          |          |          |

| Fuel | previous | forecast | measured |
|------|----------|----------|----------|
|      |          |          |          |

### Primary energy requirement & CO2 emissions

|   | previous | forecast | measured |
|---|----------|----------|----------|
| <b>Annual CO2 emissions</b><br>(kg CO2/m <sup>2</sup> .yr)    | -        | -        | -        |
| <b>Primary energy requirement</b><br>(kWh/m <sup>2</sup> .yr) | -        | -        | -        |

### Renewable energy (kWh/yr)

| Renewables technology                | forecast | measured |
|--------------------------------------|----------|----------|
| -                                    |          |          |
| -                                    |          |          |
| <b>Energy consumed by generation</b> |          |          |

### Airtightness ( m<sup>3</sup>/m<sup>2</sup>.hr @ 50 Pascals )

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

### Annual space heat demand ( kWh/m<sup>2</sup>.yr )

|                          | Pre-development | forecast | measured |
|--------------------------|-----------------|----------|----------|
| <b>Space heat demand</b> | -               | -        | -        |

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

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## 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

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## Project images







