

Midland Energy Efficiency Retrofit Pilot Programme

Galway County Council were selected as one of the counties to participate in the Midland Energy Retrofit Pilot Programme as part of the Government's exit from peat strategy. Five housing estates in the East & South of the county were selected to participate in the programme, as they primarily use peat as a heat source and there is a good mix of private and council owned properties in each estate. A sample of rural cottages were proposed both not chosen for this pilot. The estates selected are:

Estate	Local Authority	Private	Total units
St. Josephs, Ballinasloe	19	48	67
Shannon Park, Portumna	21	28	49
Cloughbrack, Eyrecourt	16	16	32
Cre na Cille, Tynagh	6	9	15
St. Josephs, Killimor	9	9	18
TOTAL	71	110	181

Design:

The main concept of the project is to remove solid fuel heating sources such as open fires, ranges and stoves and to replace them with Air to water heat pumps. To achieve this, some works would also be needed to the fabric of the buildings, such as the refurbishment/replacement of windows and doors, increasing the level of insulation, improving air tightness and controlling ventilation. Galway County Council have decided to include Photovoltaic solar panels as part of the project to provide a fuel source for the heat pump, reduce annual electricity costs and reduce the carbon emissions.

Procurement:

It was decided to divide the project into 3 separate lots.

Lot 1 consists of 21 houses in Shannon Park, Portumna. This was tendered on etenders and a contractor was appointed in December 2020.

Lot 2 consists of 19 houses in St Joseph's Place, Ballinasloe. This was also tendered on etenders with a closing date of 3rd December 2020 and a contractor is due to be appointed in early February 2021.

Lot 3 Consists of the remaining 31 houses and it is anticipated this will be published on etenders by end of March 2021.

Works:

The typical works to be carried out under this Retrofit program are.

- Removal of all solid fuel sources of heat
- Installation of Air to water heating system
- Replacement of Radiators to accommodate new heating system
- Service or Replacement of windows where appropriate (majority of windows will not be replaced)
- Replacement of front and rear external doors
- External insulation where appropriate

- Demand control ventilation (Mechanical ventilation with humidity-controlled vents)
- 2Kw Photovoltaic solar panels
- Air tightness works internally and externally (sealing around floor joists internally, seal around service voids externally)
- Replacement of all lighting to energy efficient lighting.

Costs:

The cost of these works is typically between €25,000 and €35,000 depending on the house type, age, construction method and works required.

Conclusions:

The current BER rating of the selected houses ranges from C3 to F. Once the works are completed the BER will typically be between A2 and C1 depending on the house type size and layout. This will result in a noticeable increase in comfort levels, reduced heating/fuel costs and a substantial reduction in carbon emissions. There will also be a considerable improvement in air quality within the houses due to the removal of the solid fuel burning within the home and the provision of mechanical ventilation. This will greatly benefit occupants with respiratory problems.

