

# **Business Energy Upgrades Scheme**

# Contractor Info Form – Heat Pumps

## Introduction

This form has been compiled to assist you as the Nominated Company/Contractor to ensure you are aware, have the ability and agree to comply with the minimum requirements of the Business Energy Upgrades Scheme for the above measure.

# Minimum requirements

The minimum requirements of the scheme are also outlined. Ensure you are satisfied you and your associated installer can commit to all requirements prior to accepting your nomination. Failure to achieve any of these requirements will cause a cancellation of your clients grant offer.

# **Eligible existing system**

#### Heat Pumps (various excl. those referenced specifically below)

Fossil fuel-based heat generating plant

## **Air to Water Combined (Heating & Cooling)**

Fossil fuel-based heat generating plant & chiller cooling plant

## **Water to Water off Dry Air Cooler**

Fossil fuel-based heat generating plant where standard packaged unit deemed unfeasible

## **Geothermal**

Fossil fuel-based heat generating plant following relevant source viability survey

#### **Pipework**

Existing pipework requiring replacement as a direct result of replacement of fossil fuel units with heat pumps

#### **Emitters**

Existing emitters requiring replacement as a direct result of replacement of fossil fuel units with heat pumps

## **Installer requirements**

## Min. Qualifications

FETAC Level 6 Advanced Craft Certificate in plumbing with module in minor electrical works

Manufacturer's training certificate(s) for each make of heat pump installed – Refrigeration Partner Certificate

Fetac Level 6 Refrigeration Certificate

**RECI Registered Electrician** 

F Gas Registered

# **Technical requirements**

The minimum technical requirements of the scheme are as outlined in the Contractor Info Form this particular measure, available for download in same location on webpage as this Pre App Form.

## **General Requirements**

Min. efficiency in line with Regulation 813/2013 implementing Directive 2009/125/EC

Min Controls in line with minimum requirements of Table 4 (Section 1.4) Building Regulations 2022 Part L

Unit data must be calculated in compliance with EU standard EN14511

Unit seasonal efficiency must be calculated in compliance with EU standard EN14825

Equipment be Eurovent certified.

Equipment F Gas compliant

That equipment meets EN378 requirements.

That supply companies are F-Gas registered (required by law to buy refrigerant).

That supply company service engineers (refrigeration craftpersons) are F-Gas certified (required by law).

F gas regulations compliant regarding GWP) Global Warming Potential of refrigerant over lifetime of installation

All fans EC Type

**CE Certified** 

Integral, Modbus, BACNet connection, wifi or Bluetooth enabled controls installed to allow monitoring of run time, energy use and fault recording as a minimum. Basis of recording can be existing BMS, local network or web-based system. Remote monitoring capability to be provided.

Unit Thermal Capacity sized on Irelands environmental conditions

High temperature unit operation up to 70 °C

Standard temperature unit operation up to 55 °C

## **Split Units /VRF (additional notes)**

System sized based on 1:1 indoor to outdoor unit capacity

All equipment from single manufacturer

Contractor to select internal and external units which make adequate allowance for derating due to height difference between indoor and outdoor unit, maximum and minimum outdoor ambient temperature, and length of pipework runs

Condensate pump supplied by manufacturer

Permanent galvanised washable filter to Eurovent 4/5 grade EU2

Speed control adjustable at the central controller

All power (230V/24V/12V) and BMS equipment to have IP rated cover installed protecting it. (outdoor units)

Ceiling Cassettes to be self-cleaning units.

VRF System to include touch screen intelligent central controller at a minimum of 1 person system. Capability to include but not limited to set point, time clocking of units on an individual or zonal basis, fault identification, energy monitoring, remote access (as outlined in main general technical requirements).

Leak detection and other safety measures in line with current EU regulations

#### **Geothermal**

A feasibility study required to verify viability shall include:

- Energy demand profile assessment (heating and cooling) for building;
- Review of applicable shallow geothermal technologies suitable for the deployment (open and closed loop collector options);
- Sample drilling and completion of initial investigative geothermal boreholes (closed loop and open loop);
- Testing of site specific ground properties (thermal response/pump testing);
- Assess the availability of space and constructability potential for deployment of GSHP solutions;
- Modelling of a site specific geothermal collector option based on collected data;
- Completion of a final thermal and hydraulic design for the GSHP system.

Water to Water off Dry Air Cooler (Dry Air Cooler Spec)		
System F&R Temperatures (0C):	37/42°C	
Design Ambient:	28°C	
Number of Capacity Steps:	0-100% EC fans (0-10V signal)	
System % Glycol:	15% Ethylene Glycol	
A-rated energy efficiency		

Pipework	Material	Fittings
LPHW (<50mm)	BS 1387 Medium weight	BS 1965 Part 1a
LPHW (>50mm)	BS 1387 Medium weight	BS 143
CHW (<50mm)	BS 1387 Medium weight	BS 1965 Part 1a
CHW (>50mm)	BS 1387 Medium weight	BS 143
Refrigerant (Split/VRF)		

#### **Notes:**

Insulation thickness and thermal properties to meet App. G Building Regulations 2022 Part L

# Fan Coil Unit (incl. Split/VRF indoors as appropriate)

All FCUs to 4 pipes with waterside control.

CHW pipework shall be medium grade mild steel to BS 1387.

Fan coil units shall be fitted with prefabricated 2 port valve sets (Frese, Belimo or equal and approved), incorporating PICV, commissioning set, flow, return & bypass isolation valves, drain/hose connection and pressure and temperature plugs

On/off fan enable (interposing) relay for use with BMS

Water side control with 2 port valve (PICV)

Fans: EC type only

Potentiometer to be provided on each fan coil to all for local speed adjustment

All FCU supply-air ducts shall be insulated to comply with the greater requirement of BS 5422

Specific Fan Power in line with Building Regulations Part L 2022

# **Payment documentation**

All completion documentation must be uploaded by your client for review and sign off prior to release of grant payment.

Failure by you to provide a full and compliant set of all documentation to them in a timely could cause a cancellation of their grant offer.

#### **Documentation**

Testing, Commissioning Cert (Manufacturer or Agent) – Heat Pumps, Emitters, Pipework

**RECI Cert** 

Equipment Data Sheets Incl. Certification

**Declaration of Works** 

Invoice of Works

Photographs of the Installation

Scaled layout Drawings including plant, pipework and emitters. (New pipework and overall to be highlighted.)

De-Minimus Declaration (where applicable)

GBER requirements verification (where applicable)

## **Photographs**

Installation Location (Before) Incl. Existing Kit – Heat Pumps, Emitters

Installation Location (After) Incl. New Kit – Heat Pumps, Emitters

New Equipment (Heat Pumps, Emitters)- Labelling

Controls Panel

Pipework (Sample Install)

**Controls Point Wiring** 

**Power Point Wiring** 

## **Company & installer registration**

We do not require an applicant to select a company from a register. This allows applicants to use their preferred company to complete the works and allows more of the supply chain to participate in the scheme.

However, in order to monitor quality within the supply chain for the scheme we do require that all companies and their associated installers carry out a registration process the first time they are nominated under the scheme. This is a simple process and you do not have to be registered to commence the works but rather before your client makes an application for payment.

Please note as part of the registration you can decide whether you wish to be on the published register of companies and installers or not. If you opt out of this list, you will remain in the application portal in case you want certain clients to select you on future applications. If you decide to remain visible on the register you will be exposed to a strong line of prospects through the scheme.

It is important that prior to commencing the works you and your associated installer download the registration forms for your respective roles and satisfy yourselves you can comply with all Terms and Conditions outlined therein.

Please follow the link below to complete the simple Business Energy Upgrades registration process, if this is your first involvement with the scheme. You a register for a number of measures through in a single application once you possess all the relevant requirements:

https://www.seai.ie/register-with-seai/