CANETIS TECHNOLOGIES

How To?

Reduce SAP Dwelling Emission Rates (DER) with Canetis GasSaver™ using Elmhurst Design SAP 2012

(& Stroma Certification)

GASSAVER™ BY CANETIS

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Document Control & Contact Information

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Overview

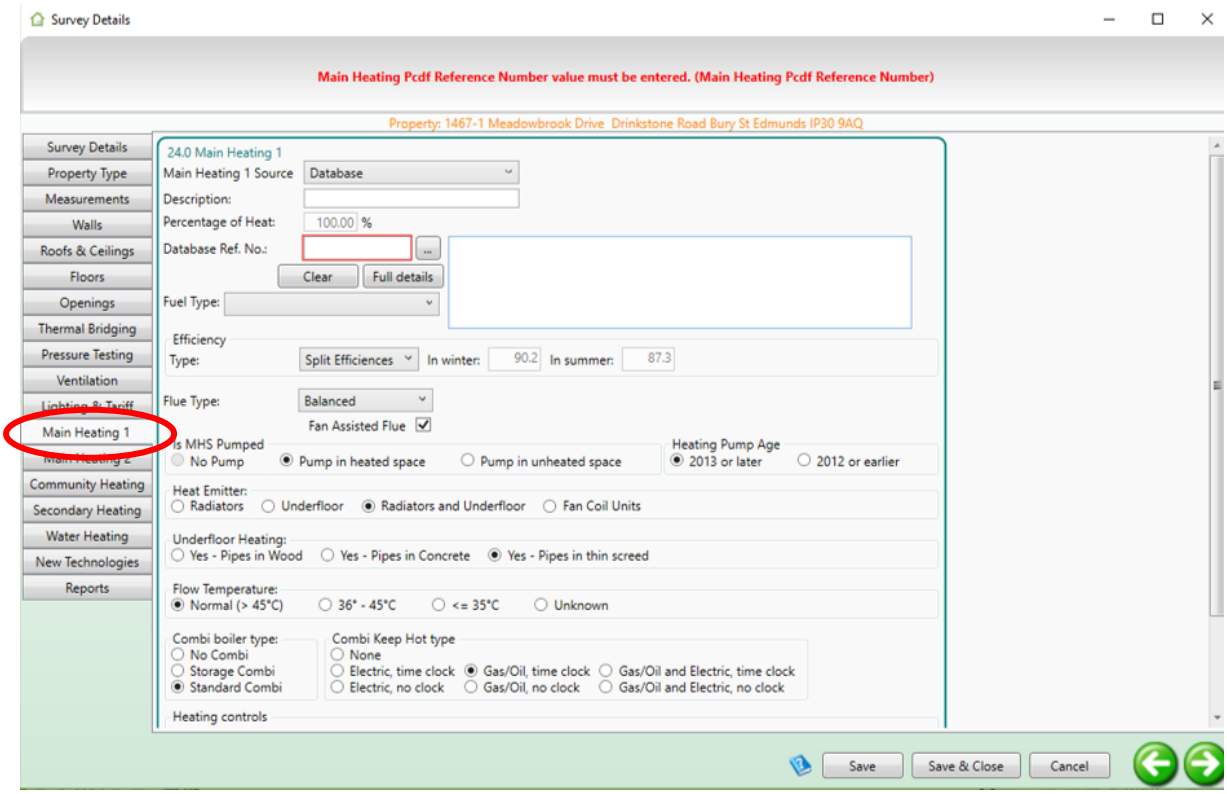
This document describes how to reduce Dwelling Emission Rates (DER) within SAP calculations using the Canetis GasSaver™ and the Elmhurst Design SAP 2012 software package.

Please note that for the best results it is important to compare dwellings that have been specified with a gas boiler both before and after the selection of a Canetis GasSaver™. In this scenario DER reductions of up to 24% are possible dependent upon the exact details of the property in question. Specification of a gas boiler and Canetis GasSaver™ into a scheme which did not previously include a gas boiler may result in DER reductions at a lower level.

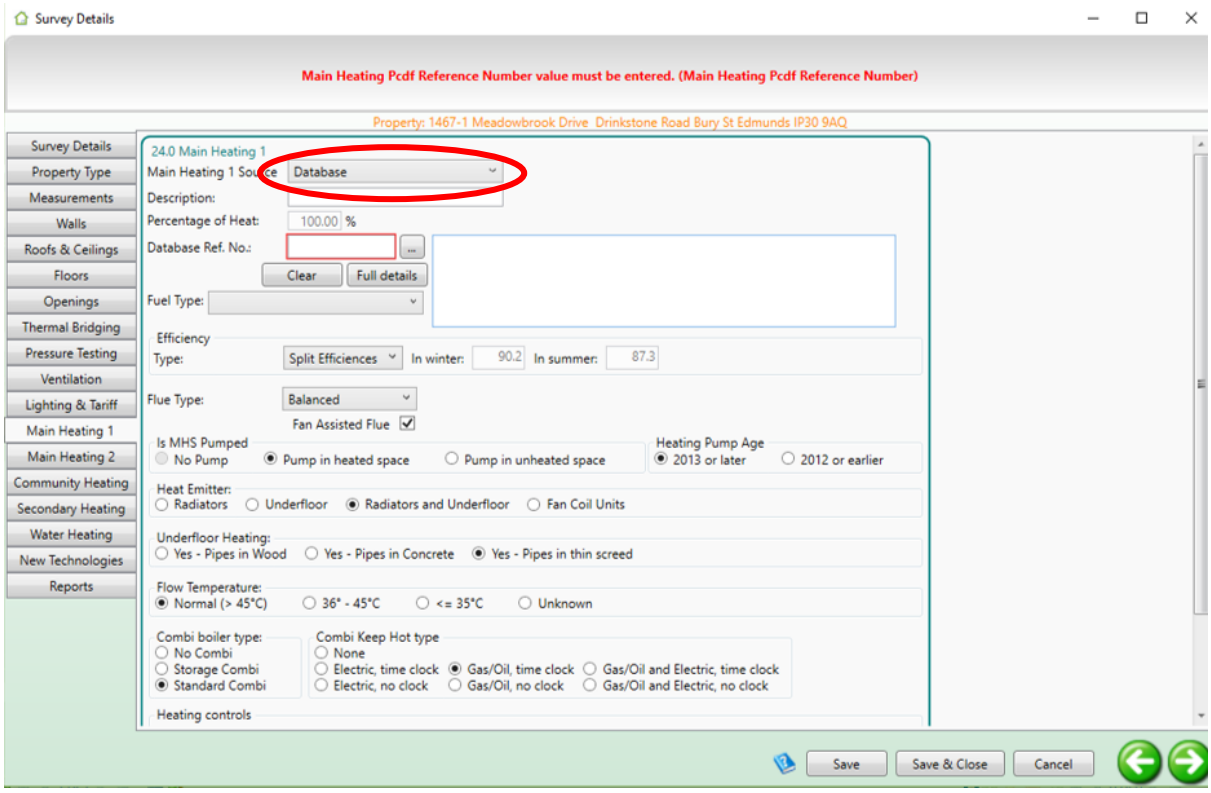
Note: Equivalent outcomes are possible within alternative SAP 2012 software packages by selecting the same boiler and Flue Gas Heat Recovery (FGHR) device as detailed in this document however exact steps for those software applications are not provided here. Screenshots for Stroma Certification are however provided as an appendix to this document.

How to reduce DER In SAP with Canetis GasSaver using Elmhurst

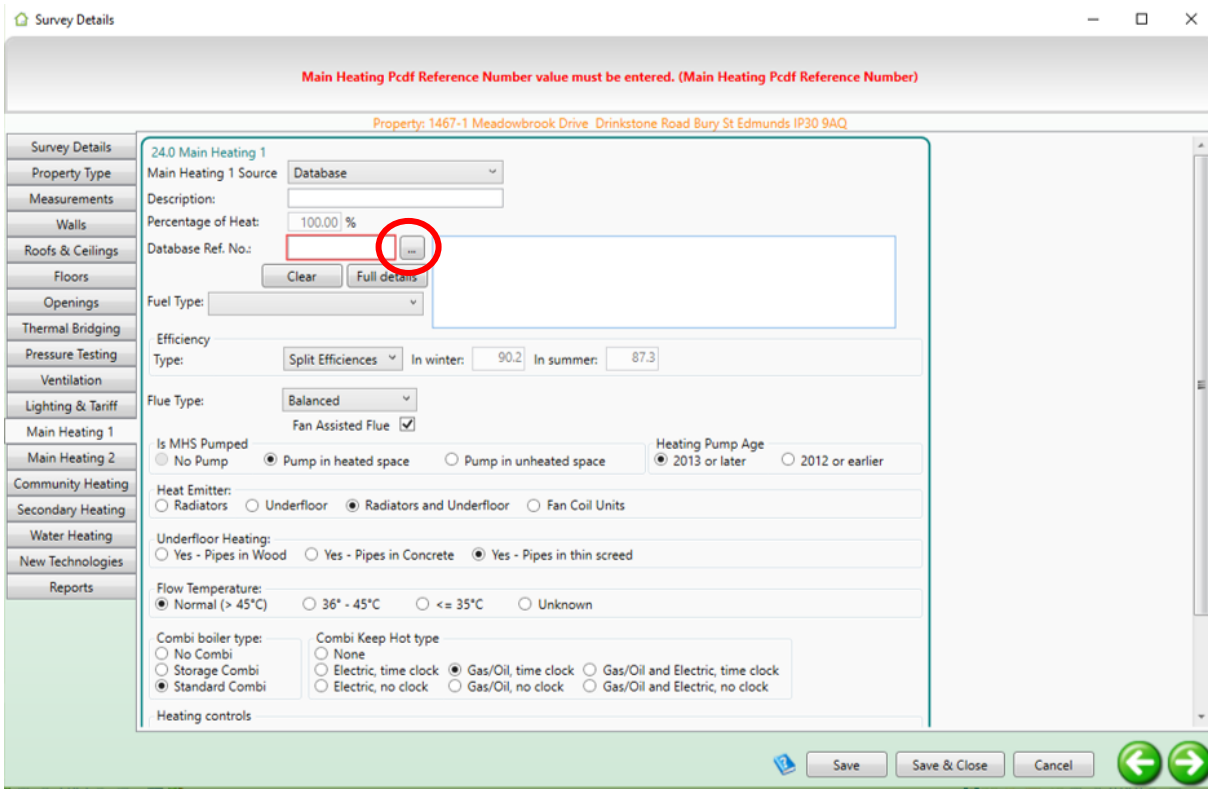
When using the Elmhurst Design SAP 2012 software application (screenshot below), within the **Main Heating 1** tab



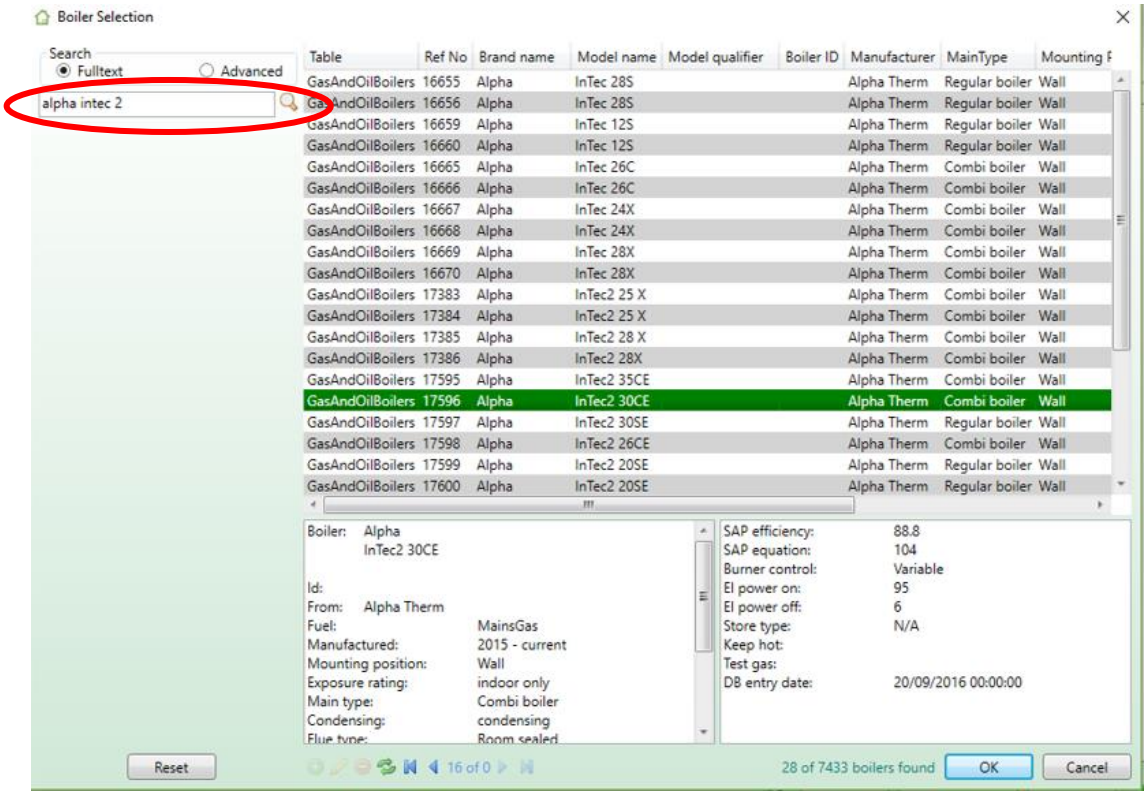
Select **Database** from the *Main Heating 1 Source* (screenshot below):



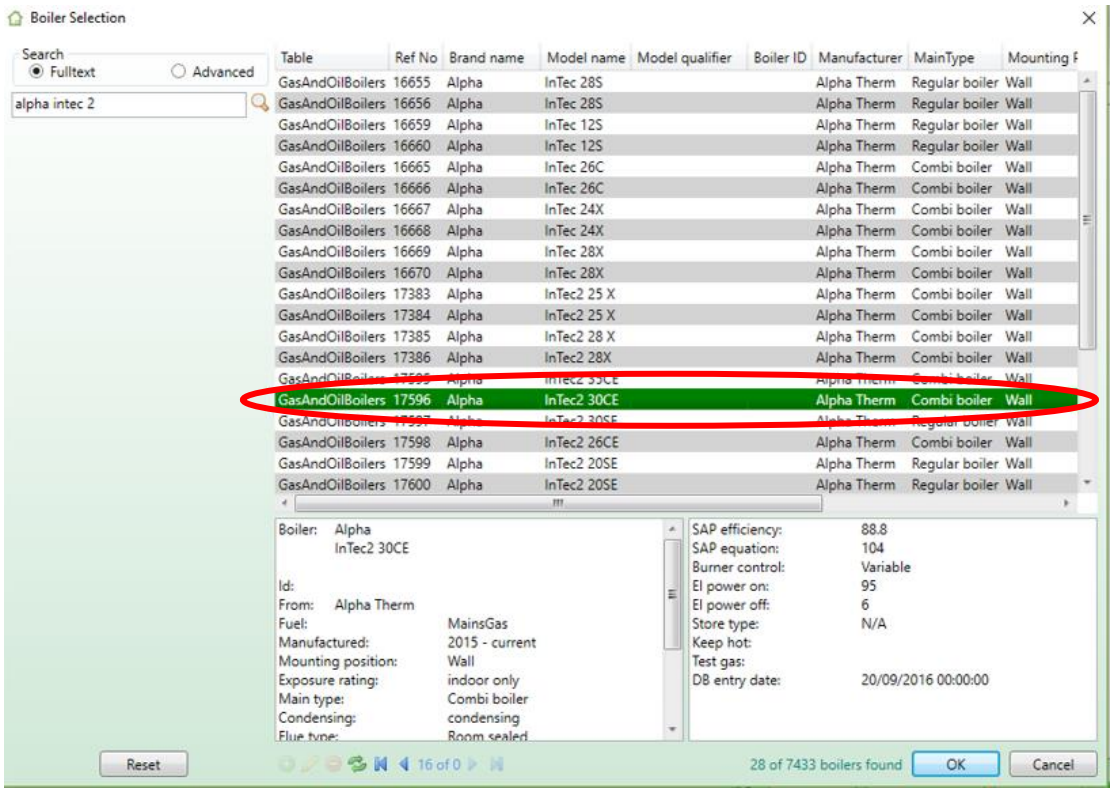
Open the list of available boilers from the database by pressing the button circled in red below:



From the list of available boilers search for “alpha intec 2” as shown below (remember to press the search button to the right of the input box at this point!):

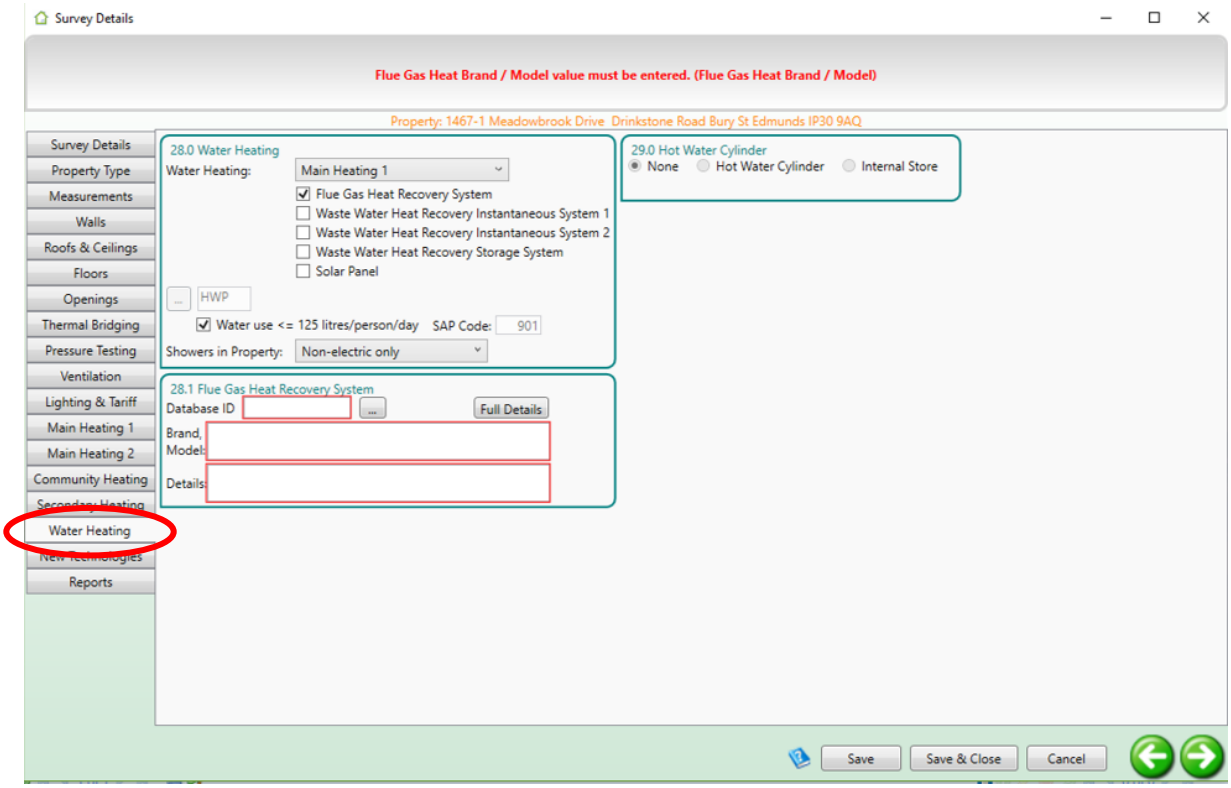


Select the following boiler: **Ref No.** 17596; **Brand Name** Alpha; **Model** InTec2 30CE (other Alpha models are available – please refer to the table in Appendix A for a comprehensive list)

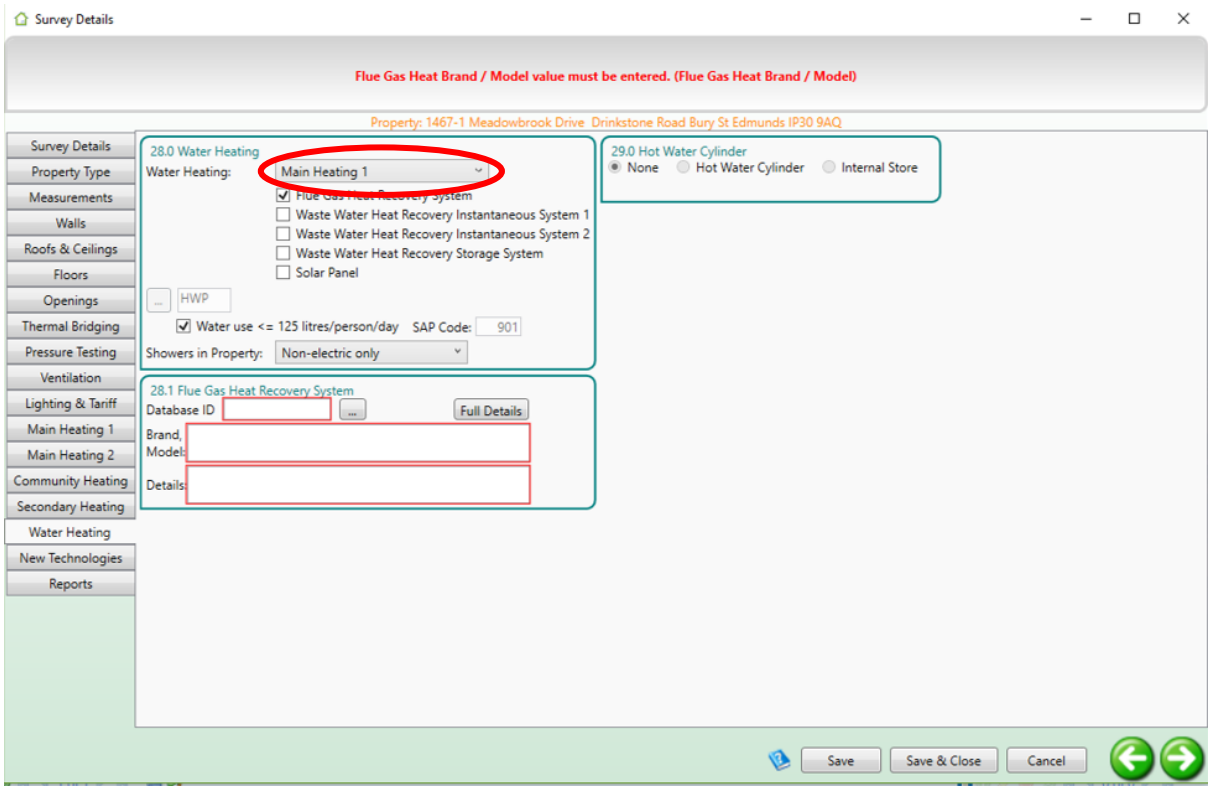


Press “OK”

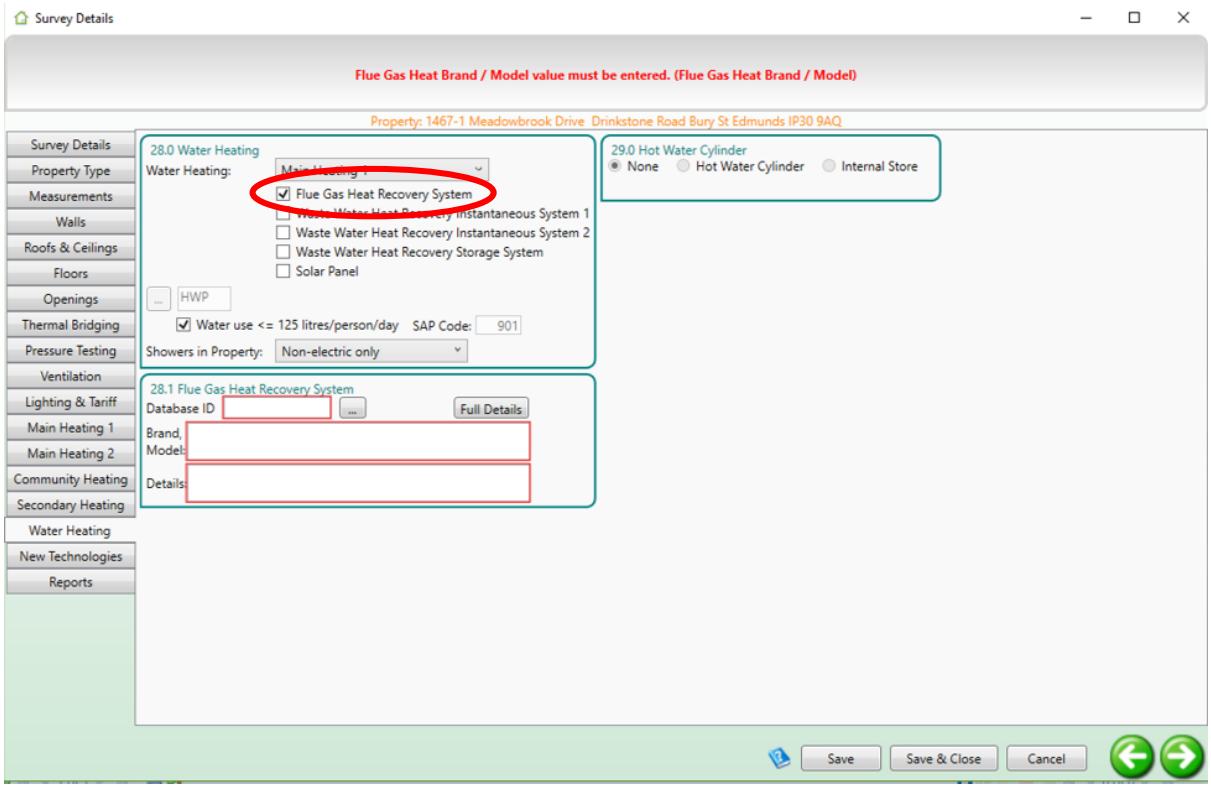
From the **Water Heating** tab:



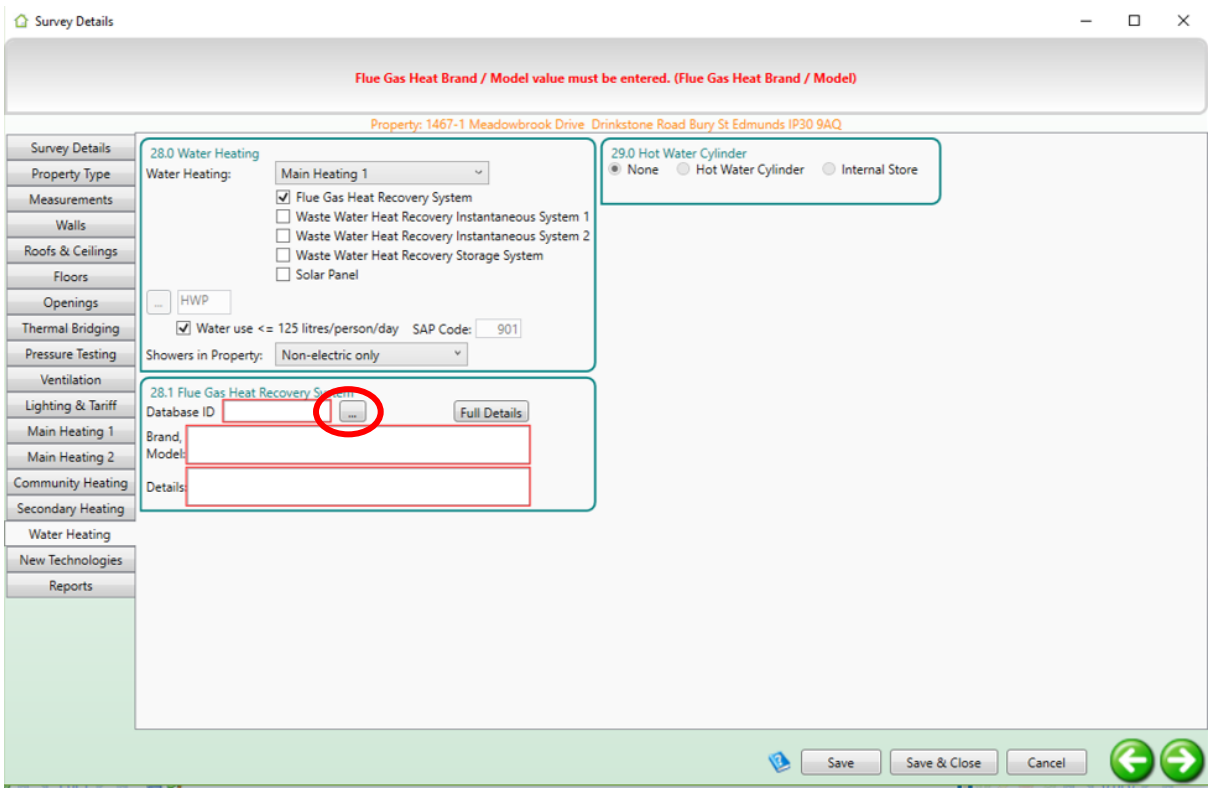
Select **Main Heating 1** from *Water Heating* as shown below:



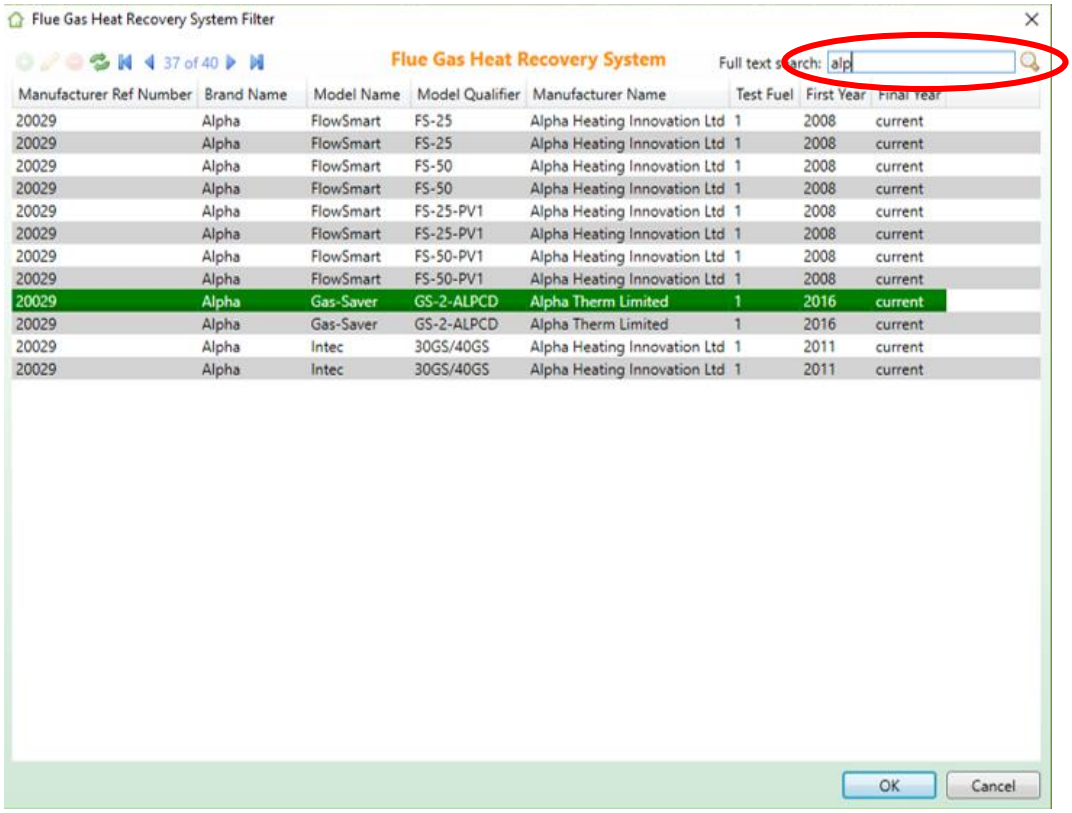
Select **Flue Gas Heat Recovery System** as shown below:



Open the list of available *Flue Gas Heat Recovery Systems* by pressing the button circled in red below:

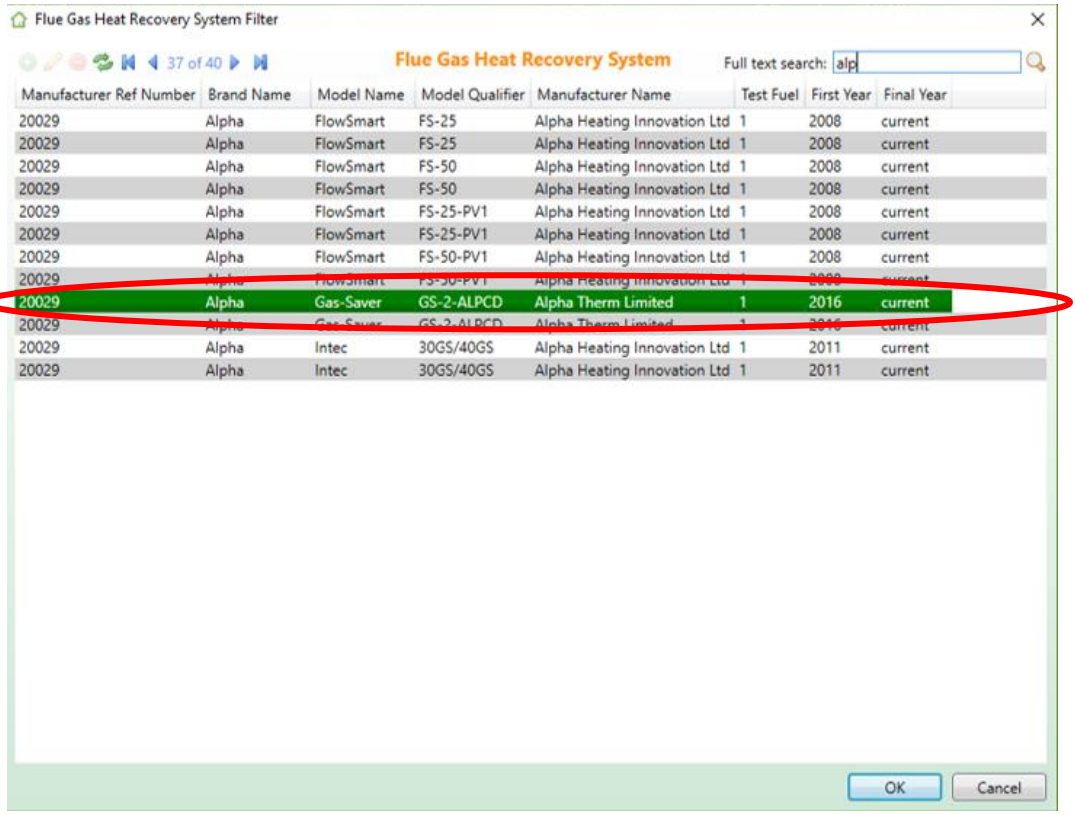


Search for “alp” from the displayed list



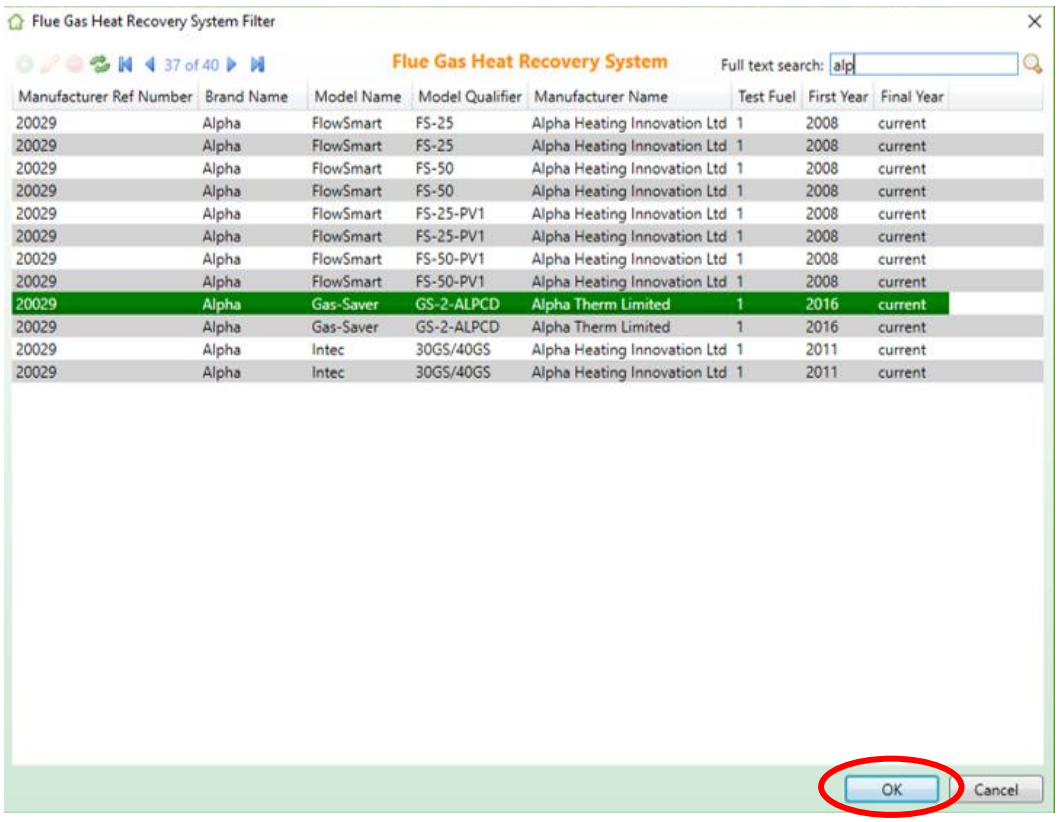
Manufacturer Ref Number	Brand Name	Model Name	Model Qualifier	Manufacturer Name	Test Fuel	First Year	Final Year
20029	Alpha	FlowSmart	FS-25	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	Gas-Saver	GS-2-ALPCD	Alpha Therm Limited	1	2016	current
20029	Alpha	Gas-Saver	GS-2-ALPCD	Alpha Therm Limited	1	2016	current
20029	Alpha	Intec	30GS/40GS	Alpha Heating Innovation Ltd	1	2011	current
20029	Alpha	Intec	30GS/40GS	Alpha Heating Innovation Ltd	1	2011	current

Select Brand Name **Alpha**; Model Name **GasSaver**; Model Qualifier **GS-2 ALPCD**



Manufacturer Ref Number	Brand Name	Model Name	Model Qualifier	Manufacturer Name	Test Fuel	First Year	Final Year
20029	Alpha	FlowSmart	FS-25	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-25-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	FlowSmart	FS-50-PV1	Alpha Heating Innovation Ltd	1	2008	current
20029	Alpha	Gas-Saver	GS-2-ALPCD	Alpha Therm Limited	1	2016	current
20029	Alpha	Intec	30GS/40GS	Alpha Heating Innovation Ltd	1	2011	current
20029	Alpha	Intec	30GS/40GS	Alpha Heating Innovation Ltd	1	2011	current

Press “OK”



Voila! Your calculated DER will be reduced due to the benefits of the Canetis GasSaver™

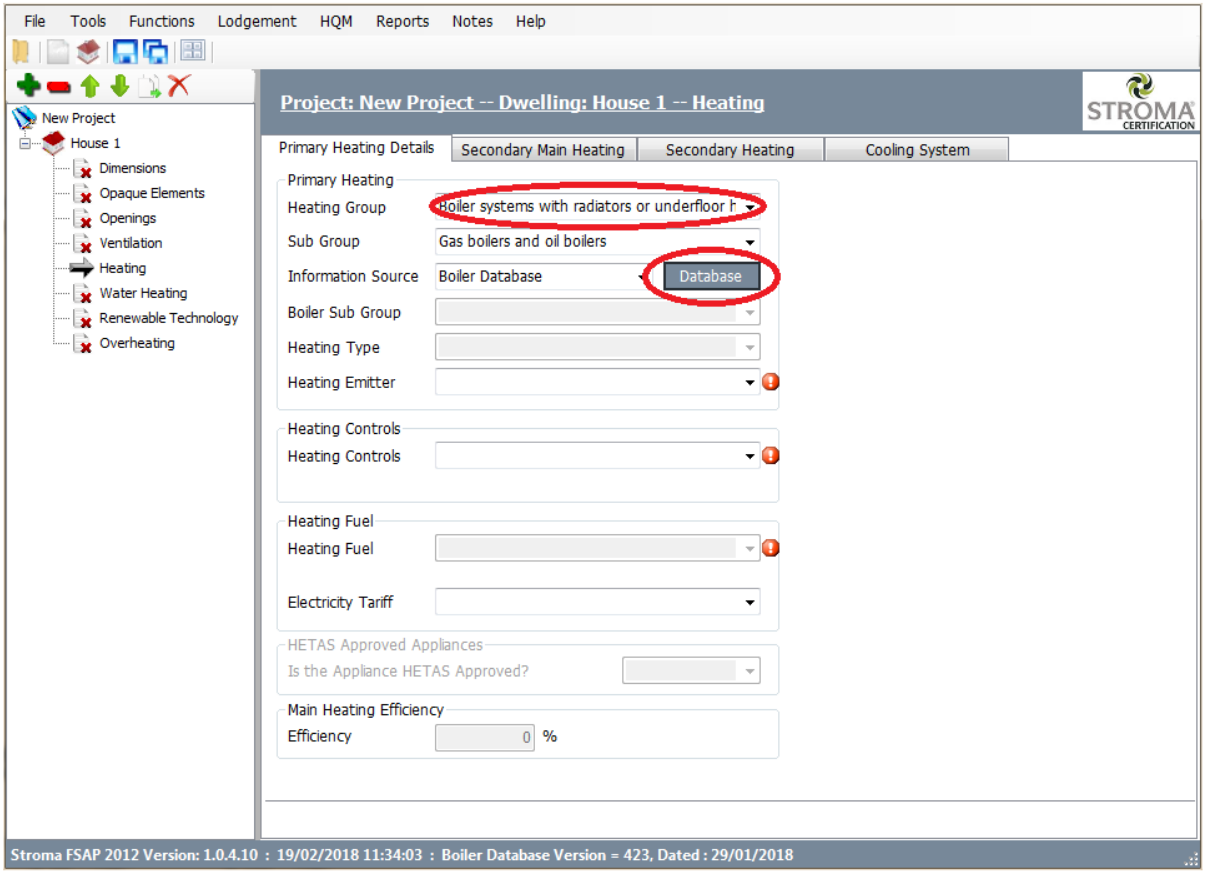
APPENDIX – A – Other Supported Boilers

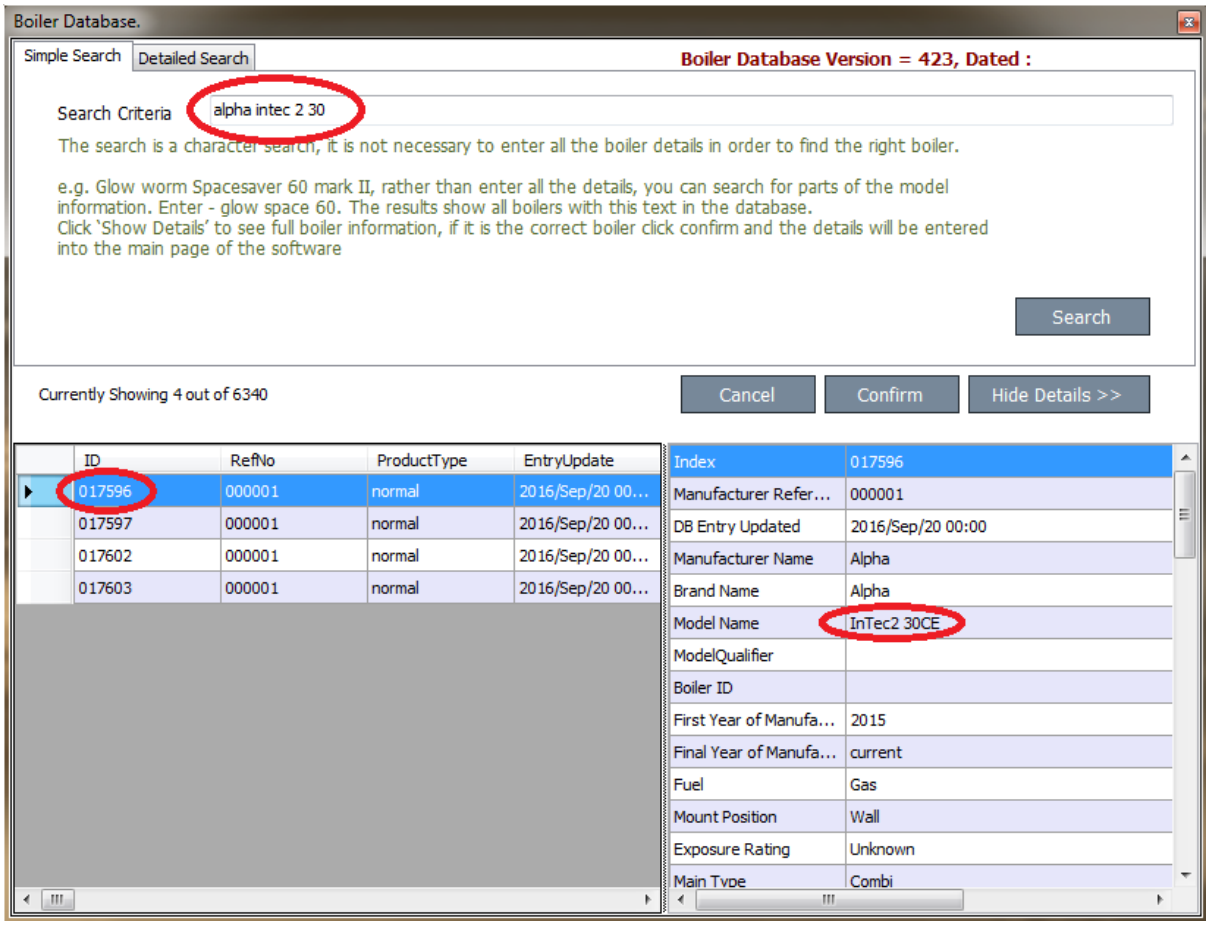
The following list of Alpha boilers can also be selected within the SAP system to obtain similar DER reductions –

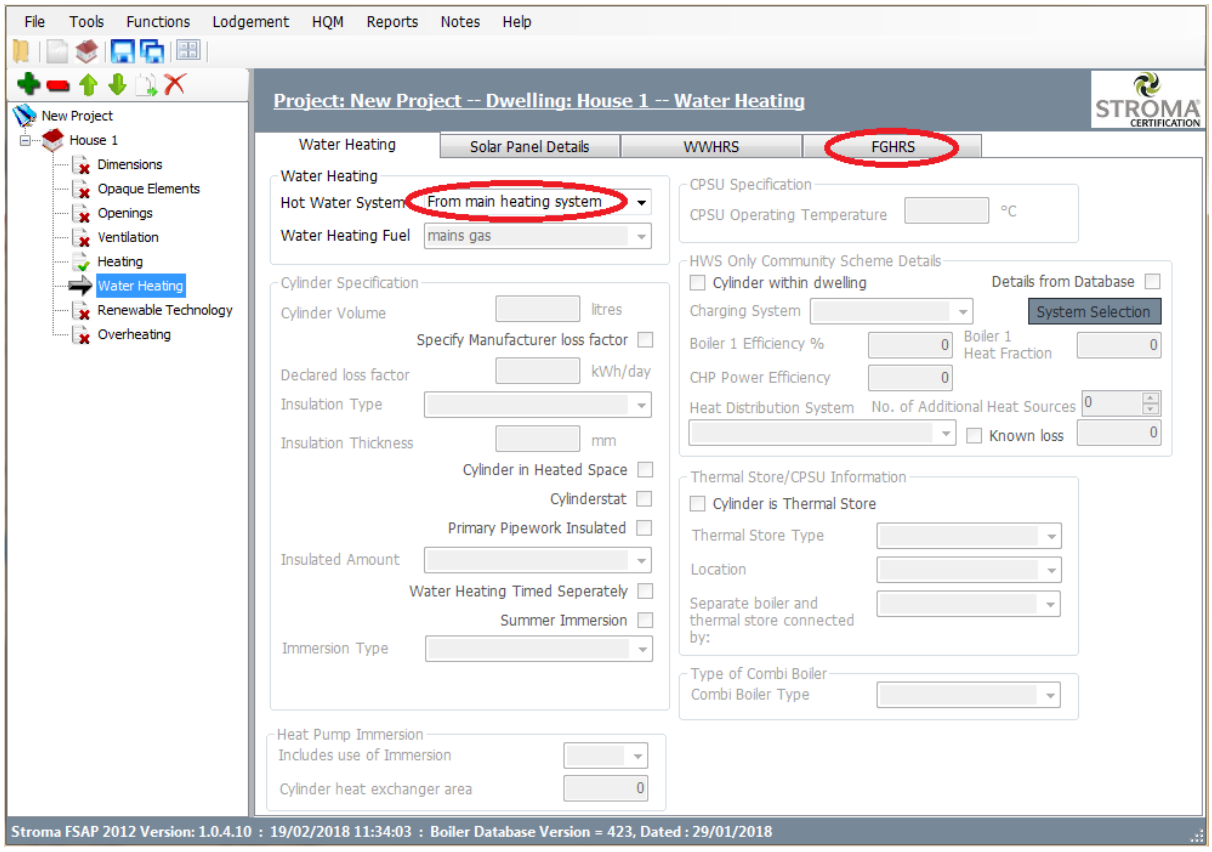
Boiler Name	Boiler Type	GasSaver™ Name	Comments
Alpha, InTec2 35CE	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 30CE	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 30SE	Regular	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 26CE	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 20SE	Regular	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, Eco2 Plus	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 25XE	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec2 28XE	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, E-Tec , 33	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, E-Tec , 28	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, Evoke , 33	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, Evoke , 28	Combi	Alpha, Gas-Saver , GS-2-ALPCD	Separately fitted on top of Boiler
Alpha, InTec 40GS2	Combi	Alpha, Gas-Saver , GS-2-ALPCD	GasSaver™ integrated within boiler. No need to select GasSaver from FGHR section of SAP system as the benefits are already included in the boiler selection

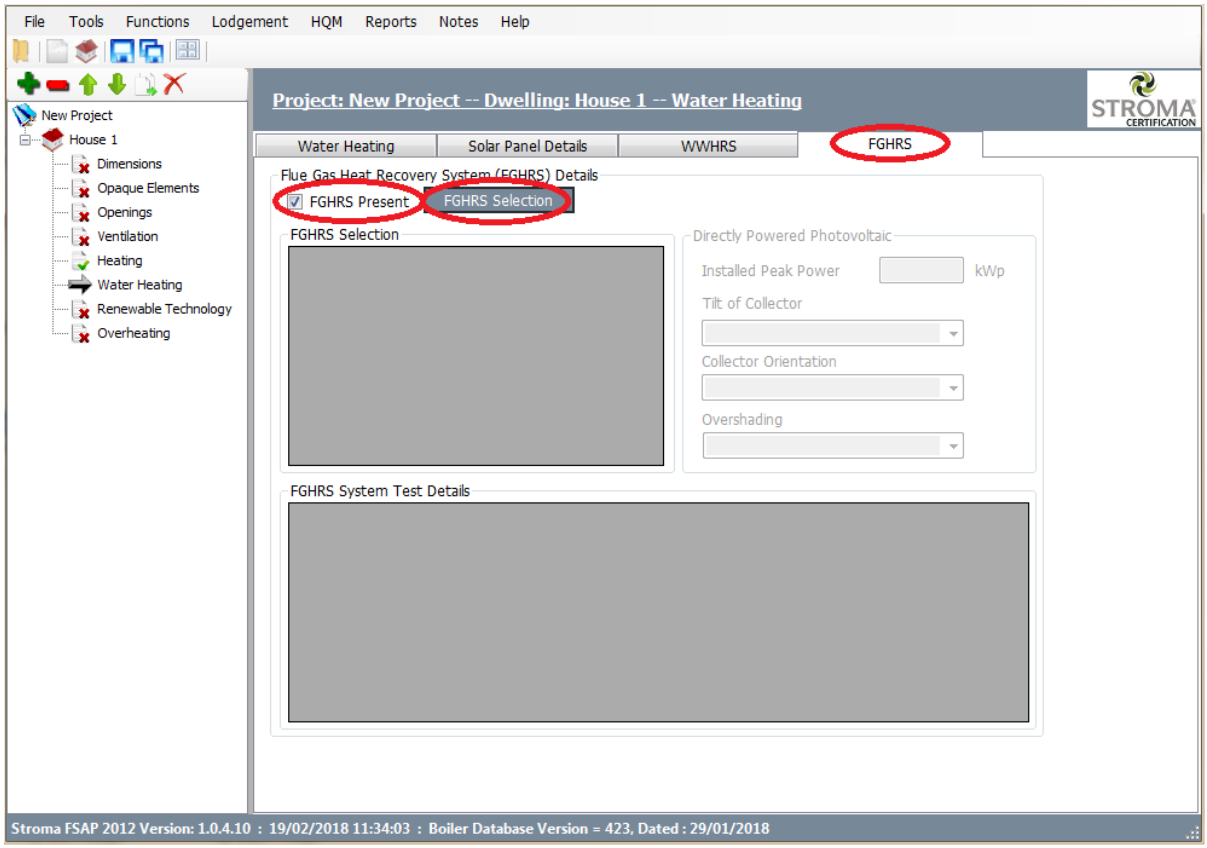
APPENDIX – B – Using Stroma Certification

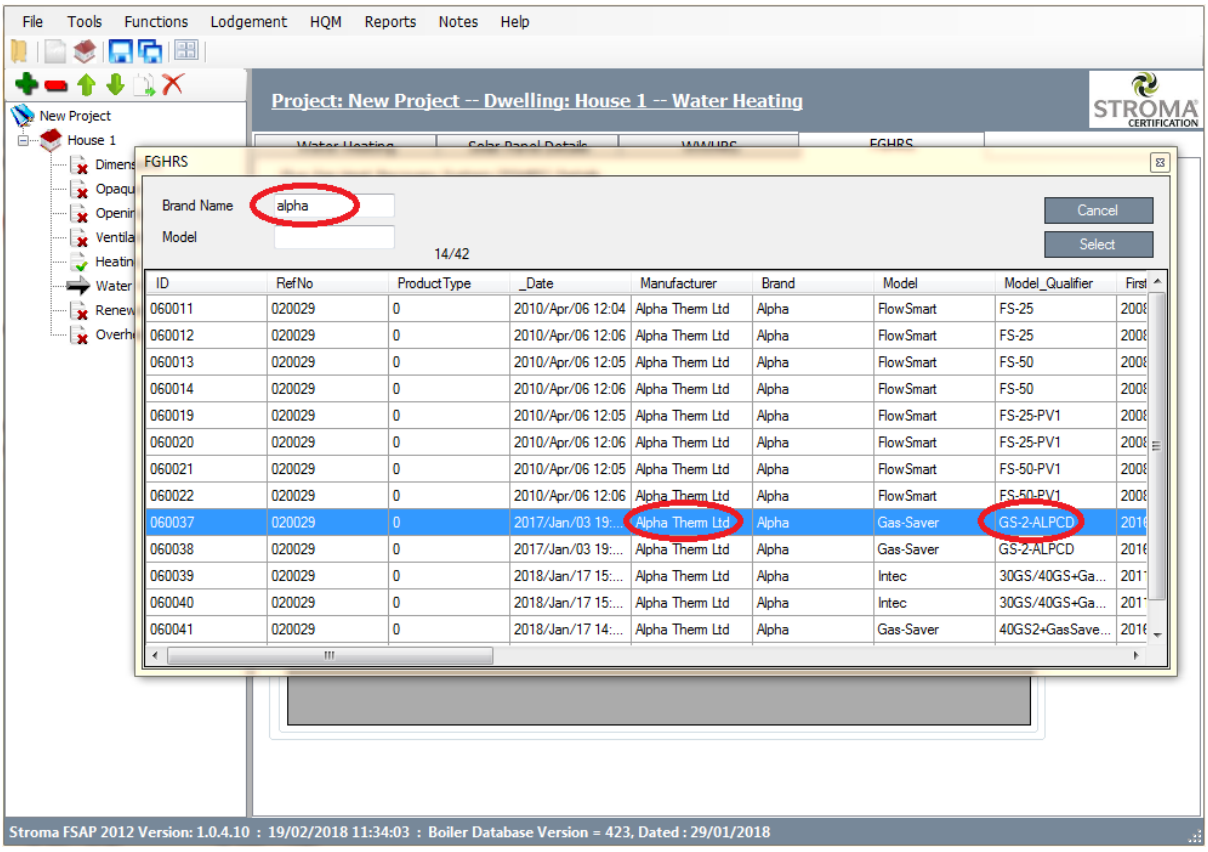
The following screenshots outline how to achieve the same benefits using an alternative SAP assessment software tool – Stroma Certification.

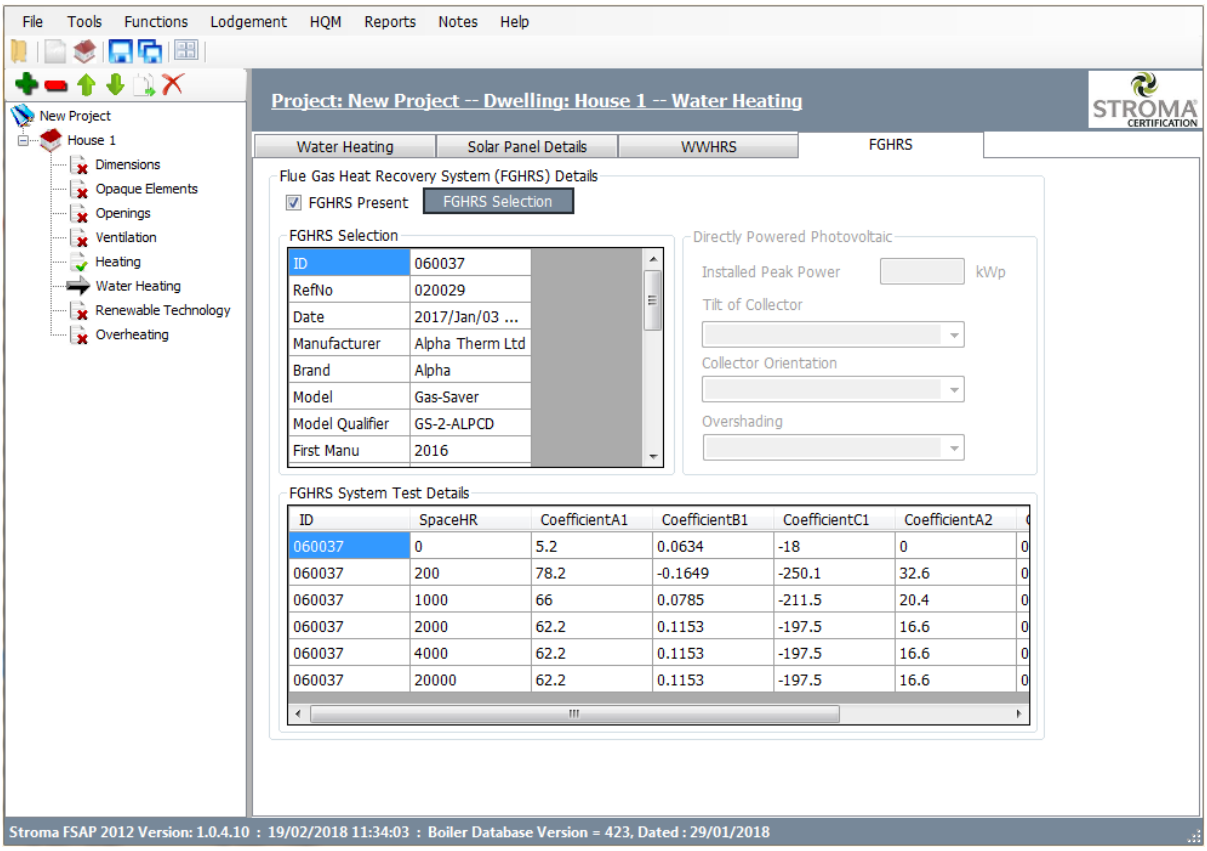



Boiler Database.
Simple Search
Detailed Search
Boiler Database Version = 423, Dated :
Search Criteria
alpha intec 2 30
The search is a character search, it is not necessary to enter all the boiler details in order to find the right boiler.
e.g. Glow worm Spacesaver 60 mark II, rather than enter all the details, you can search for parts of the model information. Enter - glow space 60. The results show all boilers with this text in the database.
Click 'Show Details' to see full boiler information, if it is the correct boiler click confirm and the details will be entered into the main page of the software
Search
Currently Showing 4 out of 6340
Cancel
Confirm
Hide Details >>
ID
RefNo
ProductType
EntryUpdate
017596
000001
normal
2016/Sep/20 00...
017597
000001
normal
2016/Sep/20 00...
017602
000001
normal
2016/Sep/20 00...
017603
000001
normal
2016/Sep/20 00...
Index
017596
Manufacturer Refer...
000001
DB Entry Updated
2016/Sep/20 00:00
Manufacturer Name
Alpha
Brand Name
Alpha
Model Name
InTec2 30CE
ModelQualifier
Boiler ID
First Year of Manufa...
2015
Final Year of Manufa...
current
Fuel
Gas
Mount Position
Wall
Exposure Rating
Unknown
Main Type
Combi


File Tools Functions Lodgement HQM Reports Notes Help
New Project
House 1
Dimensions
Opaque Elements
Openings
Ventilation
Heating
Water Heating
Renewable Technology
Overheating
Project: New Project -- Dwelling: House 1 -- Water Heating
STROMA CERTIFICATION
Water Heating
Solar Panel Details
WWHRS
FGHRS
Water Heating
Hot Water System
From main heating system
Water Heating Fuel
mains gas
Cylinder Specification
Cylinder Volume
litres
Specify Manufacturer loss factor
Declared loss factor
kWh/day
Insulation Type
Insulation Thickness
mm
Cylinder in Heated Space
Cylinderstat
Primary Pipework Insulated
Insulated Amount
Water Heating Timed Seperately
Summer Immersion
Immersion Type
Heat Pump Immersion
Includes use of Immersion
Cylinder heat exchanger area
CPSU Specification
CPSU Operating Temperature
°C
HWS Only Community Scheme Details
Cylinder within dwelling
Details from Database
Charging System
System Selection
Boiler 1 Efficiency %
Boiler 1 Heat Fraction
CHP Power Efficiency
Heat Distribution System
No. of Additional Heat Sources
Known loss
Thermal Store/CPSU Information
Cylinder is Thermal Store
Thermal Store Type
Location
Separate boiler and thermal store connected by:
Type of Combi Boiler
Combi Boiler Type
Stroma FSAP 2012 Version: 1.0.4.10 : 19/02/2018 11:34:03 : Boiler Database Version = 423, Dated : 29/01/2018


File Tools Functions Lodgement HQM Reports Notes Help
New Project
House 1
Dimensions
Opaque Elements
Openings
Ventilation
Heating
Water Heating
Renewable Technology
Overheating
Project: New Project -- Dwelling: House 1 -- Water Heating
STROMA CERTIFICATION
Water Heating
Solar Panel Details
WWHRS
FGHRS
Flue Gas Heat Recovery System (FGHRS) Details
FGHRS Present
FGHRS Selection
FGHRS Selection
Directly Powered Photovoltaic
Installed Peak Power
kWp
Tilt of Collector
Collector Orientation
Overshading
FGHRS System Test Details
Stroma FSAP 2012 Version: 1.0.4.10 : 19/02/2018 11:34:03 : Boiler Database Version = 423, Dated : 29/01/2018


File Tools Functions Lodgement HQM Reports Notes Help
Project: New Project -- Dwelling: House 1 -- Water Heating
FGHRS
Brand Name alpha
Model
Cancel
Select
14/42
ID RefNo ProductType _Date Manufacturer Brand Model Model_Qualifier
060037 020029 0 2017/Jan/03 19:... Alpha Therm Ltd Alpha Gas-Saver GS-2-ALPCD
Stroma FSAP 2012 Version: 1.0.4.10 : 19/02/2018 11:34:03 : Boiler Database Version = 423, Dated : 29/01/2018


File Tools Functions Lodgement HQM Reports Notes Help
Project: New Project -- Dwelling: House 1 -- Water Heating
Water Heating Solar Panel Details WWHRS FGHRS
Flue Gas Heat Recovery System (FGHRS) Details
FGHRS Present
FGHRS Selection
ID 060037
RefNo 020029
Date 2017/Jan/03 ...
Manufacturer Alpha Therm Ltd
Brand Alpha
Model Gas-Saver
Model Qualifier GS-2-ALPCD
First Manu 2016
Directly Powered Photovoltaic
Installed Peak Power kWp
Tilt of Collector
Collector Orientation
Overshading
FGHRS System Test Details
ID SpaceHR CoefficientA1 CoefficientB1 CoefficientC1 CoefficientA2
060037 0 5.2 0.0634 -18 0
060037 200 78.2 -0.1649 -250.1 32.6
060037 1000 66 0.0785 -211.5 20.4
060037 2000 62.2 0.1153 -197.5 16.6
060037 4000 62.2 0.1153 -197.5 16.6
060037 20000 62.2 0.1153 -197.5 16.6
Stroma FSAP 2012 Version: 1.0.4.10 : 19/02/2018 11:34:03 : Boiler Database Version = 423, Dated : 29/01/2018