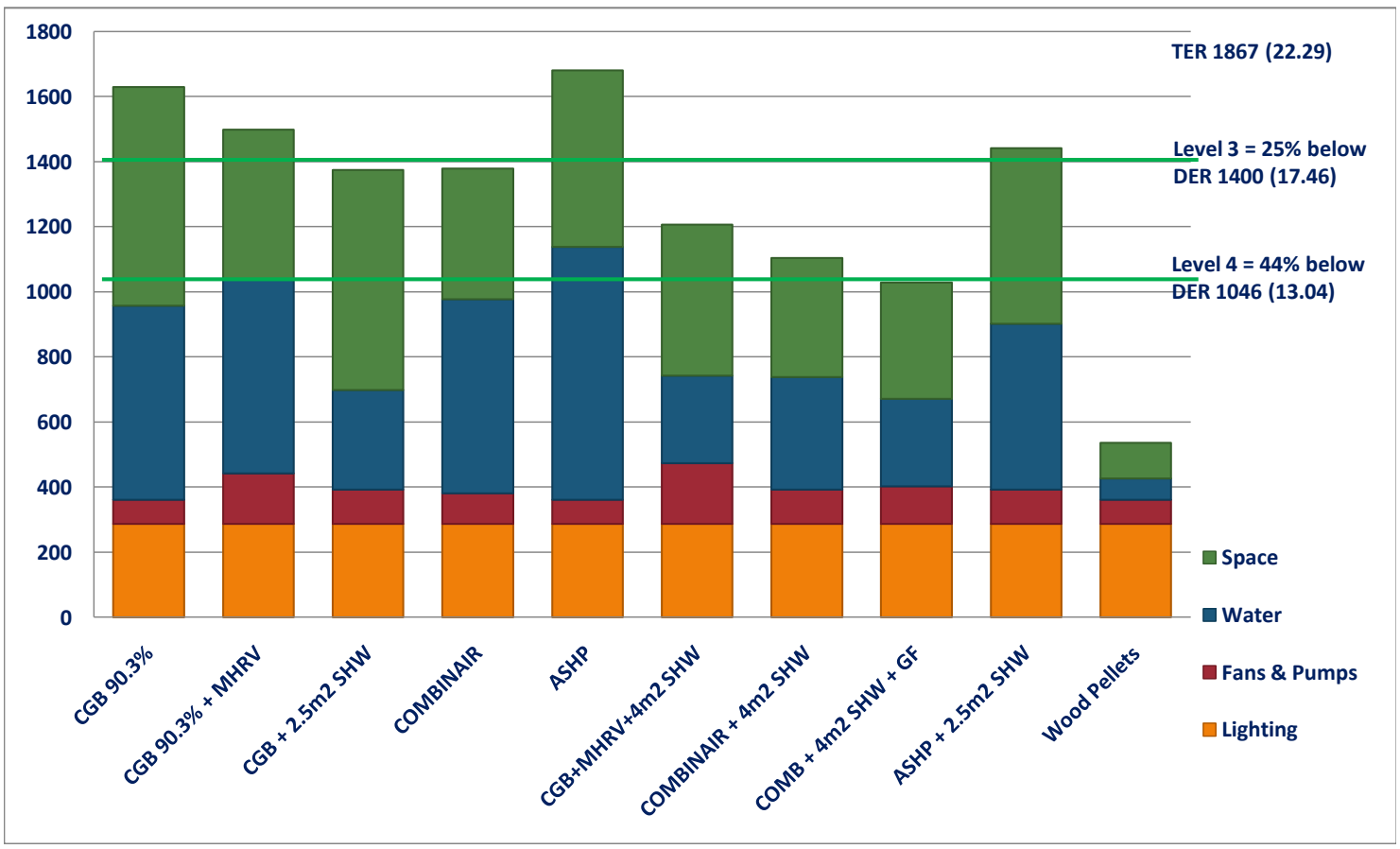
Leaders in low carbon heating

ATMOS™ HEATING SYSTEMS

Atmos solutions for Code level 3 & 4, and beyond

80 m² semi detached house
Carbon emissions kg/annum
Insulation U value = 0.20



Atmos is proud to offer some of the most carbon efficient and cost effective solutions to enable developers to achieve elusive Code for Sustainable Homes (CSH) points. By working carefully alongside SAP assessors we are able to offer solutions that achieve the necessary DER (dwelling emission rates) that meet the 25% reduction for Level 3, and 44% for Level 4.

With these levels well within our grasp, we are now working with our suppliers to achieve Level 5 through new technology, so that Atmos is able to provide solutions that will carry through to 2014, by which time we will have Level 6 solutions.

The above diagram illustrates the total carbon emissions as calculated by SAP (Standard Assessment Procedure, the methodology used in the UK for all new buildings.

CGB = Condensing gas boiler; **MHRV** = mechanical heat recovery ventilation system; **SHW** = solar hot water system; **ASHP** = air source heat pump electrically operated for heating and hot water.

From the above figures it can be seen that the Combinair provides a Level 3 rating, and by simply adding the 4m2 MonoSolar hot water system Level 4 can be attained.

Atmos low carbon products

Atmos InterCombi HE32: A high efficiency condensing gas boiler with a SEDBUK A energy rating of 90.1%. This boiler has the highest ratings for hot water efficiency, electrical energy and water economy, with NOx ratings below 40 mg/kWh for 3 extra credits in the CSH.

Atmos Inter SuperSystem: This combination of condensing gas boiler and innovative 150 litre stainless steel hot water storage tank has the benefit of the SEDBUK A rated condensing gas boiler, and a superbly insulated OSO hot water tank, closely linked to fit one above the other. The result is minimal losses which reduces heat losses and improves the DER rating.

Atmos Inter SolarCombi: This unique system provides a combination of the Low NOx InterCombi and the MonoSolar hot water system; with a 2.75 m^2 or 4.1m^2 solar panel. The compact size reduces the footprint, and reduces installation time. The drain back solar circulation system is simple to install, requires virtually no maintenance, and the low content copper heat exchanger reduces Legionella risk to way below the safety limits; a reassuring feature for housing providers.

Atmos EnergyCatcher: When it comes to achieving the Code levels, every little helps. This ingenious heat recovery device fits on to the flue outlet of the Inter boiler, and provides additional heat recovery. This device is recognised in Appendix Q of the SAP calculation, and so provides another simple and cost effective means of reducing the DER.

Atmos Combinair: The latest product in the Atmos range, the Combinair embraces three carbon reducing technologies into one fully integrated indoor unit. Space heating is provided by a 2.5 kW air source heat pump with an efficiency of 250 to 400%. Mechanical heat recovery ventilation is provided by means of a mechanical extract fan that draws the extract air through the heat pump. The 90% efficient condensing gas combi provides hot water, plus any additional heat that cannot be met by the heat pump in cold weather conditions. The result is a unit that can achieve **Level 3** easily.

Atmos Solar-Combinair: The ultimate in low carbon technology, this combines all the benefits of the Combinair with the MonoSolar hot water system, and with either a 2.75m2 or 4.1m2 solar panel will achieve **Level 4** in a well insulated house.

Left: InterCombi HE32
Below: Inter SuperSystem

Left: Inter SolarCombi
Below: Combinair

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