Report of Climate Change Group Meeting on Air Heat Source Pumps

The presentation on 6th September was given by Graeme Clements. Graeme explained that kit

available from many different manufacturers can provide flow temperatures up to 70°, although house insulation is key to any new heating system and should normally include a minimum level of cavity wall insulation and 300mm insulation (or equivalent) in the loft space and of course double glazing. The pumps also need to be 4 metres away from any neighbour's habitable room, so a site survey is critical to assess the suitability of an air source heat pump installation with a Heat Loss Report specifying the heat pump required.

The government's boiler upgrade scheme awards residential properties a £7,500 reduction in the installation cost provided there is an Energy Performance Certificate (EPC) in place with no recommendations for loft insulation or cavity wall insulation.

Although Graeme made the point that no two houses are the same, it seemed that the typical cost of a heat pump to serve a 4 bed detached house was in the region of £12,000 (not taking into account the government grant) so this would be less for smaller houses.

It seemed as well that the net cost of conversion to a heat pump as compared to installing a new gas boiler would be similar, taking into account the £7,500 grant, and provided the radiators and pipework did not need extensive changes. Overall though, the big question which seems to be holding back the move to heat pumps is the annual operating costs which are often higher than a gas boiler, although if you have your own solar panels you will pay less for your electricity to offset this. However, if the government reduces the price differential between electricity and gas (which is cheaper), then there is a chance that its ambitious objectives for the rapid move to heat pumps (part of the net zero initiative) might be achieved. Without that we felt that the uptake of heat pumps would be much slower.

Another point also to bear in mind is that as new products are developed, some concerns with early heat pumps have been addressed. Also the costs of new pumps are decreasing as new and more efficient units come into the market and as the market grows. So hopefully soon we can all be more enthusiastic about installing heat pumps.