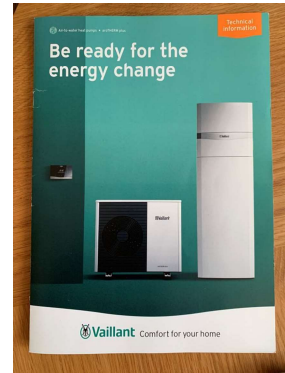


4e. Future Proofing. Heat pumps.

- NIBE presence in UK market.
- New major players to UK market Vaillant, Worcester Bosch.
- Ageing NIBE boilers: new builds
- Gas boilers: Dudley House.
- Fuel efficiency. Environment.
- Government grant £7,500



4e. Future Proofing.

- Seasonal Co-Efficiency of Performance (SCOP)
- Example: SCOP 4.03 (table)
- Vaillant air to water heat pump
- Model: aeroTHERM plus 3.5kW

SCOP and heating output

Heating system	35°C flow		45°C flow		45°C flow	
	Output	SCOP	Output	SCOP	Output	SCOP
35kW	35°C	4.2	4.4	4.3	4.3	3.1
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
35kW	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
35kW	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
35kW	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
35kW	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9
	35°C	4.1	4.1	4.1	4.1	4.9

Sound power

Model	Sound Power Level (dB)	Sound Power Level (dB)
aeroTHERM plus 3.5kW	55	55
aeroTHERM plus 5kW	55	55
aeroTHERM plus 7kW	55	55



4e. Future Proofing. Heat pumps.

- Example: Vaillant air to water heat pump
- Model: **aeroTHERM plus 3.5kW**



4e. Future Proofing. Heat pumps.

- Example: Vaillant air to water heat pump
- Model: **aeroTHERM plus 3.5kW**



- CSMC. Permission on location of outside heat pump for non ground floor flats.



4e. Future Proofing. Heat pumps.

- £10,850 Vaillant unit cost & installation (3 days)
- Includes removal and disposal of old unit
- Less £7,500 Government grant: Boiler Upgrade Scheme.
- Plus £60 approx EPC Energy Performance Certificate 'electric heating' 'air heat source pump'
- £3,410 ballpark total cost



4e. Future Proofing. Heat pumps.

- Local contractor: (owners free to find alternatives)
- K A Stripp Ltd (based Headcorn)
- [K A Stripp | Plumbing & Heating Engineers | Heat Pump Installers](#)
- Contractor can obtain government £7.5K grant and signpost who can carry out EPC Report (*wording important on current heating system*).
- Guarantee: 7 years and 2 year manufacturer.

