Community heating solutions

Centralised Heat Pump
- Replacing the energy centre with Heat pumps
- 55°C/30°C temperatures
- SCOP 2.5

Heat Pump Hybrid
- Utilise Heat Pumps on the return of High Temperature District heating network
- Recovered heat from cooling process
- Maintain 70/40 network temperatures
- SCOP 3.2

Individual Heat pump
- Water source Heat pump per apartment
- Ambient Loop
- Heat Recovery
- SCOP >4
Centralised Heat pump

Barking Riverside

4G Heat Network

20 Heat pump serving 247 homes

Running for over 3 Years

Design By Rob Hunter [L&Q]

Design SCOP 2.55
Centralised Heat pump

Leaf Street - Liverpool

4G Heat Network

8 Heat pumps serving 108 homes

Liverpool City Centre

Client – One Manchester
CAHV-P500-YA-HBP

- 43kW at -10°C
- Full Inverter and Cascade Control
- Rated capacity down to -20°C
- Twin Coil Defrost
- Up to 700kW from one system
- Low Noise 51dBA [10m]

Mitsubishi Electric Corporation
CAHV-P500-YA-HBP

Over 1000 units sold since 2013
2 Mechanical Failures
5 Year Warranty
10 Year Spares Commitment
Hermetically Sealed
Not covered by F-gas Leak regs
CAHV-P500-YA-HBP

Maintenance

No Leak Checks

No Onsite Refrigerant Logs

2 Visits Per Year

Connection Via Mitsubishi Monitor Tool

Typically 4 units serviced per day.
An Important source of low carbon heat in a commercial building is the heat of rejection from cooling

- Carbon free
- Optimal temps for a heat pump.
Opportunities

• Mixed developments
• Residential application
• Healthcare
• Education
• Leisure
PRODUCTS
NEW Inverter Scroll Integra i-NX-Q

- ERP A++
- Small Footprint
- 43 to 160kW
- Rated capacity down to -15°C
- Up to 60°C water outlet temp
- Low Noise 52dBA [10m]
Heat pump Hybrid - Pre Heat

Gas engine (CHP)

Gas boiler

Thermal store

Ecodan heat pump

Heat pump buffer

80°C

40°C

45°C

40°C

70°C
Heat pump Pre Heat

The Hyde Hendon

2no Ecodan Heat pumps

Pre Heat to CHP/Gas

387 Homes from L&Q

Still in construction
Heat pump Pre Heat

Hounslow
1 no Ecodan Heat pumps
Pre Heat to CHP/Gas
300 Properties
Meyer Homes
Apartment Water Source Heat Pump

~25°C
Apartment Water Source Heat Pump

System off

~25°C

Apartment
In cooling

Apartment
In heating
Apartment Water source HP

Hydrodan

- 60°C Flow Temp
- COP >6 [B10/W35]
- R32
- Up to 8kW
- 1750 H
- 680 D
- 595 W
- 170L DHW Volume
- Low Noise 43dBA [10m]
Apartment Water Source Heat Pump

Hydrodan

55°C
DHW Cylinder
175 Litre

Mains Water
Apartment Water source HP
Hydrodan

Removable Heat pump Module
FTC5
MELCloud

Top Connections
UK Field Trial 2019
EX Works M-ACE 2021