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Environmental Credentials

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We are proud of our environmental credentials in introducing and establishing solutions to the challenges of our industry.

1980's/90's - CFC-Free Air Conditioning

1990's - Combined Heat & Power & Cooling

2010's/20's - Heat Networks

2020's - Heat Pumps

2020's - Energy Management

2022 - Net Zero

2024 - Decarbonisation

2025 - Optimised Heat Networks

2025 - Optimised Heat Pumps

2025 - Optimised Buildings

CFC-Free Air Conditioning



Towards the end of the 1980's researchers published evidence proving that CFC refrigerants used in air conditioning were destroying the Earth's ozone layer.

Birdsall had a solution for the UK A/C industry through its sister company Elstree A/C and its product range of CFC-Free absorption chillers and chiller-heaters.

Birdsall invested in a marketing campaign to highlight the availability of a proven CFC-Free A/C range.

A new facility in Milton Keynes was opened where we trained AC contractors to install absorption chillers.

As a result of our campaign, we persuaded many organisations to specify CFC-Free absorption for their air conditioning. This included a great many local authorities, Halifax Building Society & British Gas.

Combined Heat & Power & Cooling

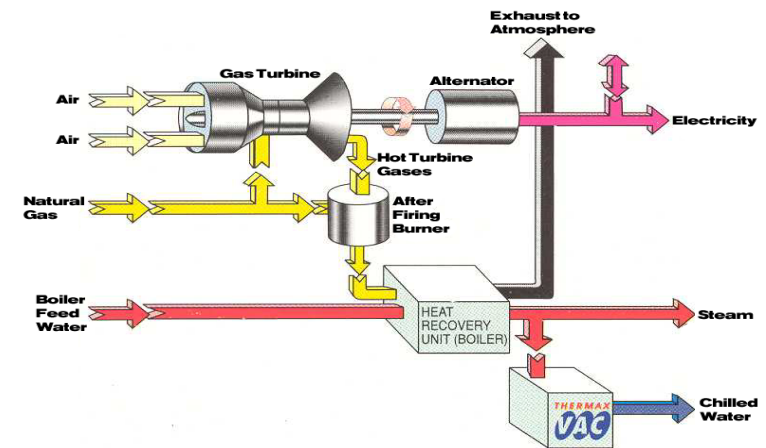
CHPC



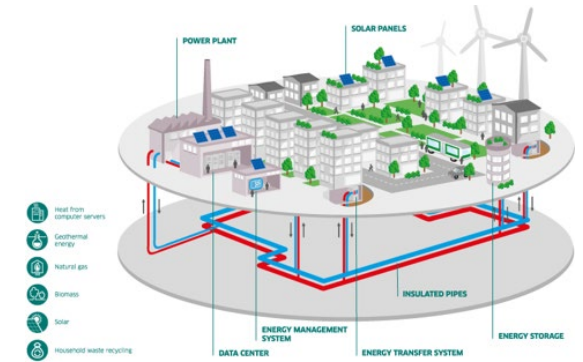
In the 1990's Birdsall led the way in establishing CHPC, using large absorption chillers with CHP to significantly reduce energy consumption and Co2 emissions.

The absorption chillers could be powered by waste heat generated by the CHP in the form of steam or hot water.

Birdsall delivered this concept at the BBC Television Centre to great effect and much publicity, paving the way for many similar Co2 reduction projects.



Heat Networks



Heat Networks significantly reduce energy consumption and Co2 emissions compared to conventional systems. They were a natural progression from CHPC for Birdsall.

The 2010's saw an upsurge of development in Heat Networks with many schemes built.

Birdsall are considered a specialist in this field and became the O&M partner for SSE operating 16 of their Heat Networks, including the redeveloped Television Centre.

Today Birdsall are a leading Heat Network O&M in London, operating 34 across the capital including district schemes.

Heat Networks now form a central pillar of the UK strategy to decarbonise the economy. The Government has set a target to increase the percentage of heat delivered by Heat Networks from 3% to 20%.

Heat Pumps



Heat Pumps reduce energy consumption and Co2 emissions compared to conventional systems and so they also form a central pillar of the UK strategy to decarbonise the economy.

Birdsall have been a specialist in Heat Pump technology since the 1970's, installing thousands across the UK.

In 2024 Birdsall established a dedicated specialist company called Birdsall Decarbonisation Ltd to provide heat pump services. The company specialises in commercial heat pump technology including; ground sourced, water sourced and air sourced heat pumps.

Energy Management

Effective Energy Management can play an enormous role in improving the efficiency of a building, reducing its carbon emissions and reducing its costs.

Birdsall are a leading voice and constant promoter of optimisation and have played its part in leading the industry towards improved energy management.

Since 2017 Birdsall have invested in R&D and introduced to the industry many optimisation service models.

Every year since 2017 Birdsall have exhibited at EMEX, the leading Energy Management Expo at Excel. Here we have promoted to the industry the benefits of optimisation and provided service models that can deliver it.

In September 2025 Birdsall will launch its latest range of optimisation service models called OM₂.



Net Zero



Net Zero

In 2022 Birdsall committed to Net Zero:

- Net Zero Pledge
- Net Zero Policy
- Net Zero Procedures
- Net Zero Audits
- Supply Chain to Net Zero
- Net Zero Services

Investment

Birdsall Net Zero investments include:

- Net Zero advisor
- Net Zero software
- Net Zero data administrator
- Fleet replacement
- Re-engineered working processes
- EMEX Net Zero

Decarbonisation



Decarbonising our economy is going to take a lot of work and investment to achieve.

To accomplish this goal will require companies like Birdsale to invest to deliver solutions.

In 2024 Birdsale established and invested in a new company to focus on delivering decarbonisation.

We called the company Birdsale Decarbonisation Ltd and it will become a specialist in the following:

- ✓ Commercial Heat Pumps (all types)
- ✓ Pre-constructed plant rooms
- ✓ Batteries & Storage
- ✓ Electric Boilers
- ✓ Solar Panels

Our initial objective is to commence decarbonising the heat networks we currently operate.

Optimised Heat Networks



With Heat Networks a central component of the Government's strategy to decarbonise the economy it is essential that they all operate efficiently.

Optimisation can play an enormous role in improving the efficiency of a heat network and therefore reduce both its carbon emissions and operational costs.

Birdsall have invested in a new optimisation service model for Heat Networks called OM₂ which will be launched in September 2025.

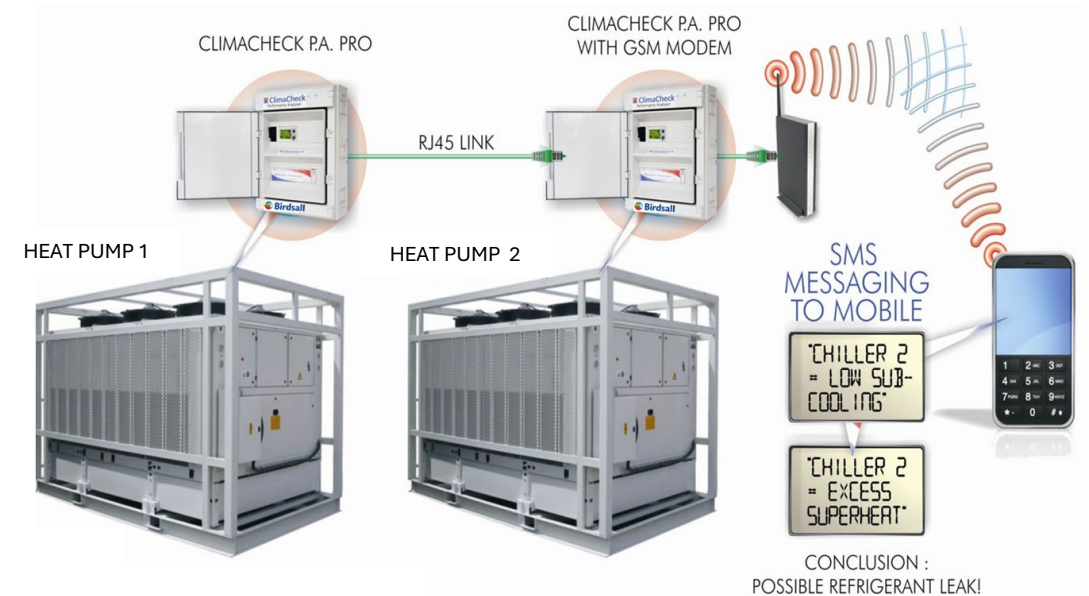
This innovative service model utilises the latest technology and will enable existing heat networks to improve their efficiency and meet new HNAS regulations which will come into law in 2026.

Optimised Heat Pumps

As we decarbonise buildings, heat pumps are today the preferred source of heating and cooling.

Effectively designing & commissioning a heat pump system enables it to be fully optimised.

Birdsall's new optimisation service model for heat pumps is called OPM and is suitable for all types and sizes of heat pumps.



Optimised Buildings



The majority of our public and commercial buildings in the UK are operated inefficiently.

Optimisation can play an enormous role in improving the efficiency of a building and therefore reduce both its carbon emissions and operational costs.

Birdsall have invested in a new optimisation service model for Buildings called OM₂ which will be launched in September 2025.

This innovative service model utilises the latest technology and will enable existing buildings to improve their efficiency and decrease their carbon emissions.



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