



## Mechanical & Renewables:

Efficiency, Decarbonisation & Lifecycle Performance





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Commercial buildings and public sector estates face increasing pressure to reduce emissions, manage energy costs, and improve system performance over time. Mechanical and renewable systems sit at the heart of this challenge - and opportunity. SOL Services helps clients navigate a fast-changing energy and compliance landscape by delivering heating, cooling, and ventilation systems that meet today's standards and support tomorrow's ambitions.







#### The Mechanical Backbone of Efficient Buildings

Heating, ventilation, and air conditioning (HVAC) systems play a crucial role in building performance, occupant comfort, and operational costs. But in outdated estates and commercial stock, legacy systems often underperform - resulting in wasted energy, inconsistent climate control, and maintenance headaches.

SOL Services works with public sector and commercial clients to upgrade these systems or install fully new mechanical plant tailored to the space, use case, and compliance needs.

#### Services include:

- Boiler and heating plant installations
- Chilled water and cooling systems
- Mechanical pipework, pumps, and control systems
- Pressurisation units, expansion vessels, and fan coil units
- BMS integration for intelligent building control
- Plumbing, hot water, and mechanical ventilation systems

By considering whole-building use and lifecycle costs, our mechanical design and installation services strike the right balance between energy performance, occupant needs, and budget control.









### Renewable Integration: Moving Beyond Gas

To hit net zero and ESG targets, many estates are phasing out gas-fired systems and replacing them with renewables. Our teams have supported commercial and public sector clients in deploying:

- Air Source and Ground Source Heat Pumps (ASHP / GSHP)
- Solar Thermal Systems for domestic hot water
- **Mechanical Ventilation with Heat Recovery (MVHR)**
- Hybrid and low-carbon heating solutions

We design renewable systems not just for headline emissions cuts - but for real-world deliverability: systems that reduce OPEX, qualify for grant support (e.g. PSDS), and are simple to maintain over 15–25 year lifecycles.













### **Smart Controls and System Integration**

Modern mechanical and renewable systems must interface with existing building management systems (BMS), occupancy sensors, and energy monitoring platforms. SOL Services delivers fully integrated systems, giving estates and facilities managers precise control over consumption, room comfort, and scheduling - all essential for compliance with new energy performance certificates (EPC) and SECR reporting.

#### Public Sector and Commercial-Ready

Mechanical and renewable upgrades often take place in live environments. Whether in healthcare, education, transport, or warehousing, SOL Services plans around operational constraints and delivers phased works to minimise disruption.

Our in-house design, install, and commissioning teams ensure that systems go live cleanly - and continue delivering value well beyond handover.

#### Decarbonisation is a Journey - Mechanical Systems Are a Key Step

As the built environment races toward net zero, mechanical and renewable systems become key enablers. Whether you're planning major refurbishments or starting with incremental upgrades, smart investment in these systems delivers carbon savings, cost efficiency, and long-term resilience.

SOL Services supports clients with integrated mechanical and renewable system delivery across the commercial, logistics, and public sectors. Our projects combine energy efficiency with real-world functionality, future-ready compliance, and robust lifecycle performance.





