

CASE STUDY

Reducing Emissions Through Efficient Refrigerant Recovery in Data Centre Retrofit



BACKGROUND

About the Customer

A leading technology solutions and services provider in Europe, headquartered in the United Kingdom. The company offers a broad portfolio of products and services, including data centre hosting, enterprise infrastructure and cloud infrastructure, among others.

About A-Gas

A-Gas is building a sustainable future through the supply of lower global warming refrigerants combined with responsible lifecycle management of refrigerant gases. Through our first-class recovery, reclamation, and repurposing processes, we capture refrigerants and fire protection gases for future re-use or safe destruction, preventing harmful release into the atmosphere.

Rapid Recovery®

Rapid Recovery is A-Gas' premier refrigerant recovery service. Across the globe, we provide a safe and fast on-site solution, which includes industry-leading F-Gas documentation.

CHALLENGE

A-Gas was engaged by a digital infrastructure provider operating an edge data centre in London to support the recovery of refrigerant and assist in the transition to a lower GWP solution.

The A-Gas Rapid Recovery team was contracted to recover a significant volume of R134a from four chillers scheduled for decommissioning.

These units were being replaced as part of a retrofit project involving the installation of new cooling equipment with a substantially lower GWP.

AT A GLANCE

Challenges

- Recovery of 1,745 kg of R134a from four decommissioned chillers.
- Need for high efficiency and minimal disruption in a sensitive data centre environment.
- Compliance with strict environmental and safety regulations.

Benefits

- Successful recovery, avoiding 2,495 tons of CO₂e emissions.
- Full reclamation to AHRI 700 standards, enabling reuse and supporting circular economy goals.

SOLUTION

A-Gas Rapid Recovery, an onsite refrigerant recovery service that operates up to 10 times faster than traditional methods, was appointed to assist with recovering the high GWP gas used at the data centre. The Rapid Recovery equipment is fully independent of external services such as power, is portable, and capable of reaching units across distances exceeding 300 feet through flexible hoses making it ideal for challenging locations.

This innovative solution proved perfect for the complex retrofit project, where efficiency was paramount. A-Gas' team of certified F-Gas engineers managed the full recovery process, enabling contractors to focus on other critical aspects of the retrofit, ensuring streamlined and timely project completion.



RESULTS

Over a four-day period, the A-Gas Rapid Recovery team successfully recovered 1,745 kg of R134a refrigerant, preventing the equivalent of 2,495 tonnes of CO₂e emissions. In addition, new chillers with a lower GWP were installed, significantly reducing the Total Equivalent Warming Impact (TEWI) of the cooling systems.

A-Gas' quick and efficient refrigerant recovery process ensured the project was executed without disruption to data centre operations, maintaining continuous service to customers and uninterrupted data security.

CONCLUSION

The recovered refrigerant was reclaimed to AHRI 700 standards, ready for safe reuse in the market. By ensuring full recovery and reclamation, A-Gas mitigated emissions from both leaks and the production of new refrigerants, supporting the principles of the circular economy, combining environmental protection with operational continuity.

**1,745 kg of R134a recovered and reclaimed,
equivalent to avoiding 2495 tons of CO₂e emissions.**