

CASE STUDY

A-Gas Rapid Recovery Helps Cut Carbon Footprint of Major Petroleum Supplier

BACKGROUND

About the Petroleum Supplier

As one of the world's largest suppliers of oil and gas, this leading petroleum supplier recognises the importance of providing more than just resources; they are focused on providing solutions. With a strategy focused on becoming net-zero by 2050, they are continuing to invest in reducing emissions throughout their operations and supporting low carbon business, products and services.

About Carter Synergy

Carter Synergy are a national provider of refrigeration, mechanical, electrical and core building services. As a business built on engineering excellence, Carter Synergy works with some of Britain's best-known businesses.

About A-Gas

A-Gas is the world leader in the supply and lifecycle management of refrigerants and associated products and services. 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.

For almost 30 years, A-Gas has supported our clients and partners on their environmental journey by supplying lower global warming gases and actively increasing the circularity of the industries we serve, building a more sustainable future.

CHALLENGE

With a focus on reducing emissions, the leading petroleum supplier appointed Carter Synergy to assist in reducing the carbon footprint across their nationwide sites.

Carter Synergy targeted the largest potential source of direct emissions; they devised a programme to remove the high GWP refrigerant that chills the food and drinks cabinets and cold stores on-site and replace it with a lower GWP, more energy-efficient alternative.



AT A GLANCE

Challenges

- Minimise business disruption by providing an efficient recovery service.
- Remove high GWP refrigerant and replace with lower GWP and more energy efficient alternative.

Benefits

- A complete refrigerant management solution providing product recovery and resupply.
- Recovery completed in half the time when compared to conventional recovery methods.



"We wanted to minimise disruption to store operations and complete the job in four weeks.

In place was an ambitious programme. Without A-Gas Rapid Recovery, the timeline would have doubled."

Ayaz Jabbar

Key Account Manager, Carter Synergy

With a need to recover refrigerant safely and efficiently with minimal disruption to operations, Carter Synergy appointed the A-Gas Rapid Recovery team to assist.

SOLUTION

The Rapid Recovery team obtained their SPA Safety Passport (a requirement for contractors working on service station forecourts) before work commenced, to ensure they were fully certified and aware of site safety and potential risk.

The work was undertaken Monday to Friday during normal trading hours. The team recovered approximately 45kgs of high GWP refrigerant from two cooling packs on each site – amounting to more than four tonnes in total – and replaced it with a lower GWP, more energy-efficient alternative.

Having the extra time as a contractor was very important to Carter Synergy. It gave them greater opportunity to troubleshoot and deal with any other issues on site should they arise. Employing A-Gas Rapid Recovery enabled the contractor to complete the task in hand very effectively and very quickly.

Recovered product is reprocessed at A-Gas to become fully reclaimed, AHRI certified product. Industry experts recognise that refrigerants saved from disposal and returned to use as reclaimed gas can make a direct contribution to reducing the carbon footprint of the industry by reducing the demand for new virgin material to meet supply. This saves on raw material usage, energy consumption and unnecessary transport normally associated with virgin production.

As suppliers of lower GWP refrigerants, A-Gas supported the project further and provided the contractor with the lower GWP, more energy-efficient refrigerant.



RESULTS

In one of the largest jobs tackled by A-Gas Rapid Recovery, refrigerant was recovered from 112 service stations across the country.

The project was completed in half the time compared to using conventional recovery machines to remove the refrigerant. Tools that make refrigerant recovery easier and quicken the process are valuable. The A-Gas Rapid Recovery, F-Gas compliant, on-site recovery service is a good example of how having the right equipment can make a real difference.

CONCLUSION

Choosing a lower GWP refrigerant and recovering the old gas achieved a significant reduction in refrigeration CO2 emissions for the leading petroleum supplier.

A-Gas Rapid Recovery has been on the UK market since 2017 and in that time has recovered refrigerants from hundreds of systems nationwide. This has helped customers switch from high GWP refrigerants to lower GWP alternatives.

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A-Gas effectively manages the complete lifecycle of refrigerants, from providing the recovery solution to supplying the lower GWP alternatives.