

CASE STUDY

Efficient Refrigerant Recovery from Decommissioned Construction Site Equipment



BACKGROUND

About the Customer

The customer is a global company that specialises in delivering innovative business solutions in structures and logistics including workforce housing, innovative modular facilities, construction, site support services, and logistics and operations management.

About A-Gas

A-Gas is a world leader in the supply and lifecycle management of refrigerants and associated products and services. Through its first-class recovery, reclamation, and repurposing processes, A-Gas captures refrigerants and fire protection gases for future re-use or safe destruction, preventing harmful release into the atmosphere.

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

CHALLENGE

At the completion of construction projects, the client collects and manages decommissioned equipment, such as air conditioning units and white goods from temporary construction site offices. The client needed to quickly process the decommissioned equipment for recycling and disposal to recover costs, as well as to prevent potential refrigerant gas leaks into the atmosphere.

AT A GLANCE

Challenges

- Efficiently manage large quantities of decommissioned equipment from construction site offices to recover costs and enable recycling and/or disposal
- Avoid refrigerant leaks into atmosphere from decommissioned equipment

Benefits

- Environmental: Over 50 tonnes of CO₂ equivalent was avoided by safely removing refrigerant.
- Operational Efficiency: Project was completed in half the time of traditional recovery machines allowing client to process equipment for disposal and recycling.



"When we're recovering refrigerant from a large amount of units, staging equipment side by side allows us to connect and recover up to 5 units at a time, saving time and costs for the client. We can recover so much faster than traditional recovery methods."

Rob Mason

Senior Field Sales Technician,
A-Gas Rapid Recovery, Australia

SOLUTION

The client commissioned A-Gas Rapid Recovery® to recover waste refrigerant gas from a large number of decommissioned construction site equipment.

The client received all ARCTick compliant documentation, including a detailed certificate of recovery showing the quantity and type of refrigerant recovered, as well as the equivalent CO₂ emissions avoided by safely recovering the refrigerant.

A-Gas Rapid Recovery® manages the recovered refrigerant for the client by providing pump down cylinders and returning the refrigerant to A-Gas' facility in Laverton, Victoria for processing.



A-Gas Rapid Recovery® can connect and recover up to five units at a time for efficiency, saving time and costs.



A-Gas Rapid Recovery® trucks are fully equipped with all the necessary equipment for fast and safe recovery.

RESULTS

285kg of refrigerant gas was recovered from over 80 decommissioned construction site units including air conditioners, highwall condensers and refrigerators. This avoided 50 tonnes of CO₂ equivalent from potentially being released to atmosphere.

Staging the equipment side by side enabled Rapid Recovery to connect and recover up to five units at a time. This enabled the project to be completed in half the time when compared to traditional recovery machines. The client was also able to efficiently process the decommissioned equipment for disposal and/or recycling once all refrigerant was removed.

CONCLUSION

Fully equipped A-Gas Rapid Recovery® trucks, utilising high-speed recovery technology delivers best practice recovery processes to ensure safe and efficient refrigerant recovery of end-of-life goods.

Safely recovering waste refrigerant from decommissioned equipment using modern technology and best practice recovery processes saves time and money, as well as mitigating the risk of potential leaks to atmosphere.

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Over 50 tonnes of CO₂ equivalent was avoided by safely removing refrigerant gas from decommissioned construction site equipment.