



EXECUTIVE SUMMARY

2014 — 2015

CHAIRMAN'S REPORT

Shortly after RRA celebrated 21 years in operation, we recorded our largest ever percentage increase in refrigerant returns. It was a strong indication of industry returning to normal following the repeal of the carbon price.

In 2014/15, 350 tonnes of refrigerant was recovered, rebounding 56 percent compared with the 224 tonnes taken back in 2013/14. The year's monthly average of 29 tonnes remains well short of the record 48 tonnes recorded between April 2011 and March 2012.

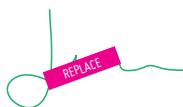
The spike in refrigerant prices caused by the carbon price and subsequent market uncertainty over the repeal, caused confusion and turbulence with dramatic knock-on effects for the stewardship scheme operated by RRA.

However, we are heartened by the recent strong recovery that proves the resilience of the stewardship scheme and the commitment of industry to the recovery and return of contaminated and unwanted refrigerant, the prevention of emissions, and compliance with environment protection regulations.

In the early days of RRA, the refrigerant in a car air conditioning system was responsible for more than 90 per cent the vehicle's lifetime greenhouse gas emissions, including the manufacture, disposal and fuel burnt. A kilogram of R12 refrigerant released at the end of the vehicle's life was the equivalent of 10 tonnes of carbon dioxide and could destroy 10 tonnes of stratospheric ozone. The air conditioning systems also leaked on average 30 percent a year – causing continual environmental damage.

Although most recovery operations yield less than a kilogram of refrigerant, the above example proves the importance of each and every kilogram that is sent for safe destruction.

Since 1993, RRA has safely destroyed over 5000 tonnes of refrigerant, equating to 10 million tonnes of stratospheric ozone saved and 10 million tonnes carbon dioxide equivalent (CO₂e) emissions prevented. All technicians, contractors, and wholesalers should be justifiably proud of their collective efforts to reduce the environmental impact of our industry.



John McCormack
RRA Chairman

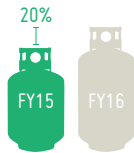
2014/2015 PERFORMANCE

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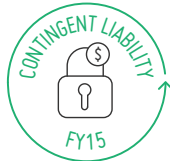
350 TONNES RECOVERED

in FY15 up 56 per cent. equivalent to 130,000 tonnes of stratospheric ozone saved and 620,000 tonnes of CO₂e prevented, bringing total since program began to 5397 tonnes.



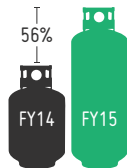
420 TONNES TARGET FY16

Bounce-back from carbon tax affected FY14 of just 224 tonnes led to projected FY16 growth of 20 per cent, bringing the annual target to 420 tonnes.



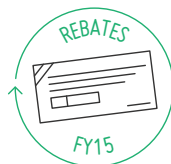
\$200M

RRA's estimated contingent liability



56% GROWTH

Recovery rebound post carbon tax: sharp volume increase in Q4 2014/15 contributed to 56% year-on-year growth in recovery for the financial year.

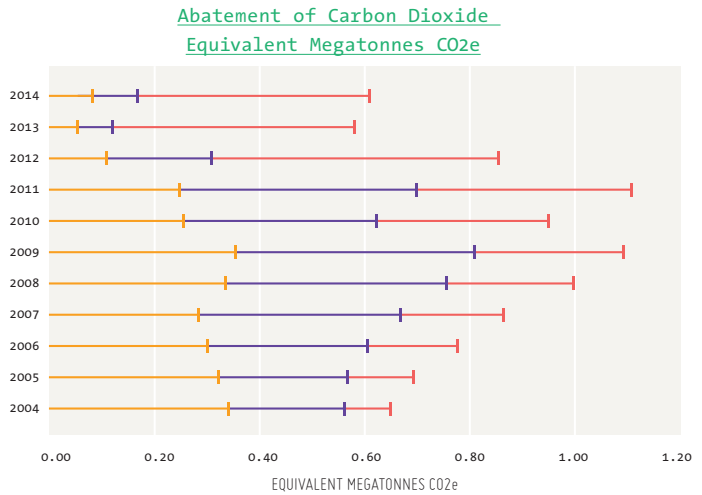
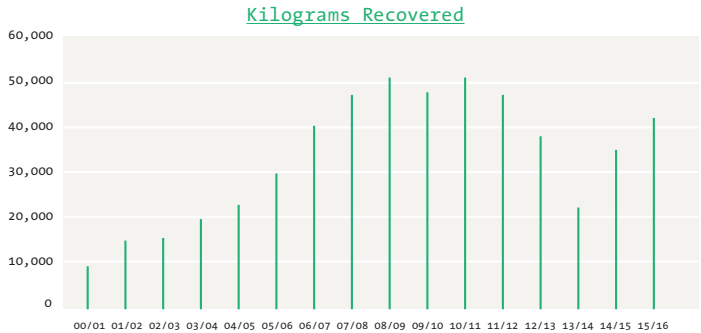


\$3.9M

Total rebates paid to industry, up 37% on last year.

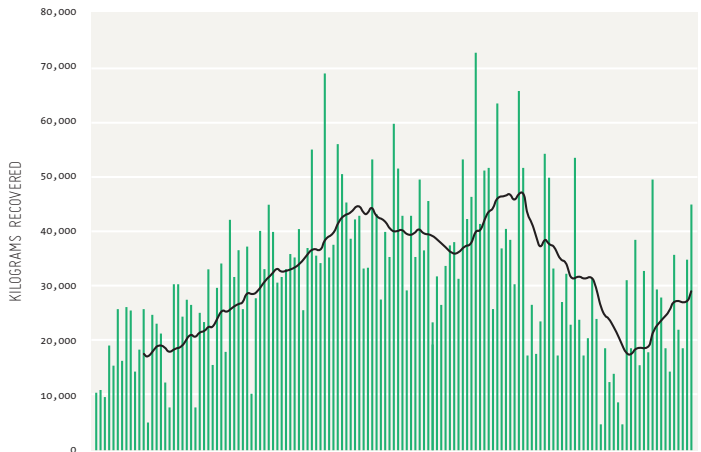
LONG-TERM PERFORMANCE

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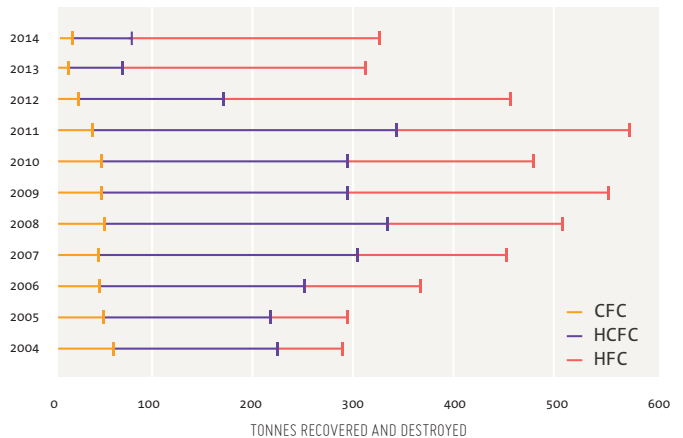


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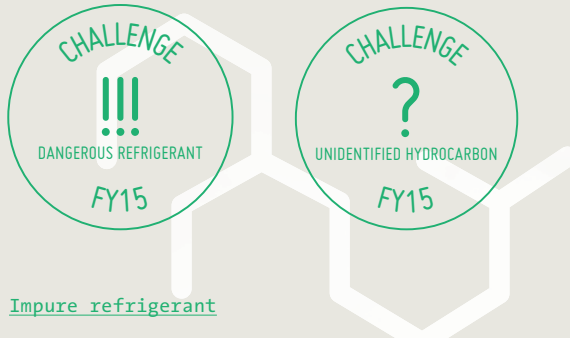
Monthly recoveries and trend from January 2004 to June 2015 12-month moving average trend



Refrigerant recovered and destroyed in tonnes



CHALLENGES



Impure refrigerant

The industry is facing unprecedented challenges caused by impurities entering the refrigerant bank through counterfeit or otherwise illegally imported refrigerants, and the proliferation of systems topped up with hydrocarbons.

A significant contributor to impurities in the refrigerant bank was the carbon price, which led to higher levels of retention, recycling, and reuse of refrigerants. Recovery cylinders that become contaminated propagate further contamination when used to service other systems.

It is no longer sufficient to assume the refrigerant in a system is pure, but while electronic identification equipment is readily available, investment in the technology is not widely considered as an essential part of a servicing toolkit.

Until that attitude changes by culture or regulation, the detrimental effects of contaminated refrigerant to equipment, performance and safety will continue to spread.

Misused and unlabelled hydrocarbon refrigerant

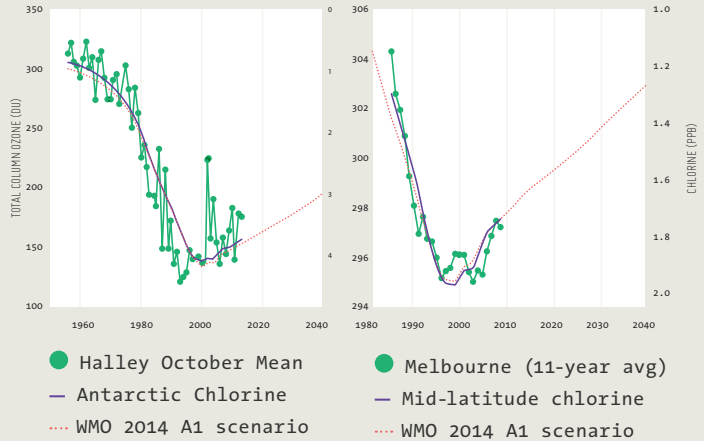
About five per cent of refrigerant sent for destruction is contaminated by hydrocarbons. Although the processing centre has been designed to destroy gas cocktails, the undetected recovery of hydrocarbons creates serious safety risks for everyone handling potentially flammable mixtures.

Most contractors and wholesalers do not have the right equipment to safely decant refrigerant contaminated with hydrocarbons. Until recently recovery cylinders were not rated for flammables and most in use still aren't. RRA must separately transport contaminated cylinders using costlier hazardous goods vehicles and work practices.

RRA encourages everyone to properly label systems and to be very wary of those where the content isn't known.

THE ATMOSPHERE

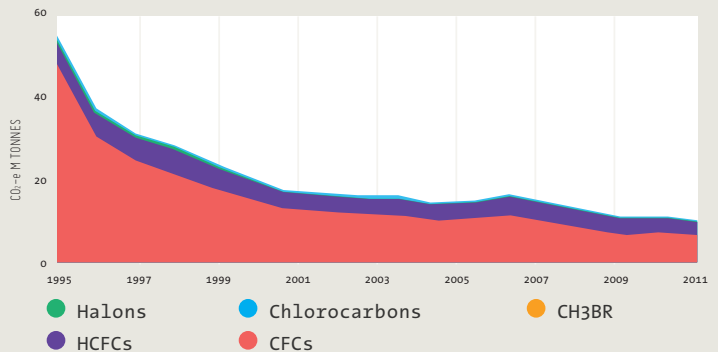
The phasing out of CFCs like R12 has resulted in a reduction in the destruction of the ozone layer. This means the 'Hole' will diminish over time and the level of harmful UV radiation will decline. The improvement can already be seen in testing undertaken by the CSIRO.



There is a similar good news story for the emissions of greenhouse gases – measured in carbon dioxide equivalent (CO₂e).

The phase out of CFCs and HCFCs, improvements to equipment and installations, the reduction in leakage rates, and the recovery and destruction of contaminated and unwanted refrigerants has produced a massive reduction in emissions by the refrigeration and air conditioning industry.

About 45 million tonnes of CO has been prevented from emission each year.



THE FUTURE

RRA faces a future on increasing costs and diminishing revenue. This is why a bank of funds has been built, to pay for recovery and destruction many years into the future.

The industry-wide move to low and zero GWP refrigerants will eventually reduce the revenue available to RRA and its ability to deal with residual gas recovered from servicing or decommissioning older equipment.

Lower leakage and higher rates of recovery will lead to continued growth with the annual volume exceeding 500 tonnes again in three years.

The rebound and strong expected annual growth in recovery rates demonstrates that refrigerant recovery has become an integral part of normal working practices in all Australian refrigeration and air conditioning sectors.

Better work practices and higher-quality equipment that leaks less results in more refrigerant in end-of-life equipment. To successfully prevent the emission of this residual refrigerant we will need to have better end of life management of equipment and motor vehicles.

Finally, RRA will need to change most of its processes and plant to become intrinsically safe to handle flammable refrigerants such as R32. The bank of flammable refrigerant is expected to grow to 20,000 tonnes in the next 10-15 years.



For more information, please
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