

# SYNTHETIC REFRIGERANT STEWARDSHIP PROJECT

## Stakeholder Consultation Report One: *Critique existing systems including product regulations*

### INTRODUCTION

A working group has been established to investigate how SGG refrigerants stewardship should look in New Zealand. It includes significant stakeholders who are industry groups and companies within the supply chain who would be directly or indirectly affected by declaration of synthetic greenhouse gas refrigerants as priority products under the Waste Minimisation Act 2008. This is the first report by the Working Group and outlines its findings about the:

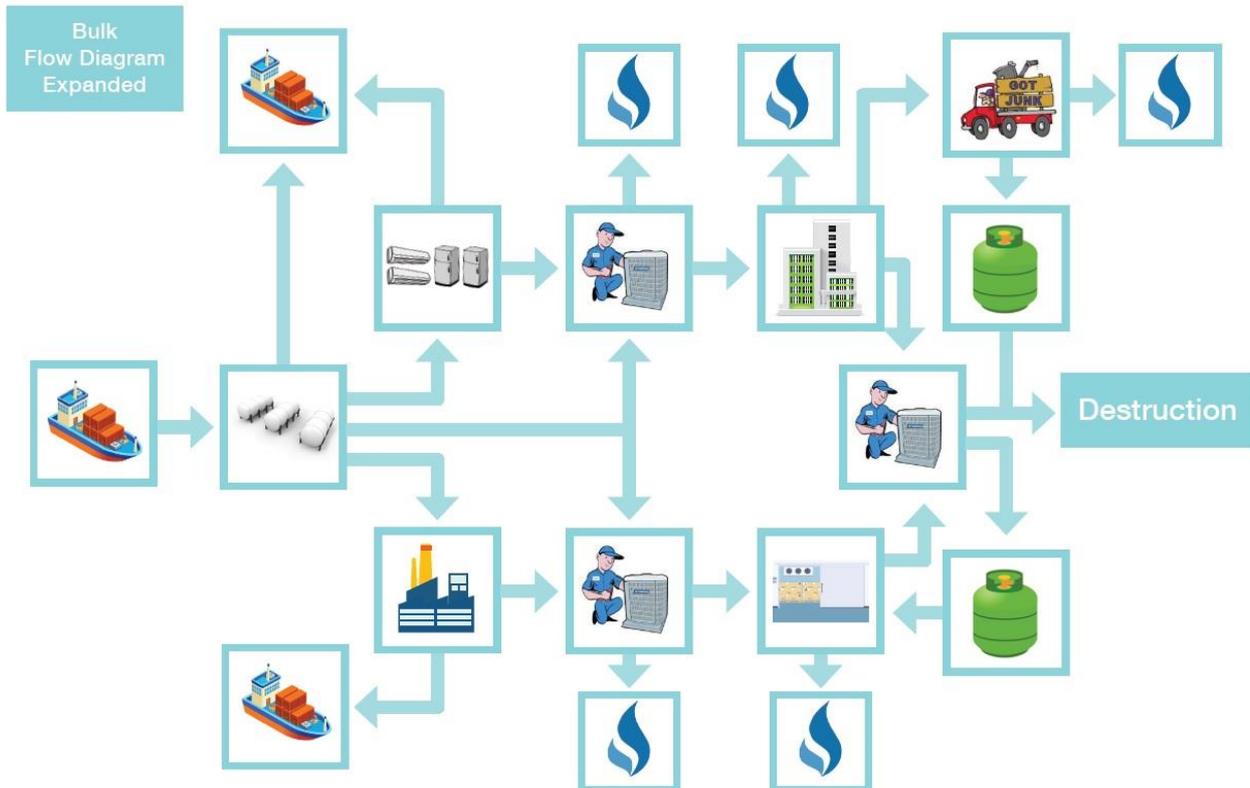
- Current life cycle of SGG refrigerants within New Zealand;
- Data that is currently available and would be needed for stewardship of SGG refrigerants; &
- Current legislative and regulatory controls on SGG refrigerants.

### SITUATIONAL ANALYSIS

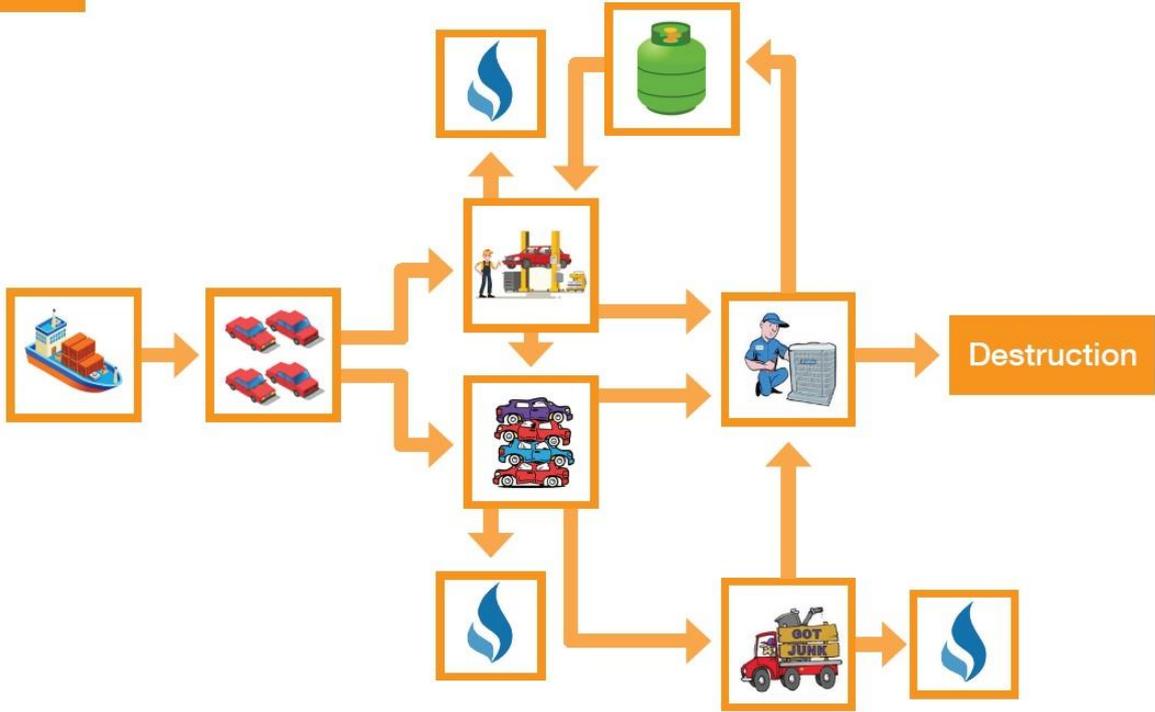
There is currently no production of SGG refrigerants within New Zealand so all SGG refrigerants are imported from overseas. There are three main import streams:

- Bulk
- Automotive (covering the air conditioning units of motor vehicles); and
- Pre-Charged (covering goods that use refrigerants such as fridges, dehumidifiers and heat pumps).

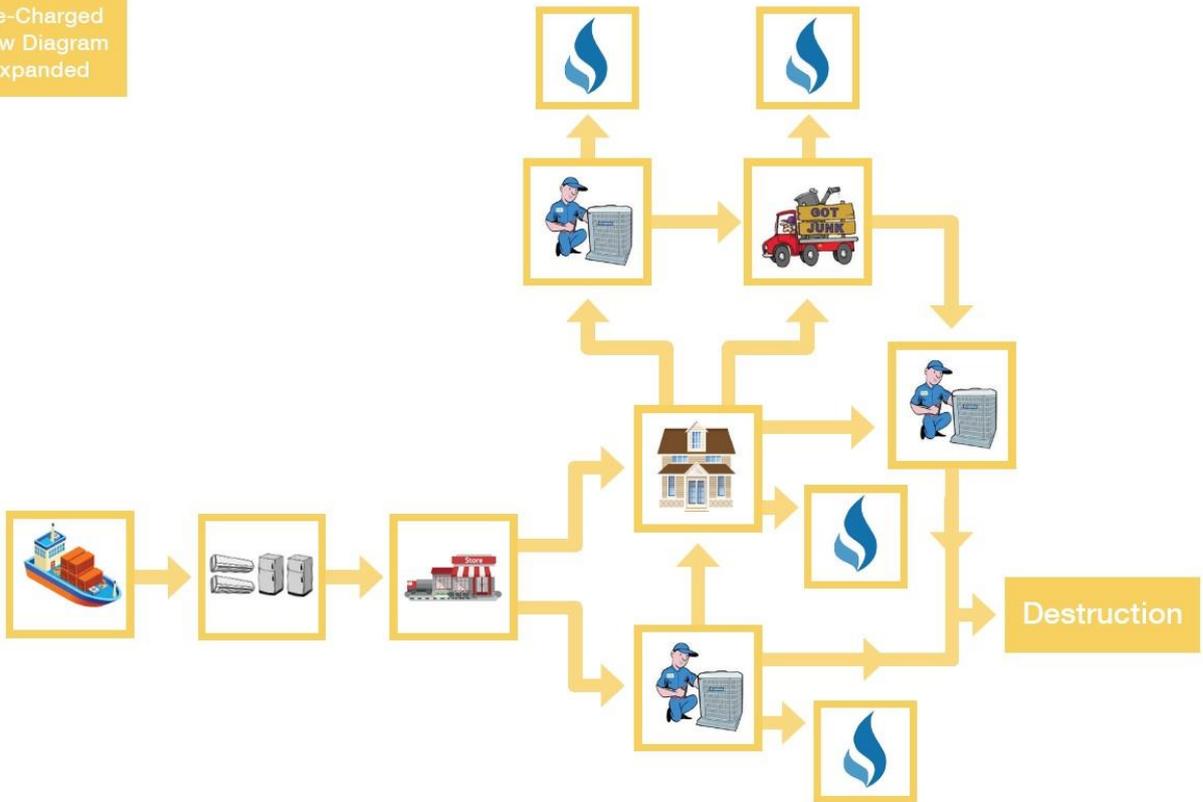
The following diagrams outline the process flows for each identified import stream.



Automotive  
Flow Diagram  
Expanded



Pre-Charged  
Flow Diagram  
Expanded



## DATA COLLECTION AND GAP ANALYSIS

Good data is essential for any successful product stewardship scheme. It enables the scheme to determine the size of the problem and develop strategies to effectively manage the environmental and human health impacts of products through its life cycle.

The Working Group has assessed the available data from the following sources and determined its suitability and what would be needed for a successful co-regulated product stewardship scheme(s):

- Environmental Protection Agency;
- Energy Efficiency and Conservation Authority;
- New Zealand Customs Service (via Stats NZ);
- Bulk Importers and;
- RECOVERY.

A key finding was that data for SGG refrigerants is conflicting and confusing due to it being collected and reported in differing years and by different agencies for different purposes. There appears to be little consistency when comparing one data set with another even though reporting of some of the data is required by law.

We have chosen to use the 2017 -2018 NZ Customs Service for bulk imports as it is comparable with data received from RECOVERY.

- This gives a net total of SGG refrigerants imported as **529,146 kg**.

For imported goods containing SGG refrigerants, we have used the EPA s250 report.

- This indicates there were **231,334 kg** of SGG levied refrigerant in pre-charged goods and **200,854 kg** of SGG levied refrigerant in imported motor vehicles.

Combining these three figures gives a total of **961,334 kg** of imported SGG refrigerants for the 2017-2018 year.

Given that RECOVERY dispose of less than **40,000 kg** per year which implies more than **920,000 kgs** of SSG refrigerant per year are either lost to the environment or form part of an increasing bank of SGG refrigerants that will need to be safely disposed in future years.

## REGULATION/LEGISLATION REVIEW

It is likely that SGG refrigerants will be declared priority product(s) and will be required to be part of a regulated product stewardship scheme that would seek accreditation by the Minister for the Environment. The act of declaring a product “priority” doesn’t in itself require business and organisations to participate in product stewardship, the regulations in relationship to the products imported and distributed do. (refer WMA 2008 Section 23).

Therefore, it is important to understand what regulatory/legislative controls are currently in place, understand the gaps and consider what regulatory controls may be required to ensure the success of any future regulated product stewardship scheme(s).

Below is the list of legislation, regulation and controls that are considered to impact the management of SGG refrigerants within New Zealand and were reviewed for this section. Note: We have not listed legislation that would control the general activities of a commercial operation.

### Current regulatory (rule or directive by an agency) controls:

- Climate Change (Other Removal Activities) Regulations 2009 (CCORAR)
- Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 (CCSGGLR)
- Hazardous Substances Disposal Notice 2017 (HSDN)
- Health and Safety at Work (Hazardous Substances) Regulations 2017 (HSWHSR)
- Ozone Layer Protection Regulations 1996 (OLPR)

### Current legislative (in law) controls:

- Climate Change Response Act 2002 (CCRA)
- Hazardous Substances and New Organisms Act 1996 (HSNO)
- Health and Safety at Work Act 2015 (WSWA)
- Land Transport Act 1998 (LTA)
- Ozone Layer Protection Act 1996 (OLPA)
- Resource Management Act 1991 (RMA)
- Waste Minimisation Act 2008 (WMA)

## CONCLUSIONS AND RECOMMENDATIONS

The recommendations below are suggestions of what would need to be implemented to ensure an effective SGG refrigerant stewardship scheme

1. **Data Management:** Currently there is a requirement for multiple parties to collect, maintain and provide information on refrigerants under their management but this requirement does not cover the whole lifecycle and only relates to the collection of levy money. For a successful product stewardship scheme there should be a requirement for all to maintain records and ensure they use suitably qualified and competent persons.
2. **Advanced Disposal Fee:** There is currently no requirement to charge an Advanced Disposal Fee on refrigerants. This would be essential for any scheme and should be set at a rate that ensures the collection, storage, management and promotion of the scheme and the safe destruction of the collected refrigerants.
3. **Training and Qualifications:** There are requirements for persons in control of a business or undertaking to ensure that persons undertaking work with refrigerants are suitably trained and qualified. However, this does not appear to extend to installations undertaken outside of a place of work such as a home owner installing their own heat pump. Given the risks to the environment that unintentional releases of SGG refrigerants can have, it is considered that this should be addressed.
4. **Equipment standards:** As with training and qualifications, there are requirements on equipment used for gases under pressure that apply in a place of work. However, again this does not appear to extend to other locations.
5. **Prohibition of intentional discharges:** There are controls that prohibit the intentional release of SGG refrigerants. However, it does not cover the whole lifecycle of the gases and provides potential loopholes that could enable intentional discharges in some situations.
6. **Recycling controls:** There are no specific controls on recycling or reuse. Therefore, controls should be developed to ensure that the recycling and reuse of SGG refrigerants is undertaken in a manner that minimises the risks to the environment whilst not impeding the requirement to phase out and phase down those SGG refrigerants that are ozone depleting and have a high GWP.
7. **Collection locations/services:** There are currently no controls on the location of collection points or services to safely collect and dispose of SGG refrigerants, it is important that access to collection points and services are available in locations that enable participation in the scheme.
8. **Storage controls:** It is considered that there are sufficient controls on the storage of SGG refrigerants.
9. **Safe destruction:** It is considered that there should be a requirement to ensure that all unwanted SGG refrigerants are safely destroyed in a manner that eliminates or significantly reduces their global warming potential.

## CONSULTATION QUESTIONS

The working group is interested in hearing your views on the stewardship of SGG refrigerants.

Below are a series of questions they are seeking your views on.

You can either respond via email to [darren@3R.co.nz](mailto:darren@3R.co.nz) or complete the questionnaire online at <https://www.surveymonkey.com/r/SGGconsultation1>

1. Given the significant potential climate change impact that synthetic greenhouse gas refrigerants pose, do you consider that all SGG refrigerants should be part of a co-regulatory product stewardship scheme?
2. Do you think a co-regulatory product stewardship scheme for SGG refrigerants should consider a rebate scheme to encourage engagement by end users?
3. Do you think a co-regulatory product stewardship scheme for SGG refrigerants should include regulatory controls on installation including the requirement for all installers to be qualified?
4. Do you think a co-regulatory product stewardship scheme for SGG refrigerants should include a regulatory requirement for parties to maintain records of disposal?
5. Are you aware of other data sources that could help in providing a clearer picture of SGG refrigerant use in New Zealand?
6. Do you have any other comments you would like to share?
7. If responding by email please ensure you include the following contact details:

Name

Title

Organisation

Email address