Australian Government

Department of Climate Change, Energy, the Environment and Water

AUSTRALIAN REFRIGERATION COUNCIL

ANNUAL REPORT 2024-2025

OPSGG Management Permit Scheme

Contents

Introduction

This report outlines the practical implementation of the Refrigeration and Air Conditioning (RAC) permit scheme, delivered under the *Ozone Protection and Synthetic Greenhouse Gas Management Program*. The program licenses technicians who handle prescribed substances (refrigerants) or work on equipment designed for, or containing, these substances.

The ARCtick permit scheme (referred as the permit scheme throughout the report), now in its 20th year, supports over 113,000 licensed technicians and businesses, contributing to significant reductions in carbon dioxide equivalent emissions – over 24.37 Mt CO_2-e to date, with a further 58.02 Mt CO_2-e projected by 2030[1].

Since its inception in 2005, the Australian Refrigeration Council (ARC) has administered the scheme on behalf of, and in partnership with, the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

As Australia transitions to a low-emissions economy, the ARC remains committed to strengthening the co-regulatory model that underpins the permit scheme. This report serves as a record of the ARC's stewardship, operational excellence, and its vital role in supporting national and international environmental and productivity goals.

The Montreal Protocol, signed in 1987, was established in response to alarming scientific evidence that certain human-made chemicals – especially chlorofluorocarbons (CFCs) – were depleting the Earth's ozone layer – the protective layer shielding life from harmful ultraviolet (UV) radiation. Its degradation posed serious risks to human health, agriculture, and ecosystems.

The Protocol aimed to phase out the production and consumption of ozone-depleting substances through international cooperation. It is widely regarded as the most successful environmental treaty in history, with every United Nations member state participating. Recent research indicates the ozone layer is now on track to recover to 1980 levels by 2065 to 2088.[2]

Australia responded to the Montreal Protocol by enacting the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995*. The Australian Refrigeration Council (ARC) evolved from National Refrigeration and Air Conditioning Council (NRAC) to administer the permit scheme in 2005.

1 Brodribb P, McCann M, Report Prepared for the Department of the Environment, (2015), Assessment of environmental impacts from the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.

2 Krummel PB, Trudinger CM and Fraser, PJ, (2025), The 2024 Antarctic Ozone Hole Summary.

From its inception, the ARCtick permit scheme was world leading and incorporated both ozone depleting substances and synthetic greenhouse gasses. Today, the scheme is delivered via a coregulatory cooperation between the Australian Refrigeration Council and The Department of Climate Change, Energy, the Environment and Water. The ARC plays a pivotal role as the peak industry body, with a broad membership spanning the refrigeration and air conditioning sector. This collaboration is key to the scheme's continued success.

The permit scheme is an integral element of the overall product stewardship scheme for prescribed substances (refrigerant); other key elements include import/ manufacture licensing by the Government and reclamation and destruction of through Refrigerant Reclaim Australia (RRA).

The ARC delivers the scheme through a targeted mix of initiatives: licensing for businesses and technicians, education-first compliance audits, support for vocational training, and consumer engagement via publications, digital platforms and campaigns.

In 2024–25, the ARC processed over 60,000 licence applications, maintained high service standards with over 70% of applications assessed within 7 days, and expanded digital automation to improve efficiencies. These efforts contribute to the recovery of the ozone layer and have helped prevent millions of cases of skin cancer and cataracts in Australia[3]. The Protocol also laid the foundation for further climate action, including the inclusion of hydrofluorocarbons (HFCs) under the Kigali Amendment. Its success demonstrates the power of science-based policy and global collaboration in addressing environmental challenges.

Together, these efforts reflect ARC's ongoing commitment to environmental stewardship, industry advancement, and public trust, ensuring the permit scheme continues to evolve in step with Australia's climate goals and global best practice.

3 Brodribb P, McCann M, Report Prepared for the Department of the Environment, (2015), Assessment of environmental impacts from the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.

From the Chair

This 20th year marks a significant milestone for the Australian Refrigeration Council as we celebrate 2 decades of administering the Refrigeration and Air Conditioning industry permit scheme. Since its inception in 2005, the scheme has grown into a cornerstone of Australia's environmental stewardship, supporting over 113,000 licensed technicians and businesses.

In 2024–25, ARC experienced its busiest year on record, processing over 60,000 licence applications and achieving the highest annual growth in new licences since the scheme began. This surge reflects the RAC industry's expanding role in Australia's transition to a low-emissions economy and the increasing demand for skilled professionals in climate control technologies.

The ARC's commitment to service excellence and innovation was evident in the rollout of automated licence renewals, which reduced average assessment times by 56.7%, from 6 days to just over 2.5 days. These efficiencies have enhanced the experience for permit holders and allowed ARC to maintain high service standards despite record volumes.

Compliance and education remain central to ARC's mission. This year, the ARC conducted over 9,000 audits, expanded its field engagement team, and achieved a 98% compliance rate among RTA holders within 90 days of being audited.

The RAC workforce continues to evolve, with strong growth in trainee licences and increasing participation from women and entrants of all ages. ARC approved over 8,000 new trainees this year – the highest ever – underscoring the sector's vitality and future-readiness.

Further, ARC's communications strategy reached new heights, with over one million emails sent to permit holders, record engagement across our websites, and national recognition for our consumer campaigns.The 'Look for the Tick' initiative continues to empower consumers to choose licensed professionals, reinforcing the value of the ARCtick brand.

The ARC remains steadfast in its commitment to protecting the environment protection, supporting industry, and the highest standard of regulatory compliance and consistency. The success of the RAC Industry permit scheme is a testament to the power of co-regulation, collaboration, and the dedication of thousands of professionals across Australia.

Thank you to our board members, stakeholders, partners, and the Department of Climate Change, Energy, the Environment and Water for continued support. Together, we are building a safer, cleaner, and more sustainable future.

Dr Greg Picker

Chair, Australian Refrigeration Council

The RAC industry at a glance

Refrigeration and air conditioning work involves the design, installation, commissioning, maintenance, repair and decommissioning of air conditioning and refrigeration systems in stationary (commercial and split systems) and automotive settings.

Increasingly referred to as the climate control industry, it is made up of businesses and supporting organisations supplying refrigeration and air conditioning products and services to the commercial, domestic and automotive industries. This has a diverse range of settings including food production, healthcare, office blocks, public transport, hospitality, retail, data centres, mining, manufacturing, agriculture, pharmaceuticals, and cold chain logistics.

90,996
Refrigerant Handling Licences

22,357
Refrigerant Trading Authorisations

Over 50 across more than 80 locations
Registered Training Organisations

Industry figures[4]

Economic impact

- RAC industry energy spends $18.9 billion
- New equipment $12.7 billion
- 1 in 117 registered businesses hold an RTA

Employment

- 378,000 jobs, 2.6% of Australia's workforce
- Equipment stock: ~54 million units in 2016 to ~62 million in 2022
- Refrigerated vehicles: ~38,000 to ~59,000

Emissions

- Total RAC emissions: ~58.5 Mt CO_2-e
- Direct emissions (refrigerant leakage): 6.9 Mt CO_2-e
- Indirect emissions (energy use): 51.6 Mt CO_2-e
- Share of national emissions: ~12.6%
- End-of-life emissions: ~4.9 Mt CO_2-e
- Combined total (including EOL): ~63.4 Mt CO_2-e

Electricity consumption

- Total RAC electricity use: 66,700 GWh
- 24.4% of national electricity production
- Breakdown:
  - Stationary AC and heat pumps: 56%
  - Cold chain (excl. domestic): 30%
  - Domestic refrigeration: 13%
  - Mobile AC: 0.3%

Refrigerant bank

- Estimated 55,000 tonnes, ~100 million tonnes CO_2-e value.
- Composition:
  - HFCs: ~95% of the bank
  - HCFCs: ~3.7% (declining)
  - Natural refrigerants (HC, CO_2, ammonia): growing rapidly
- Largest contributors:
  - Stationary AC and heat pumps: 65%
  - Mobile AC: 20%
  - Cold chain (excl. domestic): 13%
  - Domestic refrigeration: 2%

Table 1: RAC industry's economic scale, emissions, energy use, and refrigerant bank in Australia

4 Brodribb P, et al., (2024), Cold Hard Facts 4.

What the permit scheme delivered in 2024-25

Part 1

Growth in licensing and permit activity

Licensing being competency based provides for quality installations as only trained and knowledgeable technicians undertake RAC work. The 2024–25 financial year was one of the busiest years on record for licensing, reflecting significant growth in the RAC industry.

The network continues to grow

Licence holders have the option of 1, 2 or 3 year renewals, with selections trending towards one year. The ARC's customer service team has processed a record high of **60,538 approved** applications in 2024–25, resulting in:

90,996
Current Refrigerant Handling Licences (RHLs), and

22,357
Refrigerant Trading Authorisations (RTAs)

14,181
The highest ever growth experienced in one year[5]

Growth was highest in automotive at **7.8%** and trainee licence holders also showed great growth, proving the future of the industry is strong.

Every RAC industry operative is an environmental steward

Greater consumer awareness of the ARCtick scheme, and an increasing commitment to the need for environmental stewardship by climate industry technicians is delivering results for the environment.

Rapid uptake of automated renewals

The ARC introduced automated renewals for RHLs this year with immediate impact. The ARC estimates an automatic renewal can take as little as one minute to be approved.

5 This represents the highest recorded year of growth to date, excluding the scheme's initial year, for which complete data may not accurately reflect growth trends or provide a reliable basis for comparison.

Permit numbers overview

Number of RHLs by state/territory

State/Territory	Number of RHLs	Population	RHLs per 1,000 persons
NSW	20,867	8,545,100	2.44
VIC	15,409	7,011,100	2.20
QLD	25,996	5,618,800	4.63
WA	17,114	3,008,700	5.69
SA	7,014	1,891,700	3.71
TAS	1,857	575,800	3.23
ACT	964	481,700	2.00
NT	1,729	262,200	6.60
International	16	N/A	N/A
National	90,966	27,400,000	3.32

Table 2: Number of RHLs by state/territory and per capita basis

Queensland has the highest number of RHLs at **25,996**, with NSW second at **20,867**.

On a per capita basis, however, New South Wales and Victoria, which have the 2 highest populations at 8.1 million and 6.7 million respectively, both average under **2.5 RHLs per 1,000 persons**. In contrast, states with smaller populations – such as Western Australia, South Australia and, especially, the Northern Territory – show much higher RHL density.

- **Northern Territory** leads the nation with **6.60 RHLs per 1,000 people**, nearly 3 times the rate of NSW and VIC.
- **Western Australia** follows closely with **5.69**, and **Queensland** with **4.63**.
- Even **South Australia** and **Tasmania**, with smaller populations, maintain higher-than-average densities at **3.71** and **3.23**, respectively.

This suggests that while the absolute number of licence holders is highest in the more populous states, the **per capita demand for refrigeration and air conditioning services is higher in less populated or more climate-challenged regions**. This pattern may be attributed to factors such as hotter climates, greater reliance on air conditioning, greater mining and industrial infrastructure and the spread of regional and remote communities.

The **Northern Territory's high per capita rate** may also reflect the need for skilled technicians in remote areas where infrastructure is more dispersed and self-sufficiency is critical.

Number of RHLs by licence type

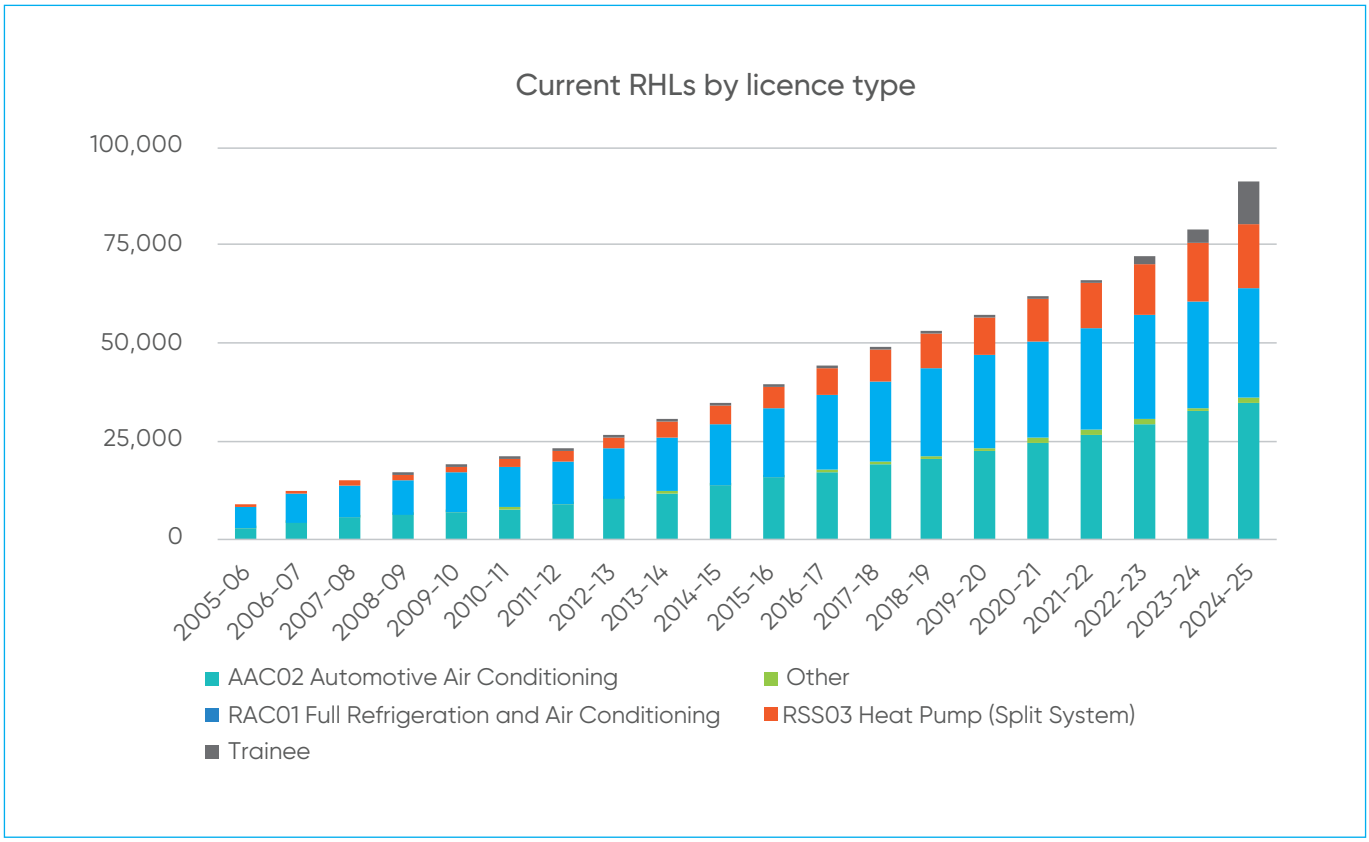

Figure 1: Current RHLs by licence type, 2005–06 to 2024–25

The total number of RHLs has steadily increased, passing 90,000 in 2024–25. Analysis shows growth across all licence types, with particularly strong growth in Heat Pump (Split System) licences.

1. **Rising demand for split system installations:** Sales of split systems continue to grow, with 1.14 million single split systems, 36,000 multi-split systems and 200,000 small self-contained units sold in 2022[6]. 94% of new split system imports contained HFC-32, which requires an ARCtick licence to install. With sales projected to grow at a compound annual growth rate of 4% till 2036, demand for licensed RAC professionals in this area is expected to remain strong.
2. **Emerging opportunities in new technologies:** Innovation in thermal management systems used in battery storage, electronics and other energy transition technologies is creating new demand for RAC skills in commercial and industrial settings.
3. **Prevalence of vehicle air conditioning:** Almost every vehicle on the road today is equipped with an air conditioning system, and the number of cars in Australia continues to rise. This creates a substantial demand for automotive air conditioning services.
4. **Upskilling opportunities:** For existing licenced automotive technicians, the AAC02 licence is a desirable option for upskilling. It allows them to offer a broader range of services after completing a relatively shorter course compared to that for the RAC01 licence.

6 Brodribb P, et al., (2023), Heat pumps - Emerging trends in the Australian market.

Number of RTAs by state/territory

State/Territory	Number of RTAs	Active Businesses[7]	RTAs per 1,000 businesses
NSW	6,015	896,461	6.71
VIC	4,373	737,877	5.93
QLD	6,194	510,440	12.13
WA	3,239	255,384	12.68
SA	1,585	164,512	9.63
TAS	305	44,033	6.93
ACT	211	36,313	5.81
NT	435	16,369	26.57
National	22,357	2,661,389	8.40

Table 3: Number of RTAs to number of active businesses by state/territory

While the total number of Refrigerant Trading Authorisations (RTAs) is highest in Queensland and New South Wales, a more insightful picture emerges when we compare the number of RTAs to the number of active businesses in each state or territory.

- **Northern Territory** stands out with **26.57 RTAs per 1,000 businesses**, the highest in the country. This suggests a strong concentration of RAC businesses relative to the overall business landscape – likely due to the need for self-sufficiency in remote areas and the climate-driven demand for cooling systems.
- **Queensland and Western Australia** both record over **12 RTAs per 1,000 businesses**, above the national average. This aligns with their large mining, industrial, and regional service sectors, which rely heavily on refrigeration and air conditioning infrastructure.
- **New South Wales** and **Victoria**, despite having the highest number of total RTAs, sit lower in per-business terms at **6.71** and **5.93**, respectively.
- **ACT (5.81)** has the lowest RTA density, which may reflect the smaller population, cooler climate, or fewer industrial sectors requiring large-scale refrigeration services.

7 Australian Bureau Statistics, (2024), Counts of Australian Businesses, including Entries and Exits.

Number of RTAs by industry segment

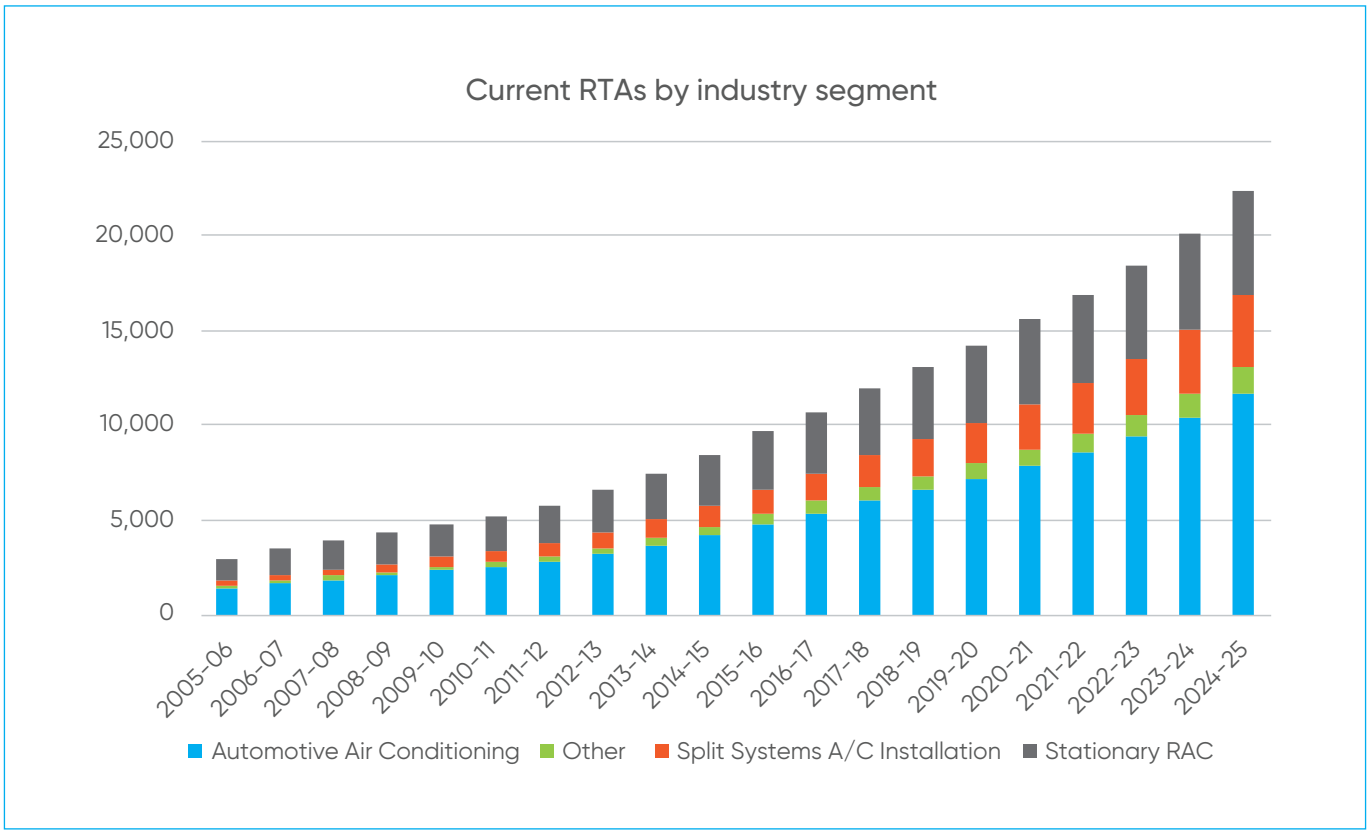

Figure 2: Current RTAs by industry segment, 2005–06 to 2024–25

RTAs by industry sector shows a similar story to RHLs by licence type – that the bulk of the composition of RTAs is made up of automotive, RAC and split systems industry sectors.

These 3 sectors contain over **94%** of the current RTAs, with other, smaller, specialised sectors such as aviation and marine together come to just under **6%**. Automotive has the largest number of current RTAs, making up over **52%** of all current RTAs.

Permit trends

2024–25 financial year saw another very strong year of growth in RTA and RHL numbers, repeating the growth trend recorded the previous financial year. In total, **14,181** new RHL and RTA licences were issued with a total of **60,538** approved applications over the year, the highest year on record.

Yearly growth of RHLs

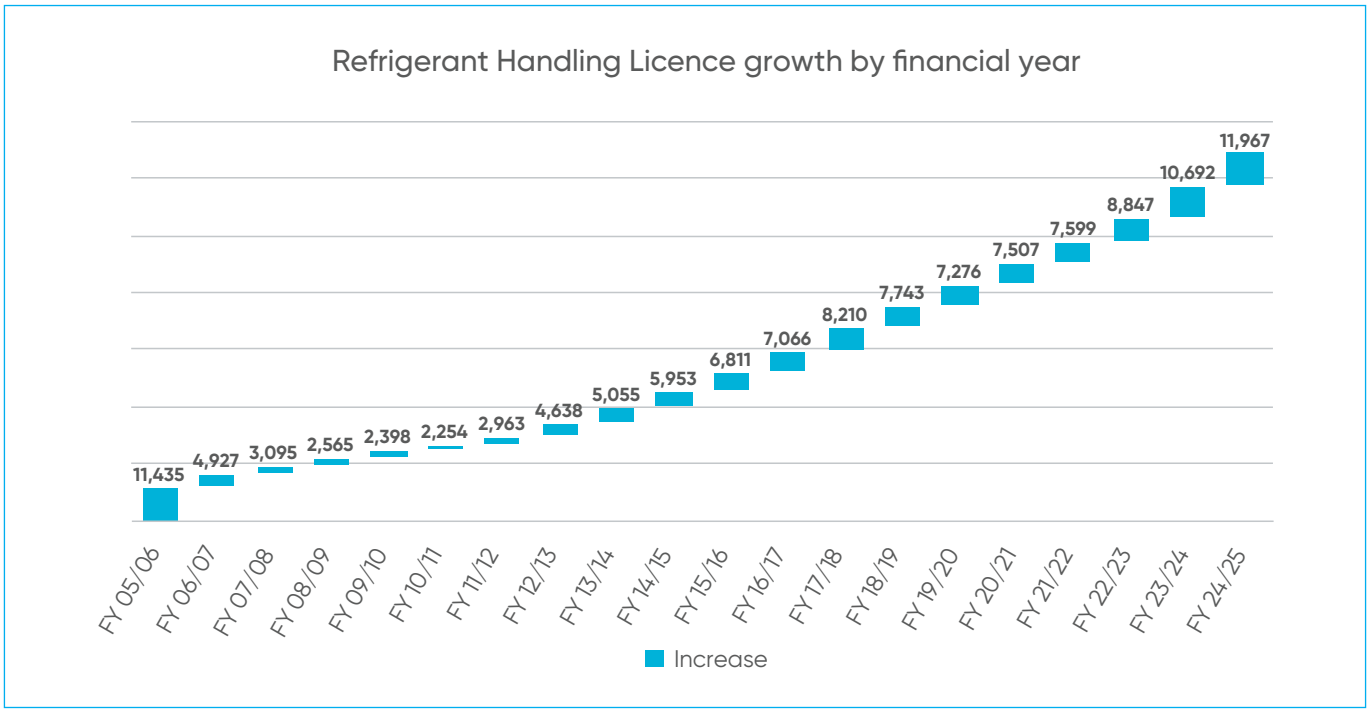

Figure 3: RHL growth by financial year, 2005–06 to 2024–25

2024–25 financial year saw the best growth year since the inception of the scheme, with **11,967** new Refrigerant Handling Licences joining the RAC industry. This is an increase of **11.9%** on the previous financial year.

Yearly growth of RTAs

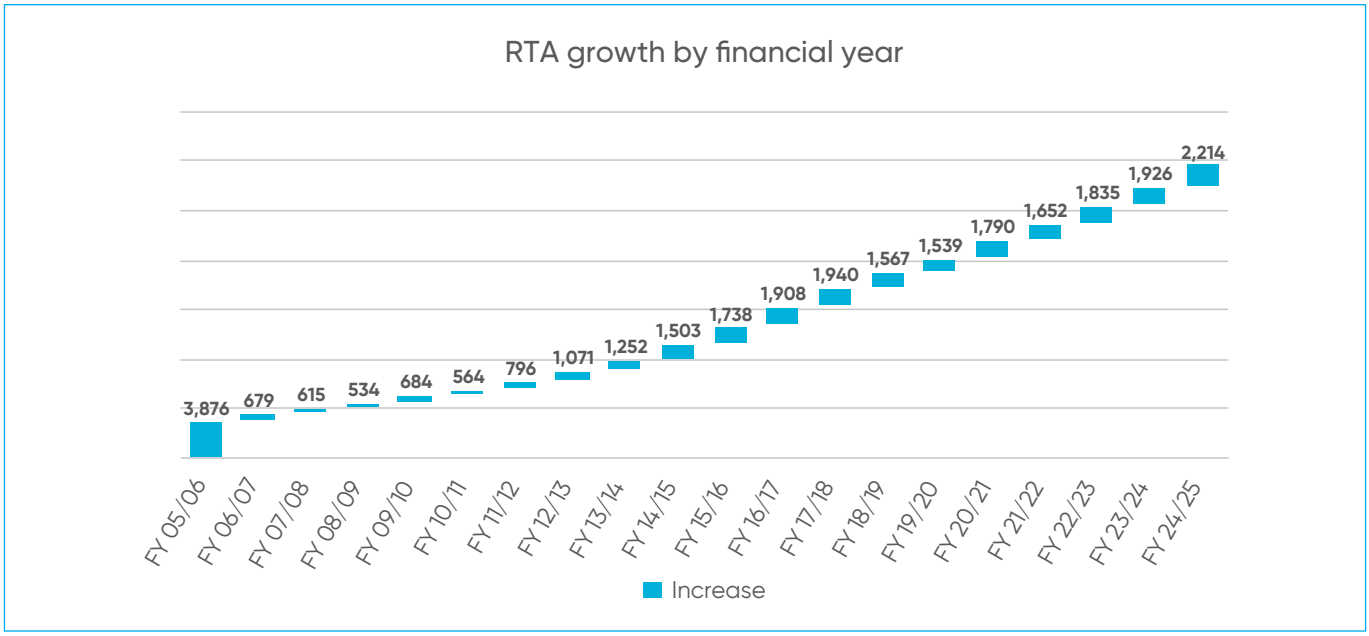

Figure 4: RTA growth by financial year, 2005 – 06 to 2024–25

In the 2024–25 financial year, **2,214** new RTAs joined, marking an increase of **14.95%** on the previous year's growth and represents **9.9%** of all current RTAs. The steady growth shows continuing demand for the refrigeration and air conditioning industry.

Demographic analysis

RHLs by age

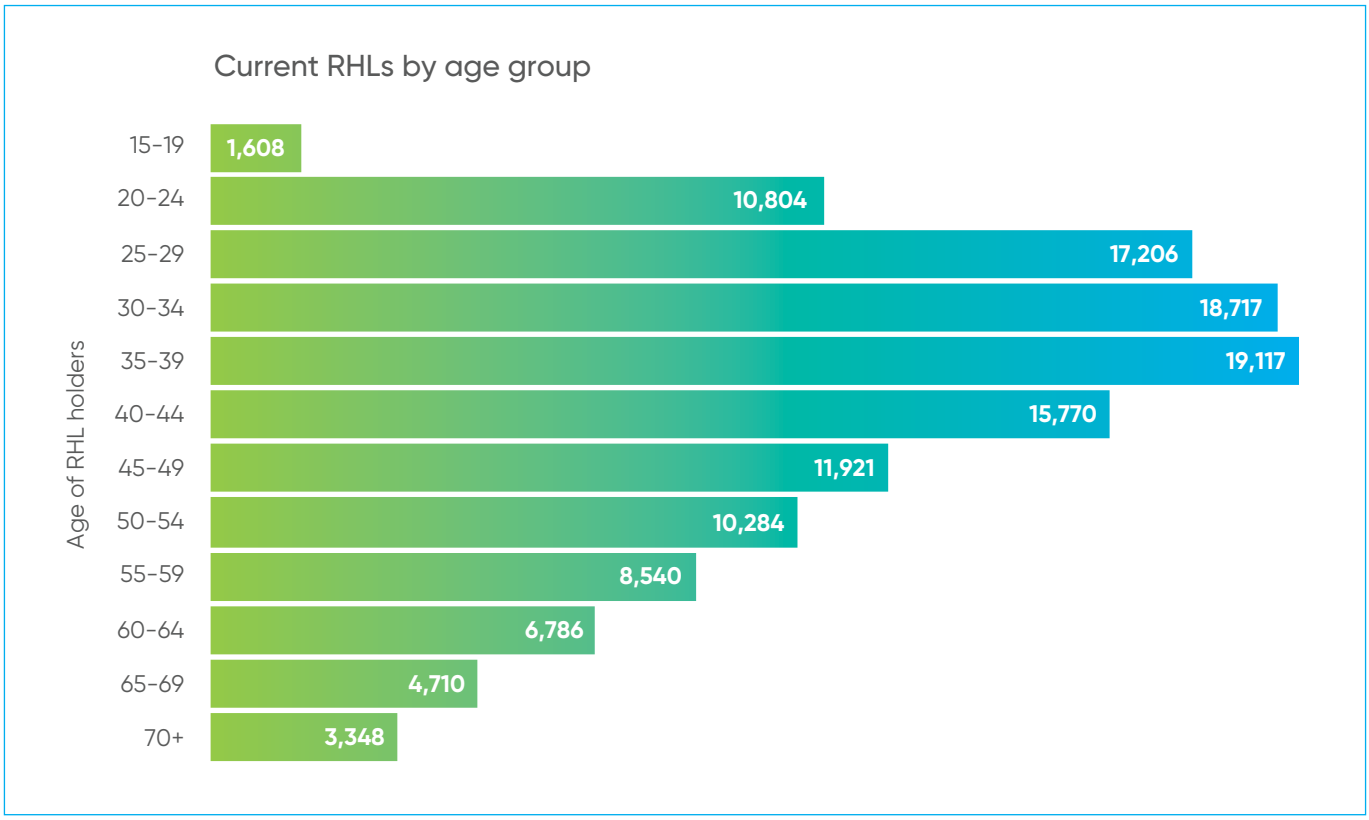

Figure 5: Current RHLs by age group in 2024–25

More than half of the RAC licence holder workforce is under the age of 40, highlighting a strong presence of professionals in their prime working years. This demographic trend reflects a younger and more dynamic workforce than commonly perceived. The largest age group is 30 – 39, making up **30%** of all licence holders, with a further **23%** under 30. Meanwhile, **11.5%** of licence holders are aged over 60, showing that the industry continues to retain experienced professionals maintaining an identity and connection with the industry later in life.

Growth in licences held by women

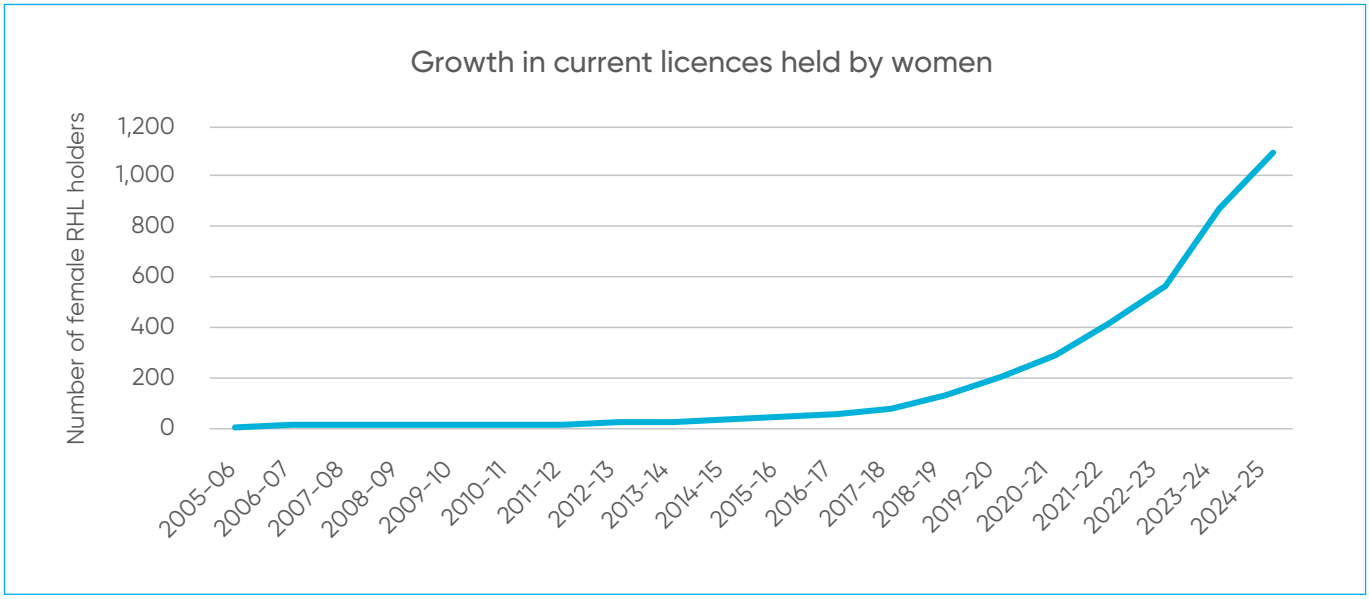

Figure 6: Growth in current numbers of female licence holders over last 20 years

Over the past 5 years, the number of female licence holders has grown at a rapid pace – more than tripling in size. This surge, though still representing a small proportion of the overall workforce, signals a meaningful shift in industry dynamics and growing interest among women in refrigeration and air conditioning careers.

Understanding the gender balance in licence numbers is critical for identifying potential barriers to entry into the scheme and the RAC industry. Women entering male-dominated fields like refrigeration and air conditioning often face several challenges:

1. **Cultural norms:** Traditional views and stereotypes can discourage women from pursuing trades, often seen as masculine occupations.
2. **Workplace environment:** Women may encounter unwelcoming or biased environments, with fewer female role models and support networks than those available for their male counterparts.
3. **Training and mentorship:** In male-dominated trades, women may face limited access to informal mentorship and development opportunities, which can affect career progression.

Despite these challenges, there has been significant progress in increasing female participation in the RAC industry. The ARC has contributed to these positive trends by actively promoting gender diversity through its communication channels. This includes gender-diverse depictions of technicians in career promotion materials, industry videos, and consumer marketing campaigns. Additionally, the ARC highlights female success stories both on the tools and in business management in the CoolChange newsletter.

By addressing these barriers and promoting an inclusive environment, the RAC industry can continue to attract and retain talented women, contributing to a more diverse and dynamic workforce.

New Refrigerant Handling Licences (RHLs) by age group

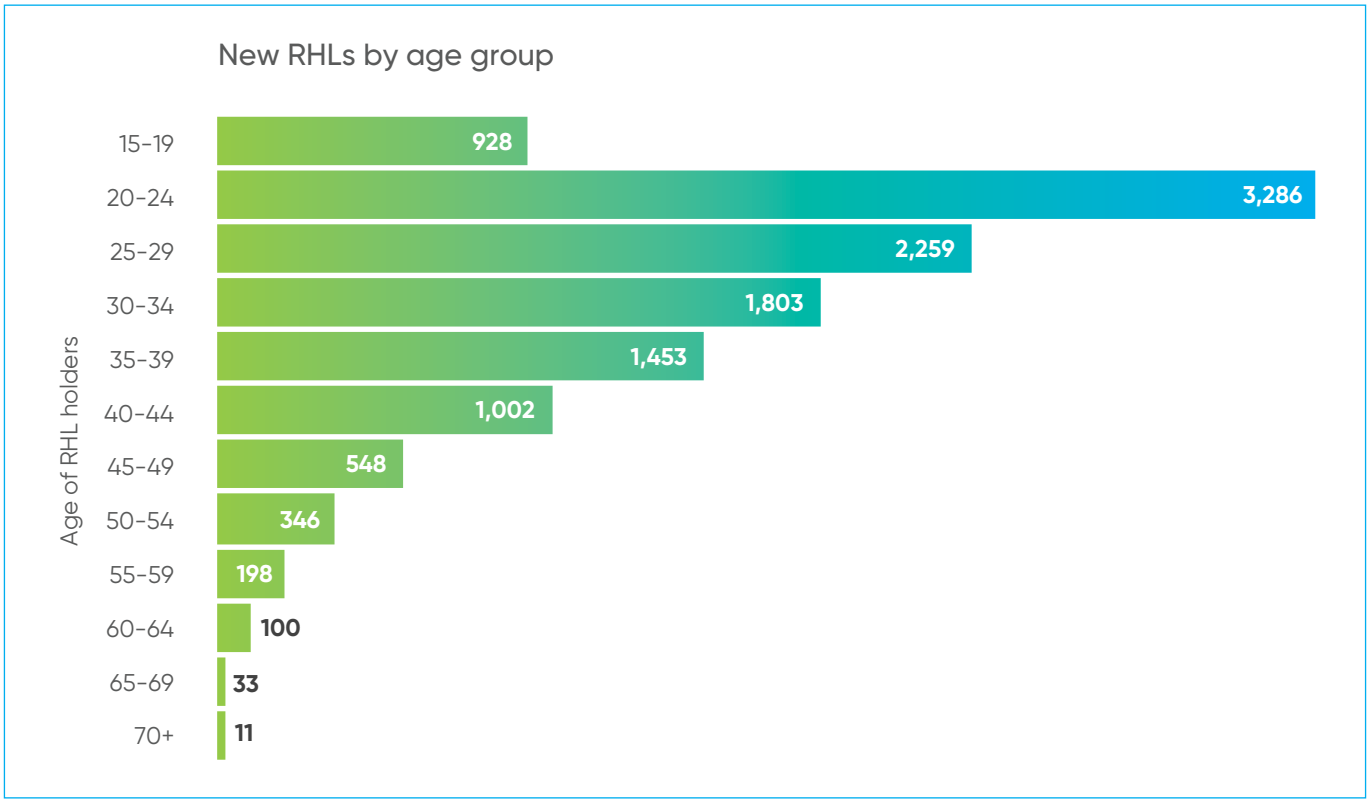

Figure 7: New RHLs by age group in 2024–25

In the 2024–25 financial year, we saw a strong influx of new Refrigerant Handling Licence Holders, with the majority coming from the 20 – 24-year age group, highlighting the growing appeal of the refrigeration and air conditioning industry among young Australians.

However, the data also reveals a compelling story beyond this. Individuals aged 40 and above made up **18.7%** of all newly joined licence holders. This demonstrates that the industry is not only attracting youth but is also increasingly recognised as a valuable and rewarding career option later in life.

Part 2

Licence processing and automation improvements

Each year, the ARC handles hundreds of thousands of enquiries from both industry professionals and the public. These range from quick phone calls to complex licence applications. The 2024–25 financial year was one of the busiest yet.

Automated renewals transform the application process

ARC's introduction of automated RHL renewals at the start of the financial year has made licence renewals instant and more convenient for eligible users. This upgrade led to a significantly better customer experience. In 2024–25, there were:

60,538
approved applications, with

23,906
of those applications using the new, convenient, automated renewal

Faster turnaround for industry

Extending the impact of the ARCs Automated Renewals and increase of internal efficiencies, the average assessment time of an application has been slashed from **6 days**, to just

2.6 days.[8]
Meaning a decrease of

3.4 days
in our processing times, or a 56.7% increase in the ARCs efficient handling of applications

8 Based on first assessment times only.

Record communication volumes

The 2024–25 financial year saw some of the highest licencing communication volumes the ARC has experienced:

Over 1,000,000 sent emails,

177,835 received emails,

61,402 phone calls, and

199,166 SMS notifications

Licence renewal automation drives

The ARC launched a new automated renewal system for RHL holders early in 2024–25, which has made the renewal process much easier for most applicants. It works best for people renewing their licence with no changes to their details. These applications can now be approved instantly, improving the existing online system.

As expected, the system has been used tens of thousands of times. Around **68%** of eligible applicants have chosen the automated option when renewing.

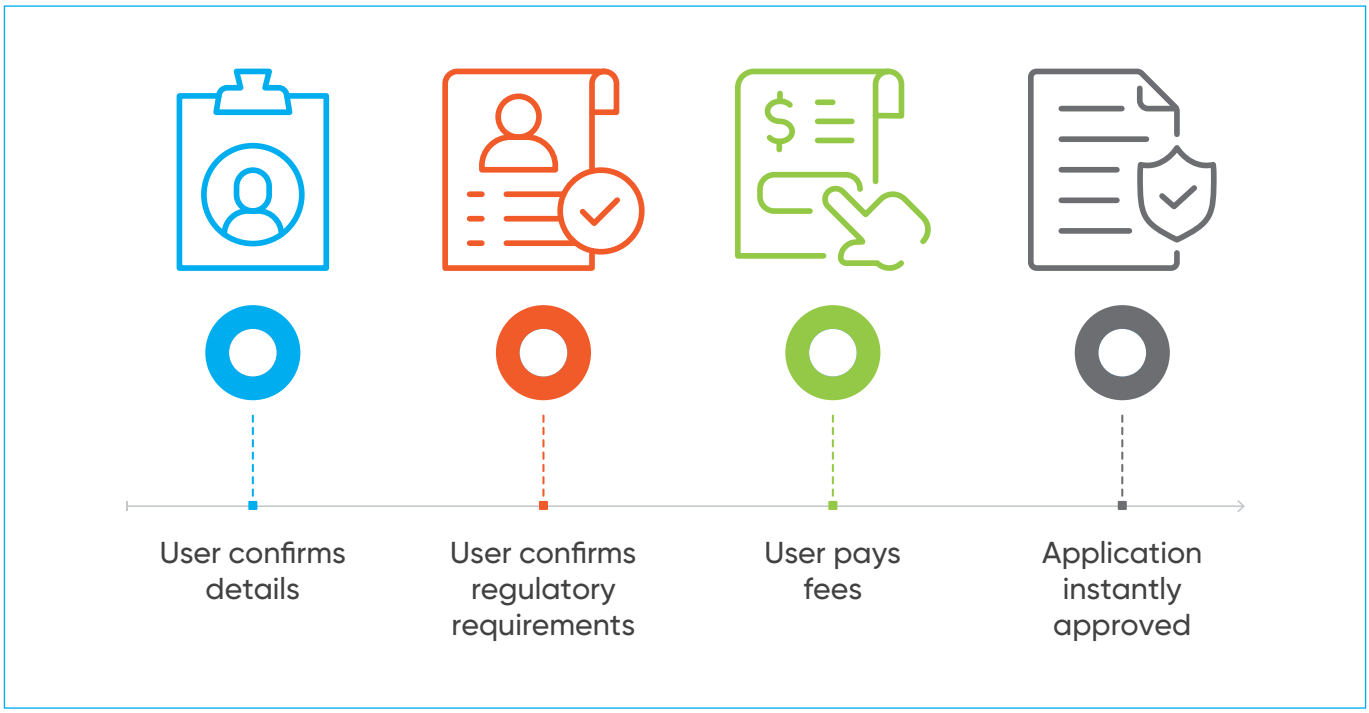

Figure 8: ARC's new automated renewal process

Average days to assessment

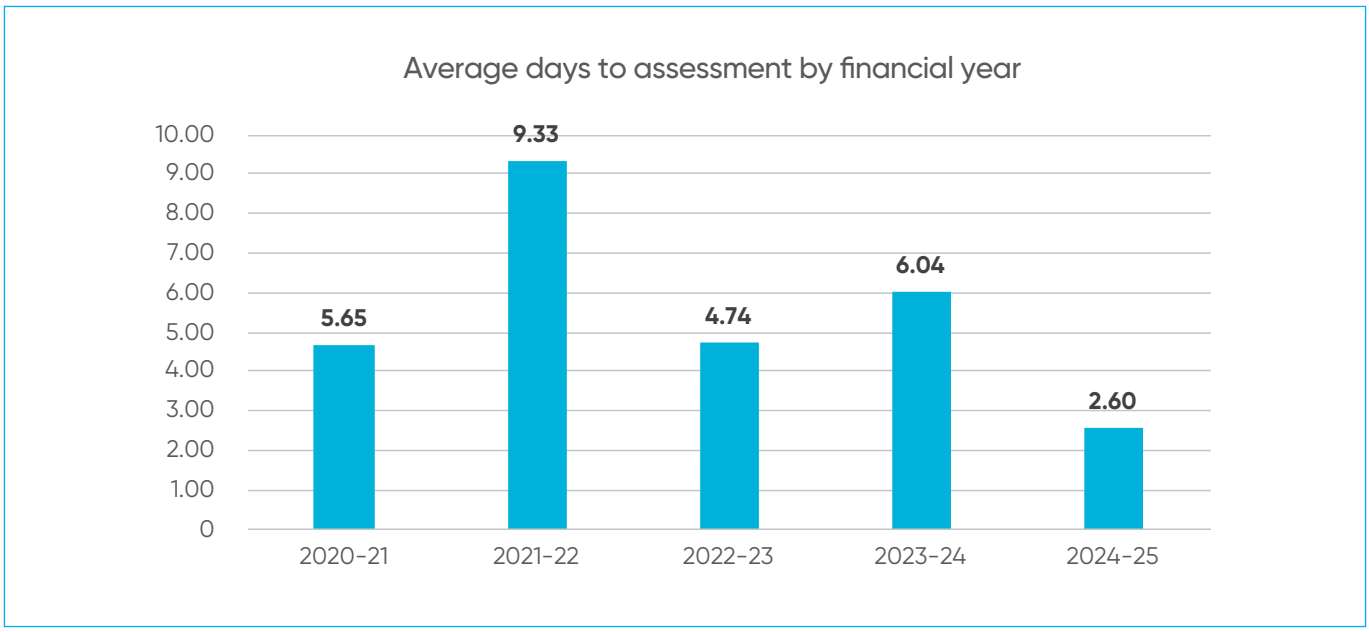

Figure 9: Average application assessment days taken by ARC, 2020–21 to 2024–25

Despite permit growth, improved efficiencies have led to a major improvement in how quickly ARC assesses applications. In the 2023–24 financial year, the average time to complete an initial assessment was **6** days. In 2024–25, that time dropped to just **2.5 days**. This change represents a **56.7%** boost in efficiency.

Renewal frequency – 1-year subscriptions

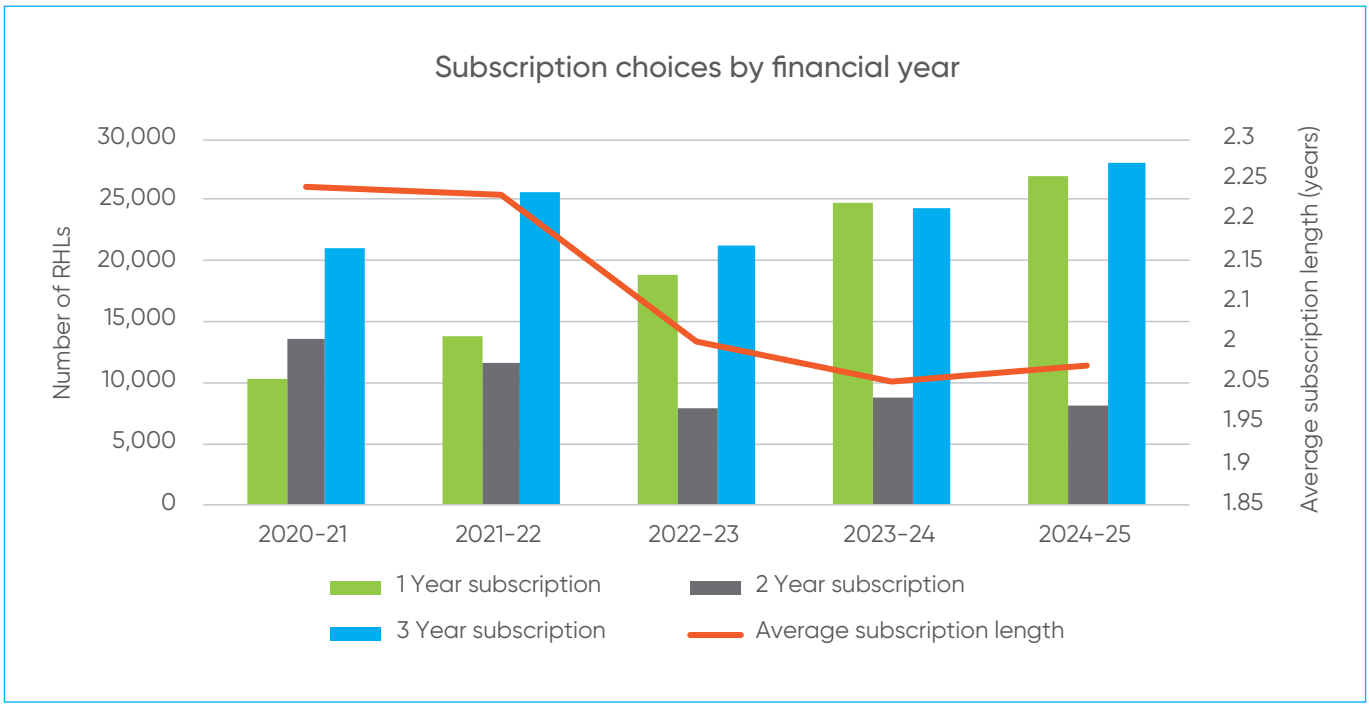

Figure 10: Subscription choices and average length, 2020–21 to 2024–25

Despite an initial collective move to one-year licences, there has been a recent move to one-year licences.

2024–25 the number of one-year licences has grown to **27,029**, representing approximately **43%** of total applications, up from **23%** in earlier years.

This shift highlights some challenges the ARC and the industry are facing. Due to current economic pressures, many licence holders are opting for one-year subscriptions to better manage their cashflow.

Contact points

ARC's multi-channel contact points continue to play a vital role in engaging permit holders and stakeholders. Figure 11 below illustrates the scale of ARC's communication activity across email (outbound, newsletter, and ad hoc), phone, and SMS channels in 2024–25.

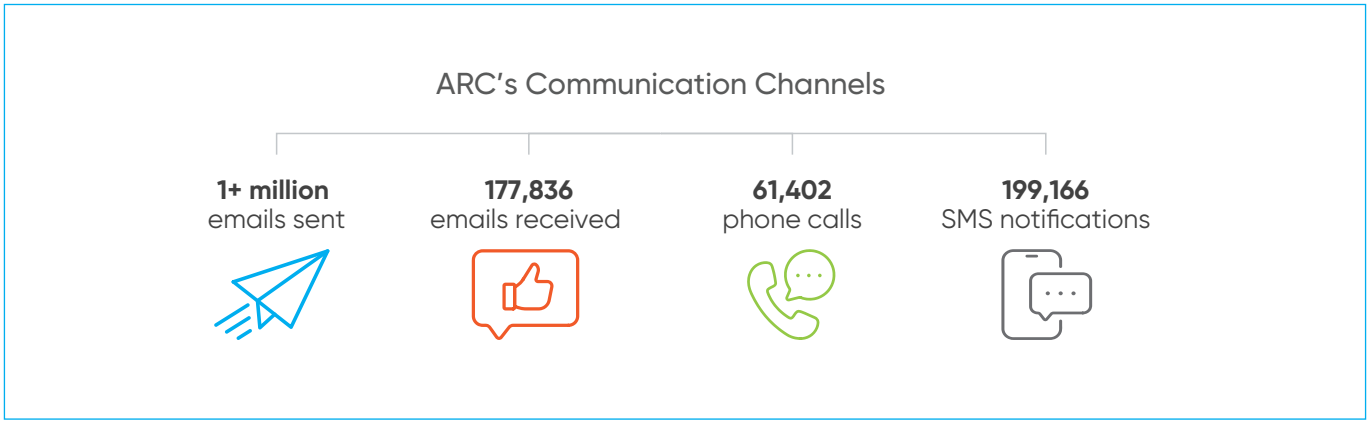

Figure 11: ARC's communication channel activity in 2024–25

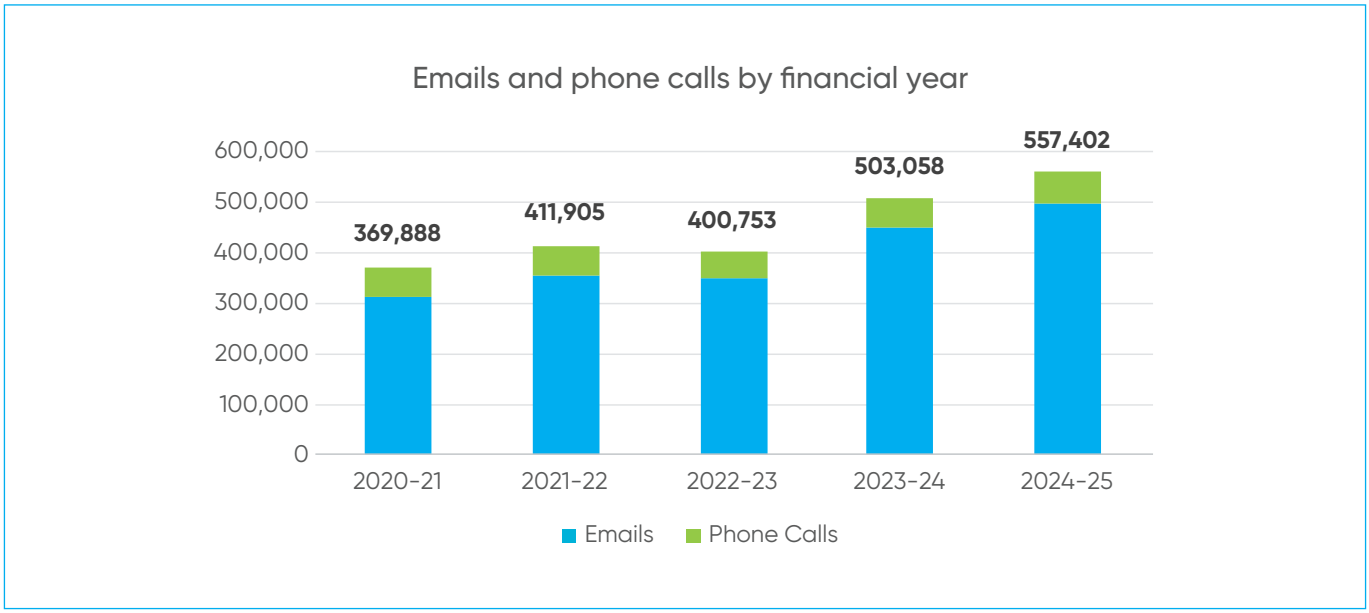

Figure 12: Emails and phone calls by financial year, 2020–21 to 2024–25

Automated outbound email volumes illustrated in Figure 12 have steadily increased over the past 5 financial years, rising from just over **312,000** in 2020 – 2021 to **496,000** in 2024–25. In addition to these system-generated communications, the ARC sent over **540,000** emails via its marketing platform Vision6, supporting initiatives such as the CoolChange newsletter and broader industry engagement.

Combined, this brings ARC's total email output for 2024–25 to **over 1 million messages**, highlighting the scale and consistency of communication across both operational and promotional channels. Phone call volumes have hovered between **54,000** and **61,000** annually, showing steady engagement across the years. Notably, 2024–25 saw the highest number of calls received in 5 years, reaching over **61,000**. The most common call types include licence enquiries, calls from field officers, and authorisation enquiries.

Part 3

Driving compliance through education and outreach

The integrity of any licence or permit scheme relies heavily on education, compliance and enforcement activities. The ARC's role focuses on initial education, support and compliance monitoring, while stronger regulatory responses and enforcement responsibilities rest with the Department.

ARC delivers an ongoing field engagement program through a national team of field engagement officers aimed at increasing participation in the permit scheme. While the program primarily targets holders of Refrigerant Trading Authorisations, it also extends to technicians, consumers, broader industry stakeholders, and entities operating outside the permit scheme who may be required to hold a permit.

The ARC's engagement strategy and activities are informed by risk, geographic distribution, and industry sector specific considerations and designed to improve understanding of permit scheme obligations and provide targeted assistance to help individuals and businesses meet their obligations for handling, trading, and disposing of ozone depleting substance (ODS) and synthetic greenhouse gases (SGG).

In 2024-25, the education-first approach proved highly successful. Of the initial non-compliant permit holders detected, 98% achieved compliance within 90 days, avoiding the need for further regulatory response.

Audit insights

9,079
Audits completed with RTA holders – of these completed, there were

5,815
Compliant RTA holders, and

3,264
Non-compliant RTA holders, giving the RAC industry a 64% compliance rate, however by 90 days post audit a 98% compliance rate was achieved

Community vigilance: Safeguarding industry standards

During the financial year, the ARC has observed an increase in potential breaches reported by stakeholders, putting the spotlight on operators who breach the Act and Regulations. We have received:

217
reports of potential breaches, of which,

93
engagement activities were completed, and,

3
cases were escalated to the DCCEEW for further regulatory action

There were also **20** RTA holders denied renewal of their licence due to their non-compliant status, removing unreliable operators from the industry.

Targeted campaign on unlicensed operators

This year, the ARC expanded its field engagement team and made unlicensed operators a primary focus. We identified:

92
unlicensed operators, of which,

98%
achieved compliance with 90 days

Hitting the mark

In June 2024, ARC implemented several surveys, one of which is sent to RTAs post-audit, focusing on user satisfaction with the ARC field engagement officers and the audit process. The results indicated strong performance by ARC officers and compliance activities:

98.5%
Positive,

1.18%
Neutral,

and less than 0.3% negative

Boosting our field presence

Over the past year, ARC expanded the dedicated field team from 9 to 14 field engagement officers, with new members joining existing teams in Victoria, New South Wales, and Queensland. ARC field engagement officers play a vital role in supporting compliance by conducting face-to-face visits with current permit holders and engaging with non-permit holders to address potential non-compliance. They serve as trusted points of contact within the industry and deliver tailored education and guidance to ensure stakeholders understand and meet their regulatory obligations.

Introductory calls and information packs for new RTA holders

RTA holders represent **19.7%** of the permit scheme and play a vital role in ensuring the responsible handling and management of regulated refrigerants across the RAC industry.

To strengthen early engagement and support, a new objective was introduced in 2024 to contact 100% of new RTA holders within 7 days of their permit being granted, for an educational introductory call. This target was achieved in 2024–25, with **2,850** calls made to new permit holders, including all their listed branch locations.

These calls provided essential guidance on permit conditions, compliance expectations, and available support. Each call was followed up with a tailored information pack, which included information on permit conditions, refrigerant record-keeping templates, and links to helpful industry resources.

Audits

Audits are a key compliance tool used to assess how effectively permit holders are meeting their obligations. ARC conducts audits through direct engagement – either on site or via video call – and with a structured assessment process that allows the ARC to identify areas of non-compliance and provide tailored education and support to help operators meet their requirements. In 2024–25, the ARC introduced new objectives to strengthen compliance monitoring and support for RTA holders.

- All RTA holders audited at least once every 3 years, prioritising holders who have gone the longest without engagement
- At least 95% of new RTA holders audited within 12 months of their permit being granted
- Ensuring a minimum of 90% of these engagements are conducted face-to-face

What we achieved:

68%
of RTA holders have been audited in the last 3 years

99%
of new RTA holders underwent their first audit within 12 months

99%
of audits were conducted face-to-face

Total audits conducted

This year, ARC Field Engagement Officers travelled over **181,766 km** (based on straight line distances) across 6 states and 2 territories and conducted **9,079** audits, a **64%** increase from last year.

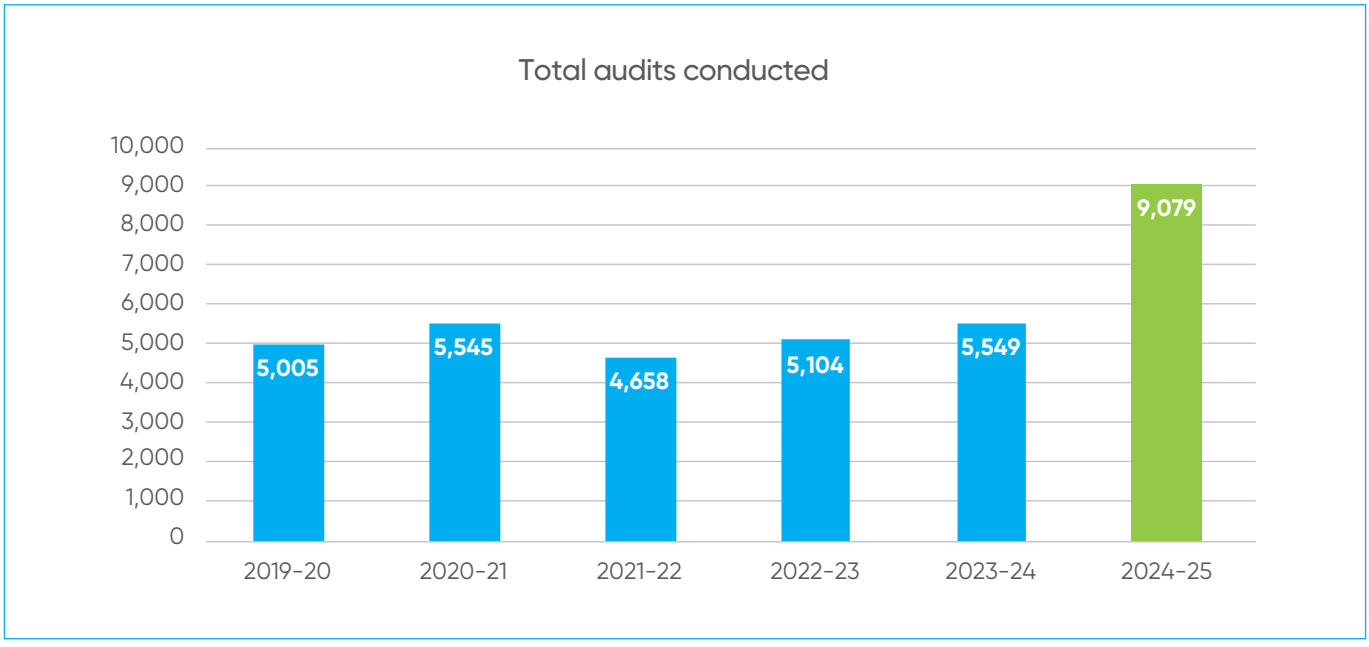

Figure 13: Audits by financial year, 2019–20 to 2024–25

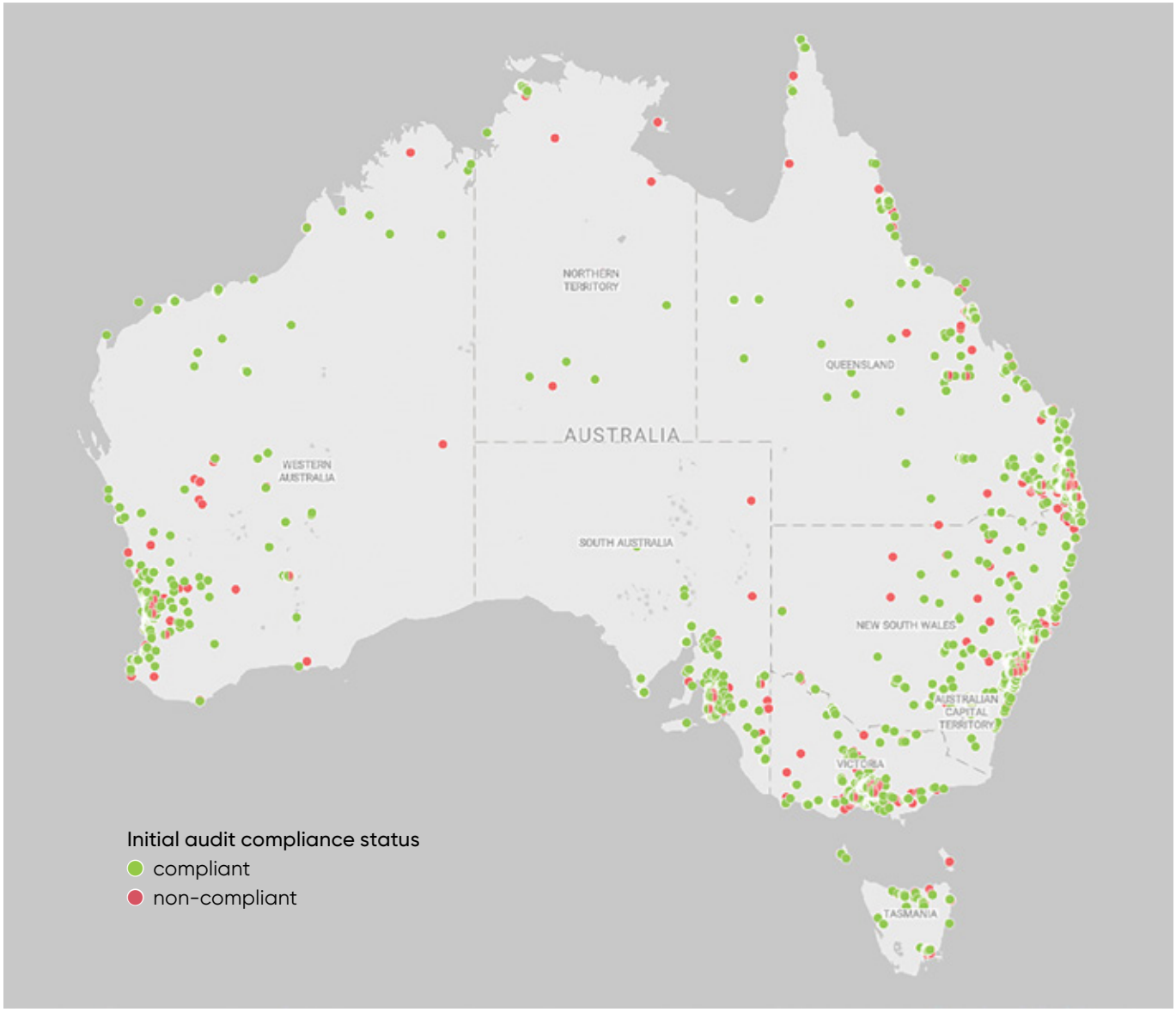

Figure 14: Audits by initial compliance status in 2024–25

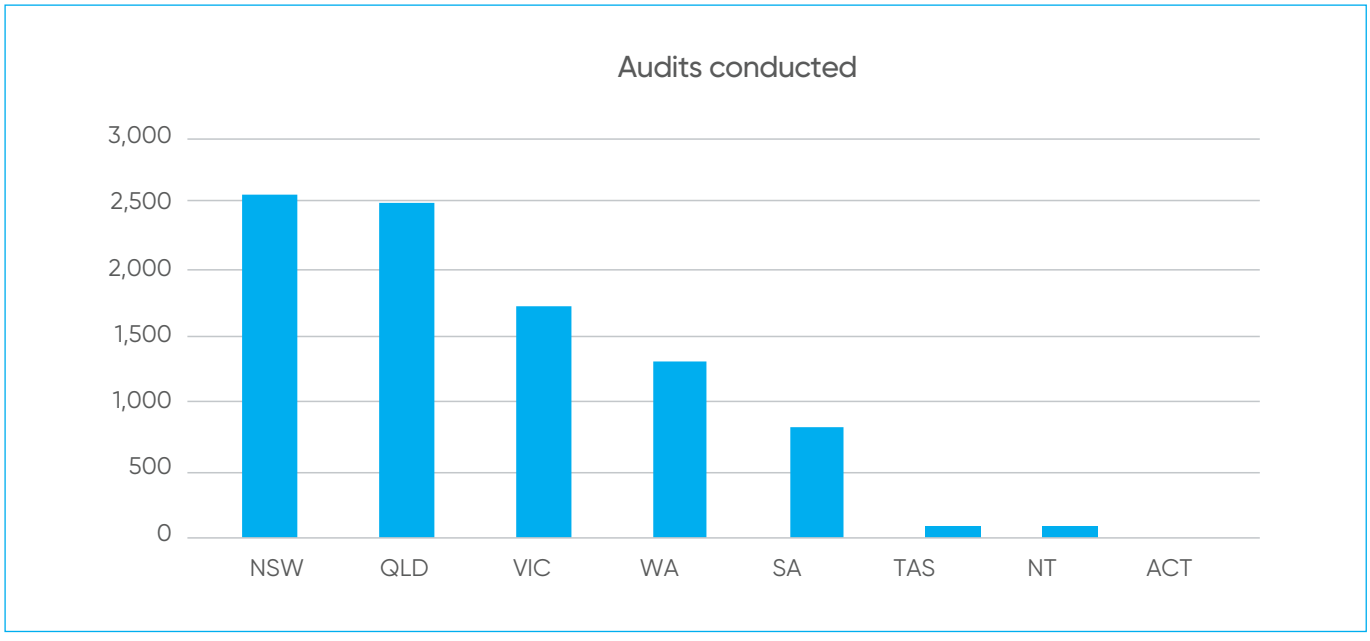

Figure 15: Audits conducted by state/territory in 2024–25

Compliance rates

The initial compliance rate of permit holders identified at audit has seen a slight decrease, from 67% to 64%. This decrease is likely attributed to a targeted campaign prioritising new RTA holders entering the industry and RTA holders that have not received an audit for an extended period. Further, the ARC conducted over 3500 more audits in the 2024–25 financial year. By prioritising these high-risk groups for auditing, we aim to ensure all businesses meet the appropriate standards from the outset. This risk-based approach helps maintain the integrity of the industry and supports continuous improvement in compliance.

Financial Year	Compliant	Non-compliant	Total	Compliance rate
2019–20	2937	2068	5005	58.7%
2020–21	3388	2157	5545	61.1%
2021–22	3334	1324	4658	71.6%
2022–23	3583	1521	5104	70.2%
2023–24	3723	1826	5549	67.1%
2024–25	5815	3264	9079	64.0%

Table 4: Compliance rates by financial year, 2019–20 to 2024–25

Areas of non-compliance

The average number of non-compliant issues identified during an audit decreased from 4.2 in 2023–24 to 4.0 in 2024–25, continuing a positive trend in industry compliance.

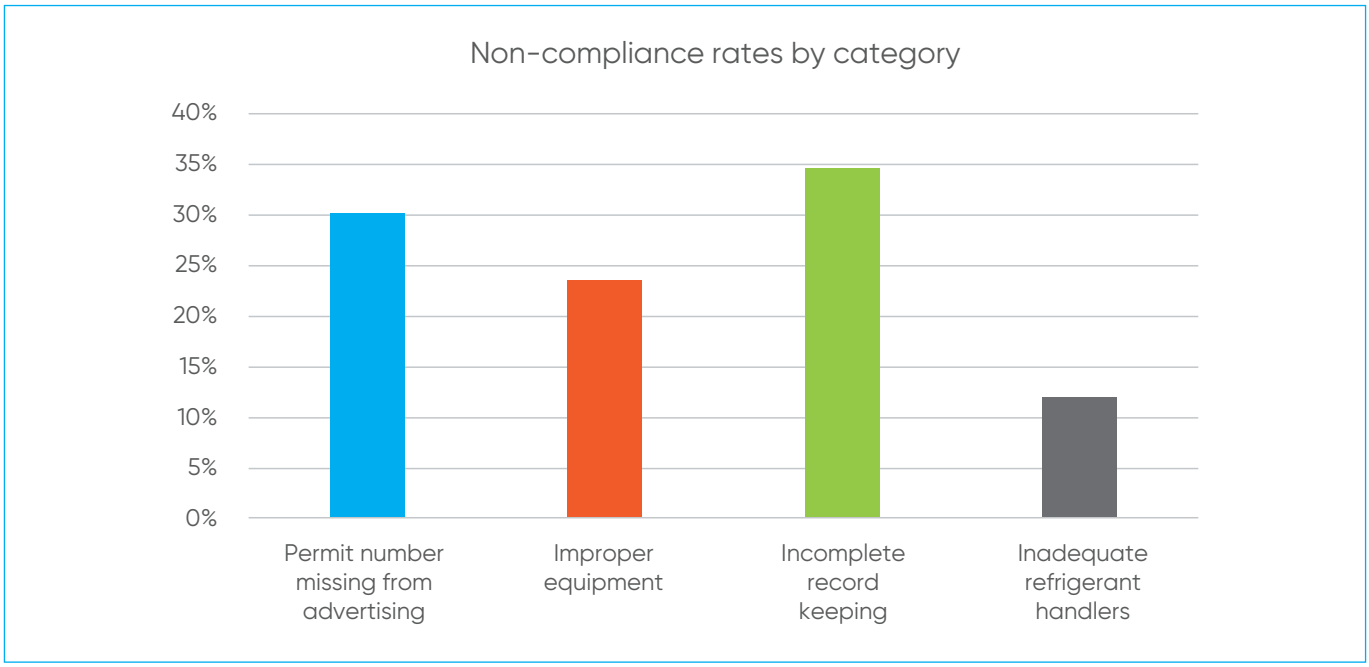

Figure 16: Non-compliance rates by category

Record-keeping remains the most frequently identified area of non-compliance, accounting for **34.58%** of all issues detected during audits. This highlights a persistent challenge and a key area of concern for RTA holders.

Advertising compliance is another highly reported issue, with **30.10%** of RTA holders failing to display their permit number across all required advertising channels.

This trend reflects the growing complexity of the advertising landscape, where businesses are required to display their permit number across multiple mediums including store fronts, flyers, invoices, vehicles, websites, social media platforms like Facebook and Instagram, and mobile marketplaces such as Airtasker, Hipages, and Gumtree. The growing diversity of these platforms has increased the likelihood of oversight and contributes to non-compliance.

Recognising achievement in compliance

The Environmental Stewardship Excellence Award was introduced to recognise Refrigerant Trading Authorisation (RTA) holders who are found fully compliant during an audit, recognising outstanding commitment to environment stewardship through regulatory compliance.

In the 2024–25 financial year, **5,815** businesses were awarded the Environmental Stewardship Excellence Award. **64%** of total RTA holders audited received this award, demonstrating the RAC industry's continued dedication to reducing emissions of environmentally harmful refrigerant gases.

Australian Government
Department of Climate Change, Energy, the Environment and Water

Environmental Stewardship Excellence Award

In recognition of outstanding commitment to environmental stewardship through achieving 100% regulatory compliance with refrigerant trading authorisation requirements, we proudly present this award to

This award serves as acknowledgement of your valuable contribution to the Refrigeration and Air Conditioning Permit Scheme to reduce emissions of environmentally harmful refrigerant gases.

Presented on:

Tracy Gurnett
Department of Climate Change, Energy, the Environment and Water

Glenn Evans
Australian Refrigeration Council

Figure 17: Environmental Stewardship Excellence Award

Checking the quality of our engagements

Permit holder post-audit survey

The Permit Holder Visit Survey is a new evaluation tool introduced to measure RTA feedback following an ARC Field Officer compliance visit. The survey is sent immediately after an audit by an ARC engagement officer is completed. It includes 7 multiple-choice questions, with an optional eighth question which is free text.

Question 1: Flexibility in scheduling
99.03% positive

Question 2: Clarity in pre-visit documents
97.86% positive

Question 3: Clear explanations during visits
99.54% positive

Question 4: Understanding of RTA conditions
98.89% positive

Question 5: Confidence in compliance
96.64% positive

Question 6: Overall satisfaction with visits
99.43% positive

Question 7+8: Any additional comments
479 comments

Figure 18: Overview of permit holder visit survey

The response rate for these surveys has been very strong. **36.25%** of people who received the survey gave feedback, with a total of **3,513** responses. This means one in 6 current RTAs responded to the survey. The survey results show strong support.

These results indicate that our audit process is functioning effectively, as evidenced by the high levels of satisfaction and positive feedback from our stakeholders. The strong engagement and trust in our processes reflect the success of our efforts to maintain high standards and ensure compliance across the industry.

Free answer sentiment analysis

The feedback from our recent survey has been overwhelmingly positive. Of those responding, 479 also shared additional insights in the comments section. Words commonly used included 'helpful', 'professional', 'knowledgeable', 'informative', and 'great'. These responses highlight that stakeholders are having consistently positive experiences with ARC.

Survey respondents stated:

> ***'I feel like I've walked out of the audit with more knowledge about what I need for the future.' and 'I had an amazing experience during the ARC permit holder visit. The process was smooth and well organised, and the officer who assisted me was very friendly and professional. They took the time to explain everything clearly and made the whole experience comfortable. Really appreciated the helpful attitude and efficiency.'***

Figure 19: Sentiment expressed in ARC feedback survey

Responding to reports of alleged non-compliance

Reports from within the industry, the public and from other government regulators are an important source of information to address non-compliance with the permit scheme.

These reports allow us to quickly respond to serious non-compliance such as unlicensed work and illegal discharges of refrigerant, while also helping us identify and report on emerging issues affecting the permit scheme.

In 2024–25, we received **217 reports** of alleged non-compliance within the RAC industry, the most we've ever received in a single year, and a **17% increase** from the previous year.

Reports of alleged non-compliance

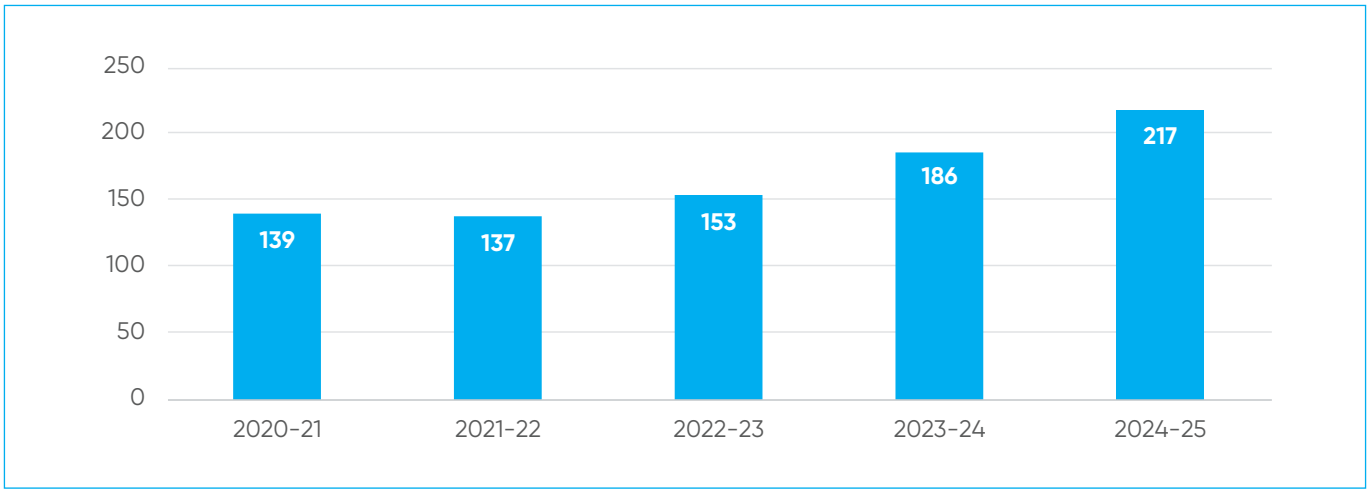

Figure 20: Alleged non-compliance over last 5 financial years

Reports of alleged non-compliance by origin 2024–25

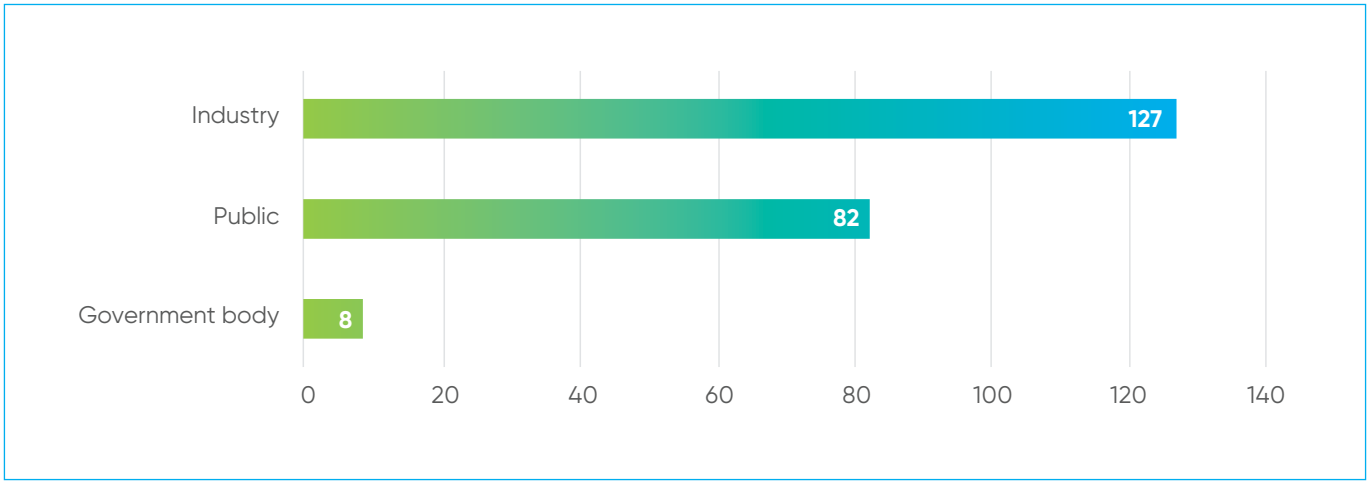

Figure 21: Non-compliance by origin 2024–25

Reports of alleged non-compliance by main issue and location 2024–25

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Unknown	Total
Discharge of a regulated refrigerant	0	12	0	12	3	0	15	5	1	**48**
Non-compliance with licence condition	1	10	1	18	1	0	11	16	7	**65**
Working unlicensed or outside licence scope	3	21	2	28	5	2	14	12	1	**88**
Illegal possession or trade of regulated refrigerant	0	1	0	4	2	0	7	2	0	**16**
Total	**4**	**44**	**3**	**62**	**11**	**2**	**47**	**35**	**9**	**217**

Table 5: Alleged non-compliance by issue and location 2024–25

From the reports we received this year, we carried out 93 engagement activities with reported entities, 33 of which resulted in the successful identification of unlicensed operators.

Addressing unlicensed operators

In late 2023, the ARC and the Department jointly developed and launched a coordinated strategy to address individuals and businesses operating and working with regulated refrigerants without the necessary permits. This strategy targets key areas of reported industry non-compliance, including individuals working without an appropriate Refrigerant Handling Licence, entities possessing regulated refrigerants without a valid authorisation, and improper handling and disposal of end-of-life RAC equipment containing regulated refrigerants. In 2024–25, we successfully identified and engaged with **92** entities who required a licence or authorisation but did not hold one. Supported by ARC's national field engagement team, the strategy achieved strong initial results, with **98%** of identified unlicensed operators voluntarily complying with their regulatory obligations within 90 days.

Identified unlicensed operators by issue and location 2024–25

	ACT	NSW	NT	QLD	SA	TAS	WA	VIC	Total
Unauthorised possession of refrigerant	0	4	0	2	4	1	4	12	**27**
Working unlicensed or outside licence scope	0	21	0	18	0	1	6	19	**65**
Total	**0**	**25**	**0**	**20**	**4**	**2**	**10**	**31**	**92**

Table 6: Identified unlicensed operators by issue and location 2024–25

Addressing persistent non-compliance and avoidant entities

We take a proactive and education-first approach to compliance. When non-compliance is identified, we work constructively with individuals and businesses to resolve issues and support their return to compliance.

While most entities engage positively with this process, a small number demonstrate serious or ongoing non-compliance or repeatedly avoid engagement. This includes RTA permit holders who fail to respond to contact attempts or avoid participation in audits.

In cases where non-compliance is severe – where educational interventions are ineffective, or engagement is consistently avoided – we escalate the matter to the Department for further action.

In 2024–25, we referred **5 cases** of non-compliance and an additional **31 RTA permit holders** who exhibited persistent avoidant behaviour to the Department.

Success story: Coordinating the safe disposal of legacy refrigerants

During 2024–25, ARC was approached for assistance on 3 separate occasions after refrigerant cylinders were located at properties associated with deceased estates. ARC quickly identified that the estates included phased-out refrigerants such as R12 and R22, as well as disposable cylinders containing regulated refrigerants, which are banned in Australia.

In response, ARC swiftly mobilised a coordinated effort involving property owners, its field officers, refrigerant wholesalers, and local permit holders. This collaboration was successful in ensuring the safe collection, decantation, and responsible disposal of all located refrigerant. We are thankful to those who brought these cylinders to our attention.

Part 4

Training sector

The quality of training associated with qualifications which demonstrates competence is the cornerstone of the permit scheme. The OPSSGG permit scheme is competency based, and ARC engages in the training space through Jobs and Skills Councils and ensuring quality and relevance of training delivery through partnership with ASQA.

The ARC ensures that qualifications and training programs are fit for purpose and aligns them with the Australian Government's licence scheme.

Our strategy in the training sector aims to:

- increase the number of students, thereby expanding the RAC workforce.
- ensure the quality of training so the principles of the Ozone Protection and Synthetic Greenhouse Gas regulations are well understood.
- guarantee that training providers deliver a high-quality standard of overall training.

To assist new graduates into the transition from a training licence to a full RAC licence or Automotive licence, a 'Graduate Pack' was developed and is made available to all RTOs.

RAC industry sees continued trainee growth

The RAC industry foundation, being trainee licence holders, is as strong as ever, with:

4,553
new approved Classroom licences, and

3,498
new approved Trainee licences which beat last year's record high with a total of 8,051

Working with ASQA to defend against fraudulent qualifications

ARC strengthened collaboration with the Department and the training industry regulator ASQA following the launch of an investigation into fraudulent qualifications used to obtain RAC industry permits.

Continuous engagement with RTOs

ARC team members frequently visit TAFEs and RTOs to provide support and assistance to both trainers and students. In the 2024–25 financial year, 22 organisations were visited.

Jobs and Skill Councils

ARC are members of 4 Jobs and Skills Councils in both the stationary and automotive sectors. Interacting with these councils provides opportunities to ensure training remains relevant to industry needs.

Growing the RAC workforce

Trainees are the foundation of the RAC industry's future. They represent not only the next generation of skilled professionals but also offer a clear indicator of the industry's long-term sustainability and growth. A strong intake of new trainees reflects confidence in the sector and ensures that the workforce remains capable, qualified, and ready to meet future demand.

In 2024–25, ARC approved **8,051 trainees**, the highest ever number of trainees in one year.

This strong intake is underpinned by ARC's ongoing engagement with the VET sector, where positive relationships with Registered Training Organisations (RTOs) have helped foster high-quality training environments and support systems for new entrants. ARC also works closely with Jobs and Skills Councils to ensure that training programs remain aligned with evolving industry needs, equipping trainees with the skills required for a rapidly changing workforce. Awareness of refrigeration and air conditioning (RAC) as a viable and rewarding career path continues to grow, with a noticeable increase in female trainees entering the field – an encouraging sign of greater diversity and inclusion in the sector.

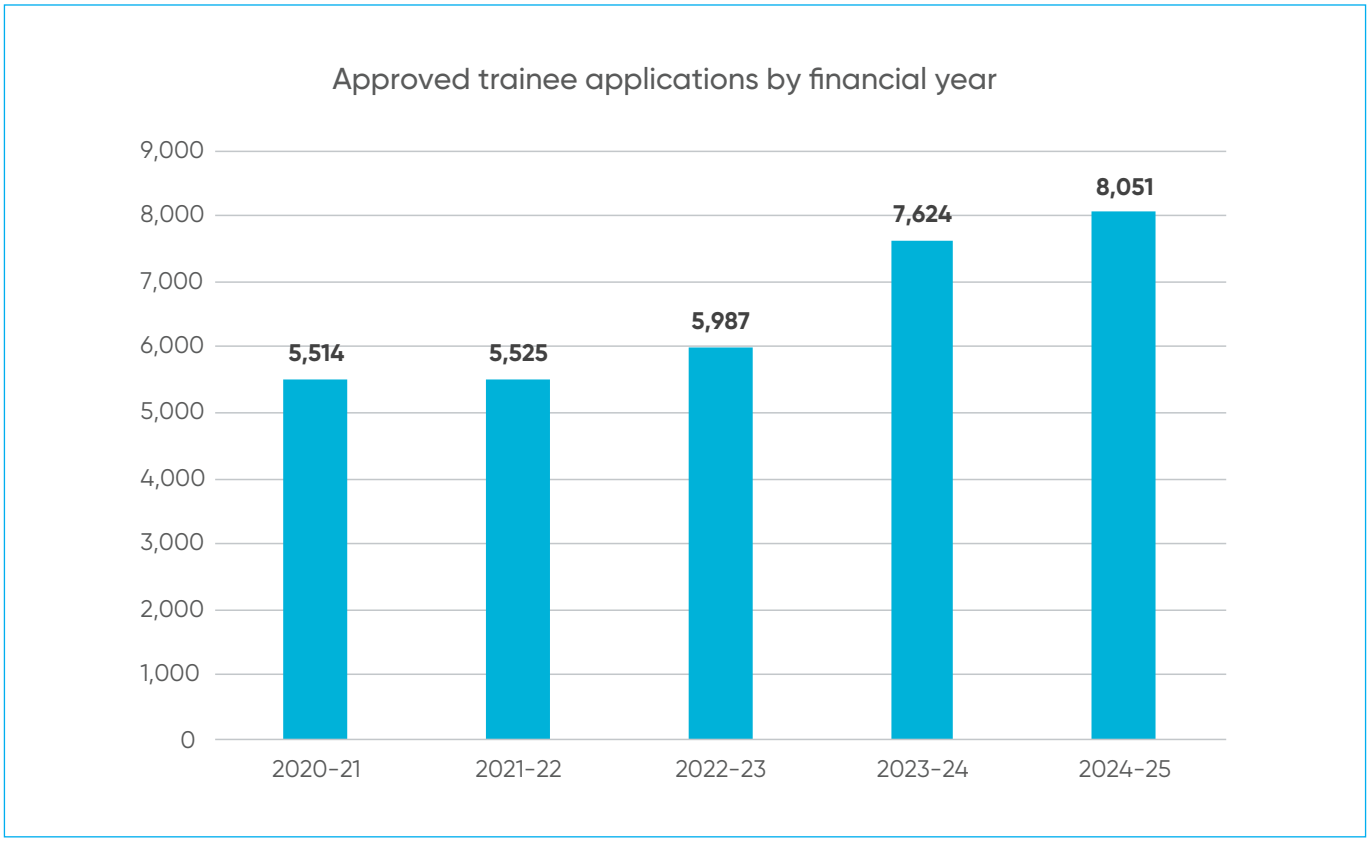

Figure 22: Approved trainee applications by financial year, 2020–21 to 2024–25

Historically, from 2021–23, the number of approved trainees each year ranged between 4,500 and 6,000. However, the past 2years have marked a significant shift. In 2023–24, ARC approved a record-breaking **7,624** new trainees. Now, in 2024–25, ARC approved **8,051**, the highest ever approved number of trainees in one year.

Monitoring training quality

The quality of training is paramount in the industry.

At audit ARC Field Officers review RTO training materials to ensure appropriate quality. A minimum of 20 such audits are conducted annually.

RTOs that utilise RPL excessively are targeted. RPL should never be a 'shortcut' but is a comprehensive tool to demonstrate competence.

What is RPL?

If a person can demonstrate they have the relevant skills and/or experience, they can get a recognition of prior learning (RPL) assessment. This is done against a qualification, without having to complete the full training and assessments. RPL is a detailed and thorough assessment process that assesses a person's previous experience and training to determine whether they have the required learning and competencies as they relate to a specific qualification.

The assessor will need to have evidence to recognise a candidate's prior learning through informal and formal sources. The following documents are considered evidence of competency. Evidence can be in many forms, for example:

- other qualifications
- in-house training certificates
- examples of work produced
- workplace reference • statement of duties
- work project
- minutes of meetings attended or conducted
- documents showing organising/supervisor skills
- awards, commendations, certificates of merit
- a demonstration.

This evidence presented will be matched against the Performance Criteria stated in the Unit of Competency. The assessor may find it necessary to ask questions about the evidence or ask the candidate to perform work activities or the candidate might take a test to assess where there are gaps between what has been provided and what is required. Selected TAFEs and registered training organisations can perform RPL assessments, as well as VET assessment provider VETASSESS.

Figure 23: RPL process

Supporting the next generation of technicians

ARC's graduate information packs provide a curated selection of technical resources and communication tools to support training providers and students as they enter the workforce. To complement these materials, ARC includes a graduate survey aimed at capturing insights into training experiences and identifying opportunities for improvement.

This report presents findings from survey responses received during the 2024–25 financial year, evaluating the effectiveness of RAC training programs. The survey explored graduates' confidence in refrigerant handling, the extent to which technician obligations were covered, and feedback for enhancing training delivery.

Confidence in refrigerant handling knowledge

85.7%
of respondents reported feeling extremely confident

14.3%
felt somewhat confident

This indicates a strong overall confidence level among graduates regarding refrigerant handling requirements

Coverage of RAC technician obligations

57.1%
of respondents said the topic was covered thoroughly

28.6%
said it was briefly mentioned

14.3%
said it was covered to a moderate extent

While the majority felt the topic was well addressed, nearly half indicated room for improvement in coverage consistency.

Feedback themes for training improvement

Respondents shared the following suggestions:

- Increase practical training time
- Include more content on natural refrigerants (e.g. Ammonia)
- Extend training duration.

The survey results reflect high confidence levels and generally positive feedback on training coverage. However, the feedback suggests opportunities to enhance practical components. Direct engagement with graduates continues to be a valuable tool for refining training programs and aligning them with industry needs.

Part 5

Communication and engagement

A strategic approach to communications is critical to scheme success. This involves a clear understanding of audiences and platforms.

In 2024–25, the ARC has made significant strides in enhancing overall communications strategy, ensuring our message reaches broader audiences. Through a series of strategic media engagement and targeted campaigns, we've strengthened the industry and the permit scheme's presence and impact.

The ARC has delivered impactful communications this year through various channels, including the quarterly *CoolChange* newsletter, the ARCtick website, and the *Look for the Tick* summer campaign. ARC maintained strong media engagement through regular media releases and ARC personnel attended several conferences and industry events, strengthening our visibility and sector connections.

ARCtick web traffic report

The following information – enumerating website views for the last financial year reflects user engagement with key licensing and informational content. Traffic trends indicate strong interest in licensing processes, practical guidance, and regulatory support. This figure identifies the most visited pages on the ARCtick website,

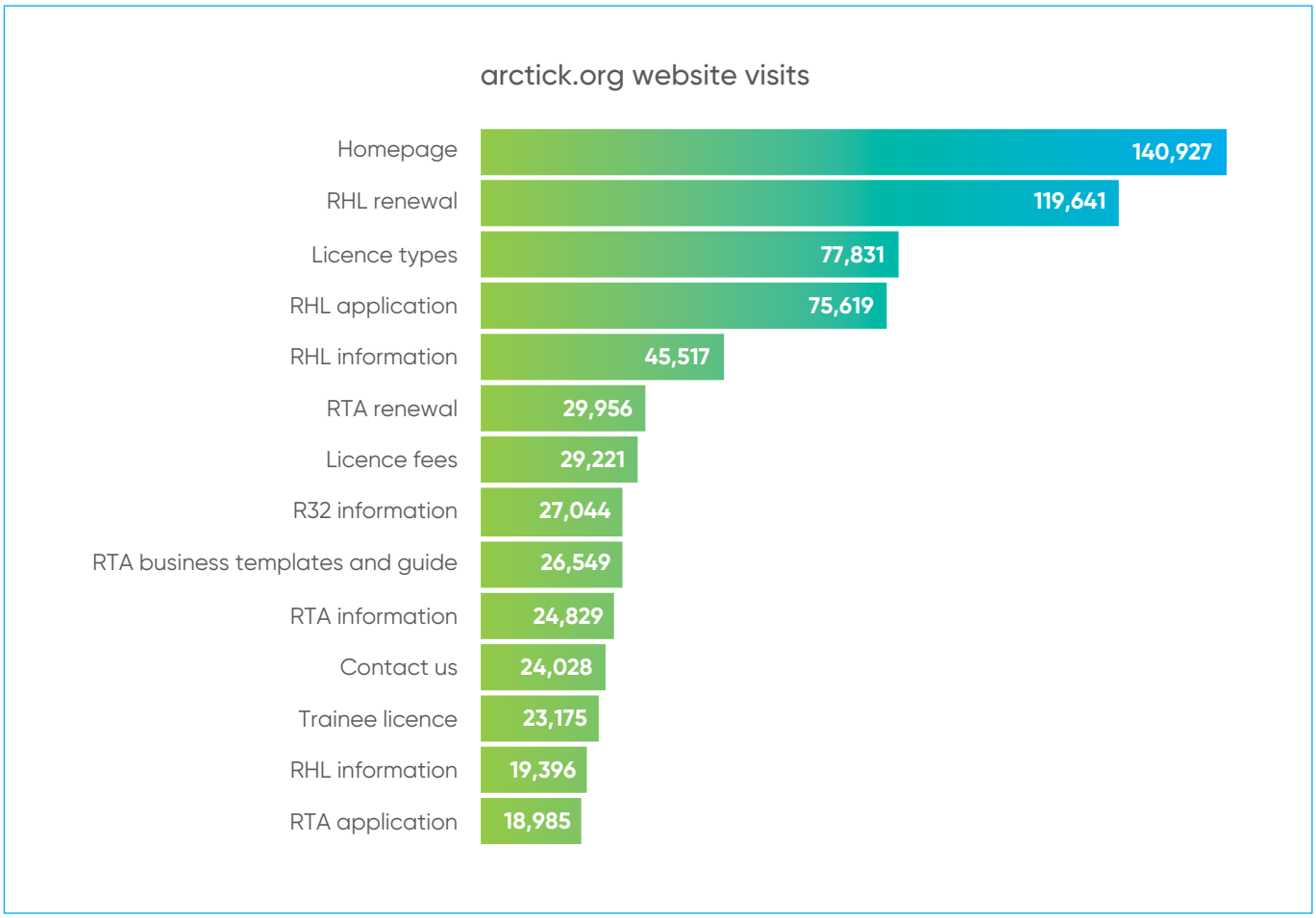

Figure 24: Website views for ARCtick website over last financial year

During the 2024–25 financial year, the ARCtick website experienced strong and consistent user engagement. The Homepage was the most visited page, receiving **140,927** views, followed closely by pages related to Refrigerant Handling Licence (RHL) renewal and application, which together accounted for over **195,000 views**. This reflects high public interest in licensing processes and regulatory information.

Other frequently visited pages included those covering licence types, fees, RTA renewal, and technical resources such as R32 refrigerant, heat pump hot water system information and business templates. The Contact us and trainee licence pages also saw notable traffic, indicating active user interaction and interest in career pathways.

This data highlights the website's role as a hub for industry information, compliance guidance, and consumer education.

Consumers *Look for the Tick*

The *Look for the Tick* website continues to serve as a vital public-facing website, educating consumers on the importance of licensed refrigeration and air conditioning professionals, while connecting them with qualified technicians and authorised businesses.

Recent data indicates strong engagement across the site's interactive tools and educational resources, reflecting growing consumer awareness and trust in the ARCtick licence scheme. Through targeted initiatives such as the Summer Campaign, ARC actively drives traffic to the website, encouraging consumers to seek out licensed professionals and make informed choices.

In the 2024–25 Summer Campaign period, ARC reported:

136,106
website visits

18,546
uses of business directory function

12,923
uses of licence check facility

13,372
total guide downloads

Figure 25 below highlights a clear spike in monthly engagement during the peak summer period, with the highest user activity recorded between October 2024 and March 2025. These trends demonstrate the campaign's strong impact in driving awareness and interaction during key seasonal moments.

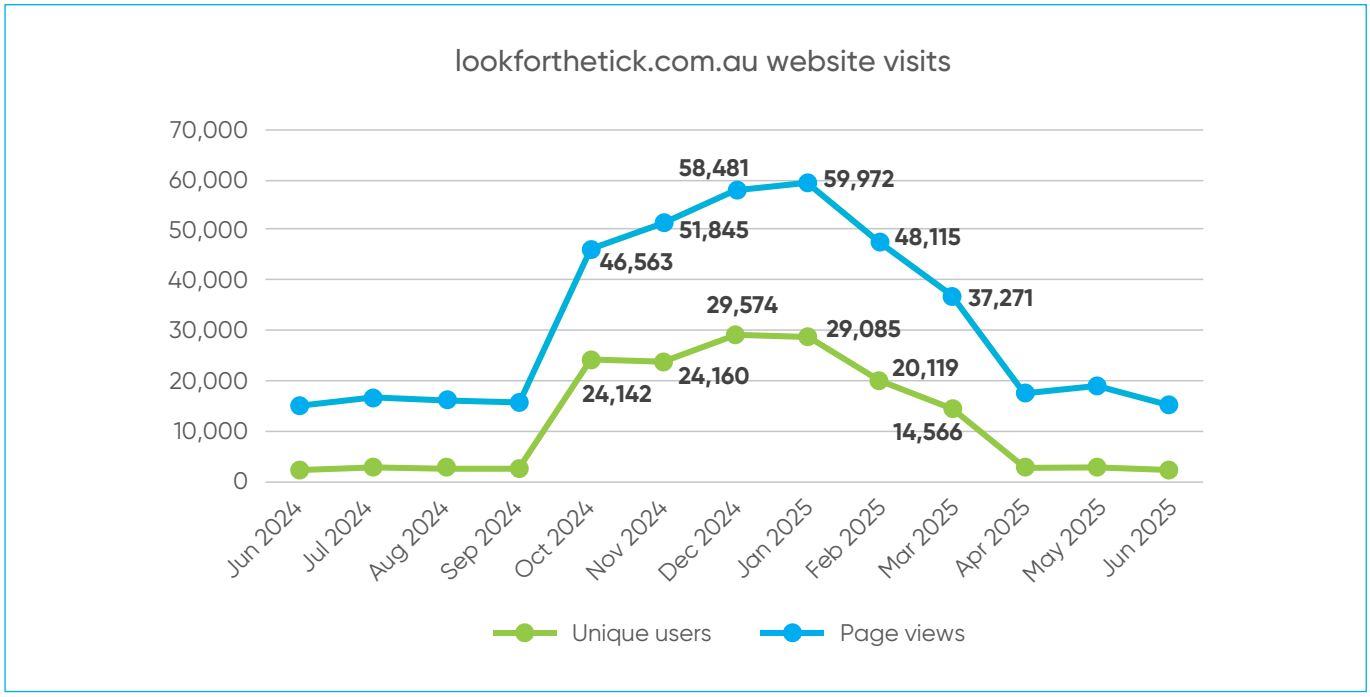

Figure 25: Unique users and page views for Look for the Tick website over last financial year

Our Meta ads in 2024–25 was where we saw the biggest year on year performance improvement from a channel perspective.

1,834,248
Impressions

72,531
Clicks

9,156
Conversions

Meta generated the most traffic of any channel, and it contributed by far the most guide downloads for the campaign with **5,774** Home Guides and **2,476** Auto Guides downloaded.


Newsletter for the Refrigeration and Air Conditioning Industry

April 2025

ISSUE 76

COOLCHANGE

In this issue

New Code of Practice 2025: A must read for all technicians

New automotive qualifications recognised for Refrigerant Handling Licence (RHL)

Improved guidance on pair coils

Watch out: Contamination of R-1234yf with R-134a

From recovery to safe disposal: The journey of recovered refrigerant gas

By the Numbers

Low GWP and flammable refrigerants training opportunities

Supporting new apprentices and trainees: How ASA can help

High GWP small AC ban extends to multi-head systems

From the Field: Evacuation of stationary RAC systems

Be part of the energy workforce transformation in Australia

What's On

From recovery to safe disposal > page 3

New Code of Practice 2025: A must read for all technicians

The Australian and New Zealand Refrigerant Handling Codes of Practice 2025 for stationary refrigeration (including transport refrigeration) are now available.

These codes provide essential guidance for air conditioning and refrigeration technicians and are mandatory for those holding a refrigerant handling licence or refrigerant trading authorisation through the Australian Refrigeration Council.

The new codes cover the entire system life-cycle: design, manufacture, shipping, installation, commissioning, servicing, decommissioning, and refrigerant recovery. Part 1 addresses self-contained low charge systems, while Part 2 covers all other stationary and transport refrigeration and air conditioning systems.

"The codes are freely available on the ARCTick website," says ARC CEO Glenn Evans, "and they are essential reading for all technicians. Apprentices receive copies of the codes through their TAFE or RTO, but for those who have been in the field for a while, it's important to check you are referring to the latest codes and standards, and that you have considered all aspects of working with today's technologies.

"These codes are best-practice guides for avoiding emissions of refrigerants. They will help you do your job and protect the environment."

You can find the electronic copies for the new Code of Practice here: **https://arctick.org/refrigerant-handling-licence/codes-of-practice/**

To place an order of a print copy, please contact ARC via the contact form at **https://arctick.org/contact-us or call us at 1300 88 44 83**

Australian Refrigeration Council | www.arctick.org | 1300 884 483

The 2024–25 Summer Campaign successfully amplified consumer engagement with the *Look for the Tick* website, equipping users with practical tools to identify licensed professionals and make informed decisions. The campaign's strategic use of digital channels, particularly Meta advertising, resulted in record-high traffic, interaction with key site features, and guide downloads. These outcomes highlight the effectiveness of ARC's targeted outreach in driving awareness, reinforcing trust in the ARCtick permit scheme, and strengthening consumer awareness during peak seasonal demand.

CoolChange: Keeping the industry informed

CoolChange, ARC's quarterly newsletter, continues to serve as one of the primary communication channels for permit holders and stakeholders across the RAC industry. Distributed at the end of January, April, July, and October, it remains the industry's most widely read publication, offering timely updates on licensing, compliance, technical developments, and sector-wide initiatives.

During the 2024–25 reporting period, ARC produced and distributed 4 editions: **CoolChange #73, #74, #75, and #76**.

These issues collectively reached a broad audience through both digital and print channels:

370,000+
email newsletters

80,000
print newsletters.

CoolChange consistently delivers high engagement, with an average open rate of **56.96%** and an **11.12%** click-through rate, well above industry benchmarks for similar publications.

The most popular content continues to be stories focused on enforcement activity and technical updates, which resonate strongly with readers. Regular features covering compliance requirements, RTA record-keeping obligations, and licensing changes also perform well, supporting ARC's broader education and compliance objectives.

Conference engagement and industry events

Throughout the 2024–25 reporting period, ARC actively engaged in key industry events and conferences across both the stationary and automotive refrigeration sectors. These efforts reinforced ARC's commitment to promoting best practices and supporting professional development across the industry.

ARC delivered presentations at 4 national conferences, providing stakeholders with valuable insights into regulatory updates, licensing developments, and compliance trends. These engagements strengthened ARC's role as a trusted authority and facilitator of industry-wide dialogue.

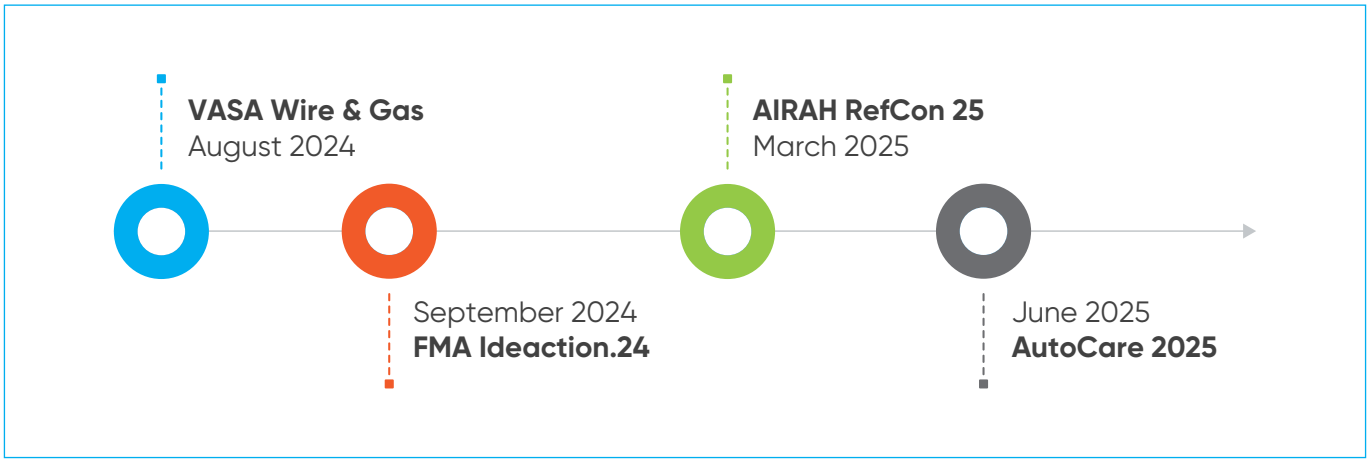

Figure 26: National conferences attended by ARC

During the 2024–25 financial year, ARC actively participated in 7 key industry events. These engagements have significantly strengthened ARC's position within the sector, fostering meaningful dialogue and collaboration with stakeholders.

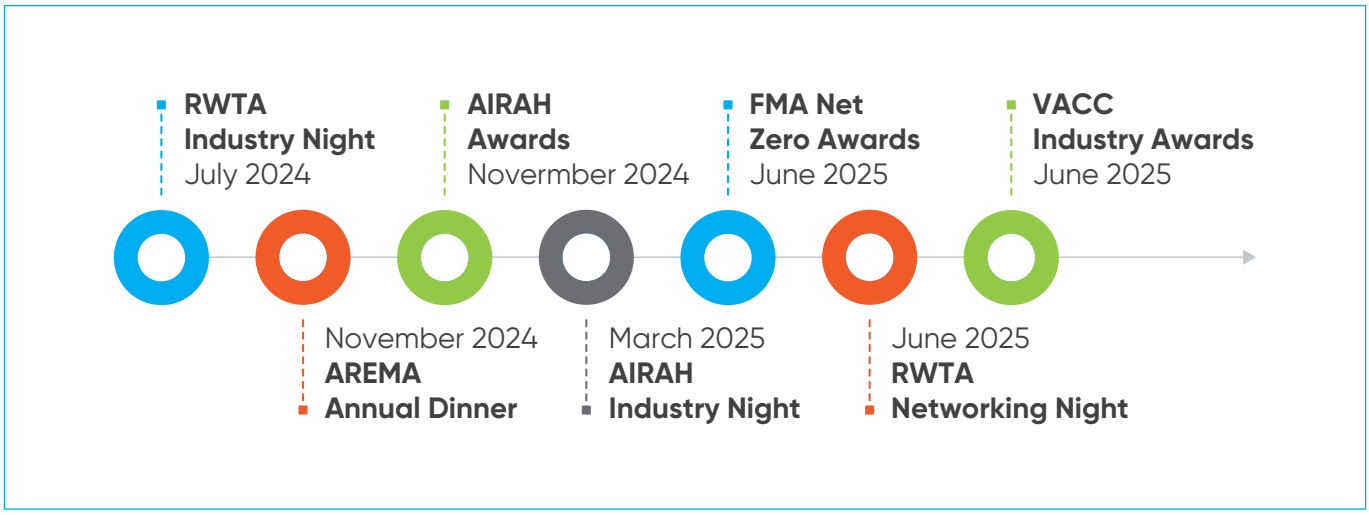

Figure 27: Industry events attended by ARC

ARC's strategic approach to conference and event participation has not only met its engagement objectives but also reinforced its reputation as a leading voice in the RAC industry.

Media releases: Year in media highlights

Throughout 2024–25, the Australian Refrigeration Council (ARC) maintained a strong and consistent media presence, issuing a series of strategic releases that informed, educated, and engaged stakeholders across the refrigeration and air conditioning (RAC) sector.

Key highlights

- **Industry growth and recognition**
  The ARC reported record growth in RAC licences reflecting the sector's expanding workforce and its critical role in Australia's climate response. Updates to national occupational classifications and recognition of new automotive qualifications further elevated the professional standing of RAC technicians.
- **Consumer engagement and awareness**
  A surge in online licence checks and the success of the Look for the Tick campaign demonstrated growing public awareness of the importance of licensed professionals. ARC also addressed misconceptions in the industry, reinforcing its commitment to transparency and education.
- **Regulatory updates and compliance**
  The ARC communicated key regulatory changes, including the penalty unit increase, the ban on high-GWP small AC equipment, and the release of updated Codes of Practice. Notably, the Codes of Practice release gained international reach through its publication in Cool-Safe NZ.
- **Training and international collaboration**
  The ARC supported international efforts under the Montreal Protocol and celebrated local training milestones, such as the first dual-qualified fridgies and the stewardship award for ARCtick compliance.
- **Events and outreach**
  The ARC maintained a strong presence at industry events, including Wire & Gas 2024, and launched a video campaign highlighting the climate value of RAC technicians.

Each media release achieved wide circulation, featuring across leading industry platforms including **arctick.org**, **CCN**, **HVAC&R News**, **RACCA**, **RWTA**, **Electrical Connection**, **Pump Industry**, and **Plumbing Connection**. This consistent presence reflects ARC's proactive communication approach and reinforces its leadership role in guiding industry awareness, regulatory clarity, and licensing updates.

Part 6

Refrigerant purchases and returns

While it is expected that more refrigerant is purchased then returned as it is, in 'in use', the return of refrigerant for reclamation or destruction is the final step in the refrigerant product stewardship scheme and is central to the origination of the permit scheme.

One crucial data set collected during audits is the information on refrigerant purchases and returns by RTAs. This data provides a micro-level view of refrigerant movement within the industry, enabling analysis of trends across different sectors, states, and more.

A wide-ranging data set

During the audit process, the ARC reviews the last 2 quarters' purchase and return data – the time of year of the audit can impact how much refrigerant is recorded. This financial year, over 8,639 eligible audits revealed the following:

58 kg purchased
was the national average, and

9 kg returned
was the national average for refrigerant returned for destruction

Heatwaves and high returns

Australia's second-warmest summer on record drove up demand for cooling services, leading to a surge in refrigerant use and returns. Combined with growing environmental awareness, these conditions contributed to a notable rise in refrigerant activity across the industry.

Sustainable practices

The RAC industry is increasingly adopting sustainable practices, such as recycling and reclaiming refrigerants. This reduces the need for new refrigerant production and minimises environmental impact.

General purchase and returns overview

During the 2024–25 financial year **498,690 kg** of refrigerant was purchased, and **75,479 kg** was returned – just by audited RTA holders during this period. Among the 8,639 RTAs with available records, the average amount of refrigerant purchased was **58 kg**, while the average returned was **9 kg**.

Across the **8,639 non-wholesaler** audits conducted in 2024–25, **4,646** RTAs had either purchased or returned refrigerant in the 2 quarters prior to their audit, while **3,993** had not recorded any refrigerant activity during that time.

Purchased and returned averages by state/territory

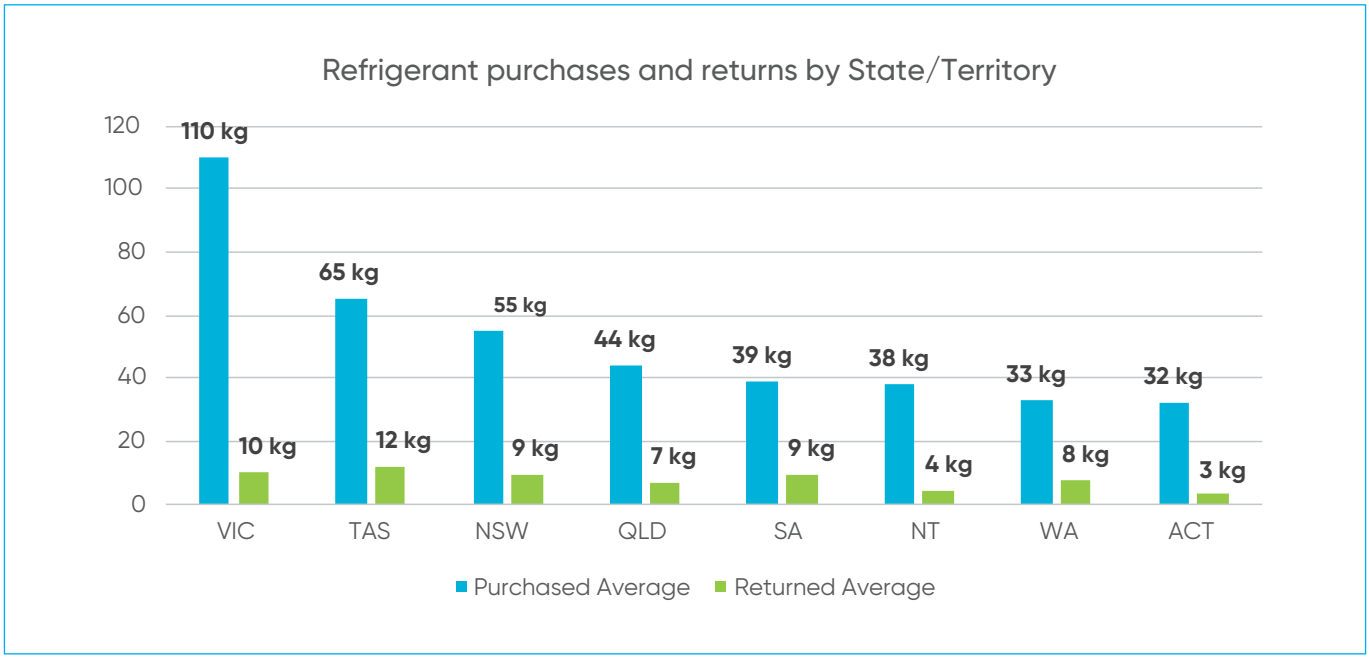

Figure 28: State/territory average of refrigerant purchased and returned

For the 2024–25 financial year, one state/territory had a significantly higher average refrigerant purchase amount. This state, Victoria, has one outlier datapoint which purchased **72,285 kg**, or over **72 tonnes** of refrigerant. This stretches the average refrigerant purchased from **66 kg** to **110 kg**, a significant difference of **44 kg**.

Purchased and returned averages by industry segment

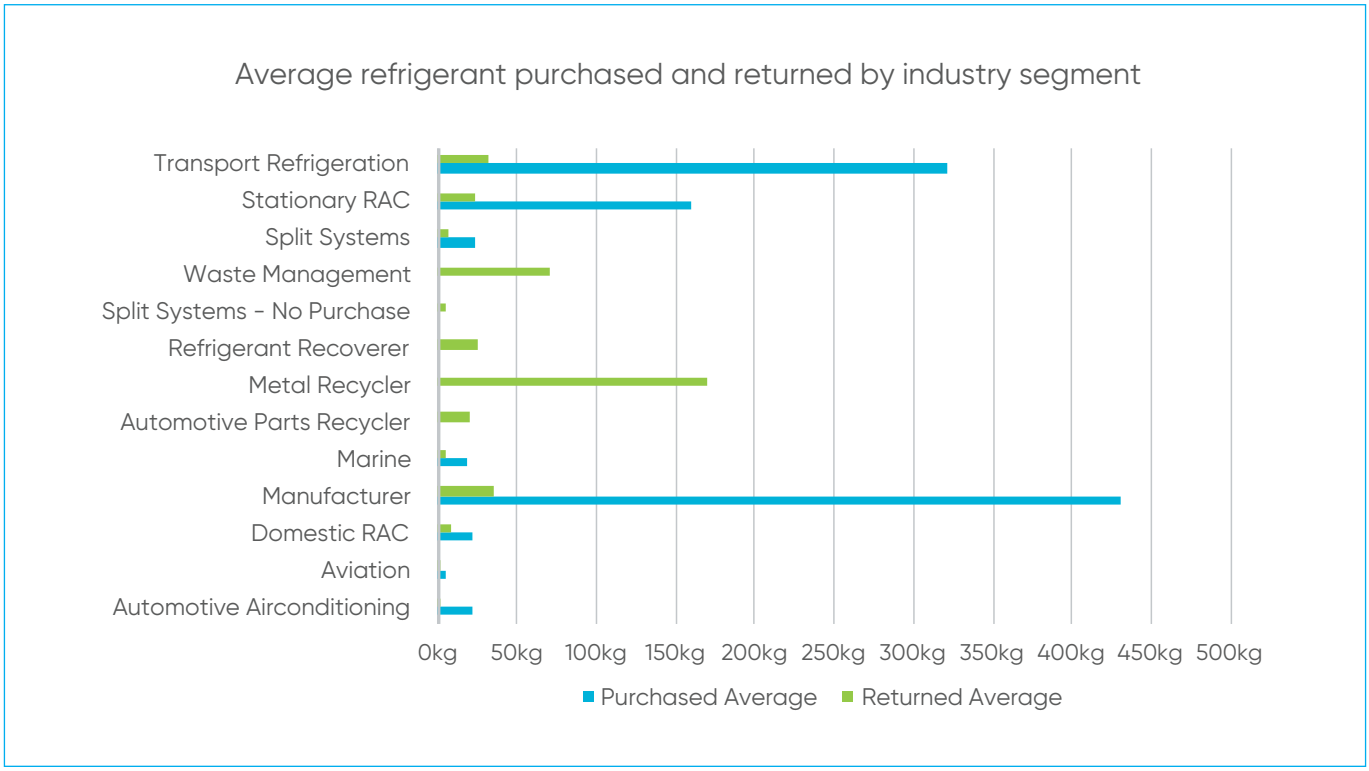

Figure 29: Average refrigerant purchased and returned by industry segment

Refrigerant purchasing and recovery activity varies significantly across industries, with manufacturers leading by a wide margin – averaging **431 kg purchased** and **35 kg returned**, reflecting their large-scale operations. Transport Refrigeration also shows high engagement, with **322 kg purchased** and **31 kg returned**, while Stationary RAC and Domestic RAC demonstrate steady activity, indicating consistent demand and recovery practices.

The restricted licence categories – such as Restricted Metal Recyclers, Restricted Waste Management, and Restricted Refrigerant Recoverer – are not authorised to purchase refrigerant but play a critical role in its safe handling and return.

Their contribution to environmental stewardship is evident in the data: Restricted Metal Recyclers returned an impressive **170 kg**, the highest among all sectors, followed by Restricted Waste Management with **70 kg**, and Restricted Refrigerant Recoverers with **25 kg**. These figures highlight the effectiveness of the restricted licence framework in supporting refrigerant recovery and minimising emissions, particularly from end-of-life equipment and waste streams. The strong return volumes from these segments underscore their importance in the broader refrigerant lifecycle and circular economy.

Purchase and returns trends

Average purchased/returned by year

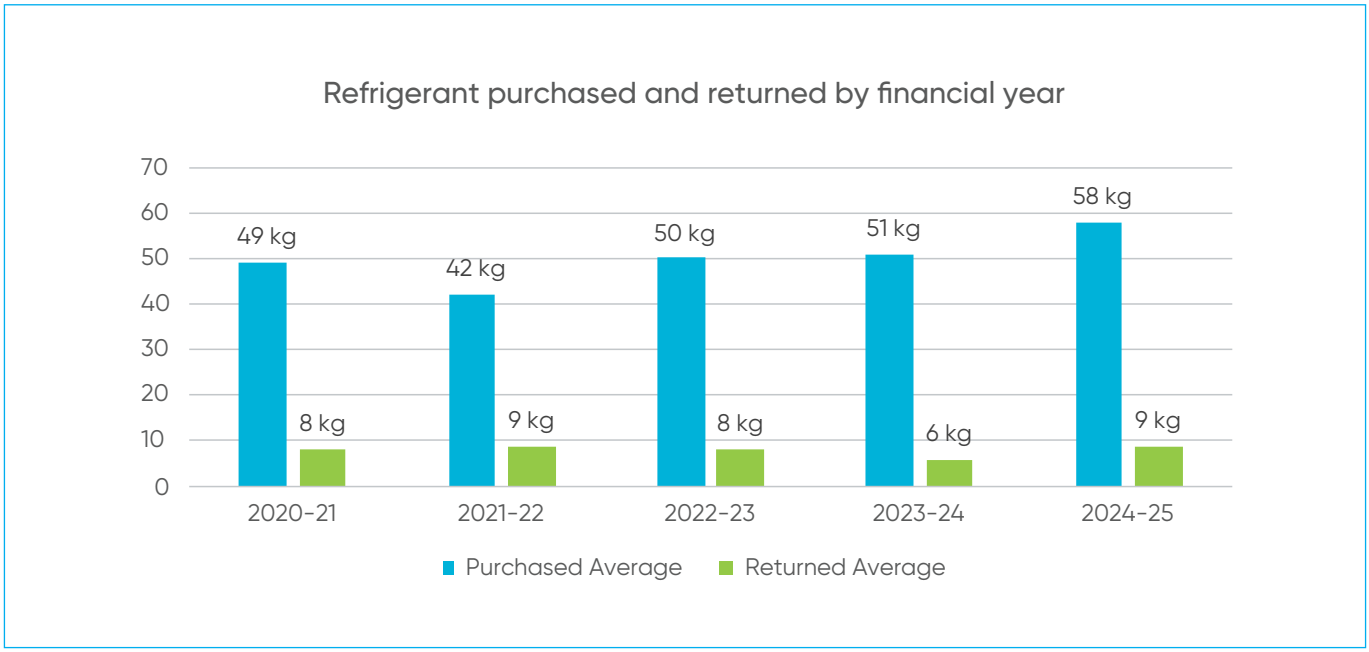

Figure 30: Average refrigerant purchased and returned in last 5 financial years

The 2024–25 financial year saw a notable rise in both the average amount of refrigerant purchased and returned. The average quantity purchased increased only slightly, however, the average quantity returned increased by **50%**.

Australia's exceptionally warm summer in 2024–25 likely played a key role in driving up demand for refrigeration and air conditioning services, with a corresponding increase in refrigerant demand.

With national mean maximum temperatures **2.27°C** above average – the second-warmest summer on record in Australia's history – cooling systems across the country would have been under increased pressure. This would have led to more frequent servicing, higher refrigerant usage, and greater urgency for system maintenance and replacement.

The heat was particularly intense in Western Australia, which recorded its warmest summer ever, and other states and territories (excluding Tasmania) also experienced one of their top 10 warmest summers on record. These conditions likely contributed to the significant rise in both refrigerant purchases and returns observed during the financial year.[9] Furthermore, a larger number of RTAs were audited, providing a broader and more representative data set. There's also growing awareness across the industry of the importance of environmental responsibility, with more businesses actively returning refrigerant as part of their commitment to sustainable practices. Together, these factors help explain the notable rise in both refrigerant purchases and returns this financial year.

Ratio of purchased/returned by year

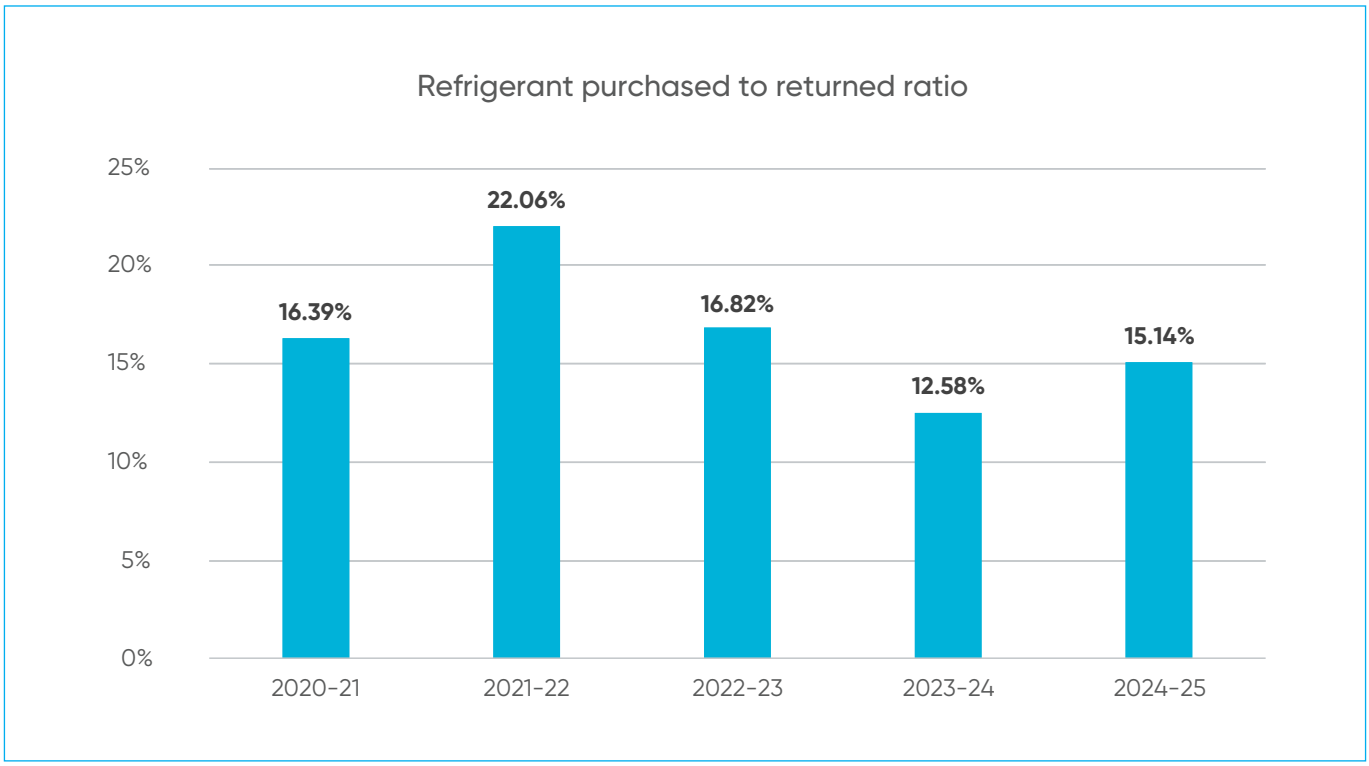

Figure 31: Refrigerant purchased to returned ratio, 2020–21 to 2024–25

The Purchased to Returned Ratio reflects the proportion of refrigerant returned for destruction or reclamation compared to the total amount purchased. In the 2024–25 financial year, this ratio sits at **15.14%** meaning that for every **100 kg** of refrigerant purchased, **15.14 kg** was returned. This metric is a useful indicator of how effectively the industry is managing refrigerant lifecycle and environmental responsibility.

Historically, the ratio hovered around **16.39%** in 2020–21. A sharp spike occurred in **2021–22**, when the ratio jumped to **22%** – a result largely attributed to **Refrigerant Reclaim Australia's (RRA) Gas Seeker initiative**. This campaign, which ran from January to June 2021, more than tripled the rebate for recovered refrigerant from **$3/kg** to **$10/kg**.

The goal was to encourage technicians and businesses to return stored or unwanted refrigerant, especially after a challenging 2020. The initiative was well received and clearly effective, as reflected in the data.

The ratio dipped again to **16.8%** in 2022–23 and fell further to **12.5%** in 2023–24, before rebounding this year. This pattern highlights how impactful targeted incentives can be – but also how difficult it is to sustain high return rates without ongoing support and awareness.

9 Bureau of Meteorology (BoM), (2025), Australia in Autumn 2025.

Part 7

Industry insights: A deep dive into the RAC sector

Complaint vs size of business

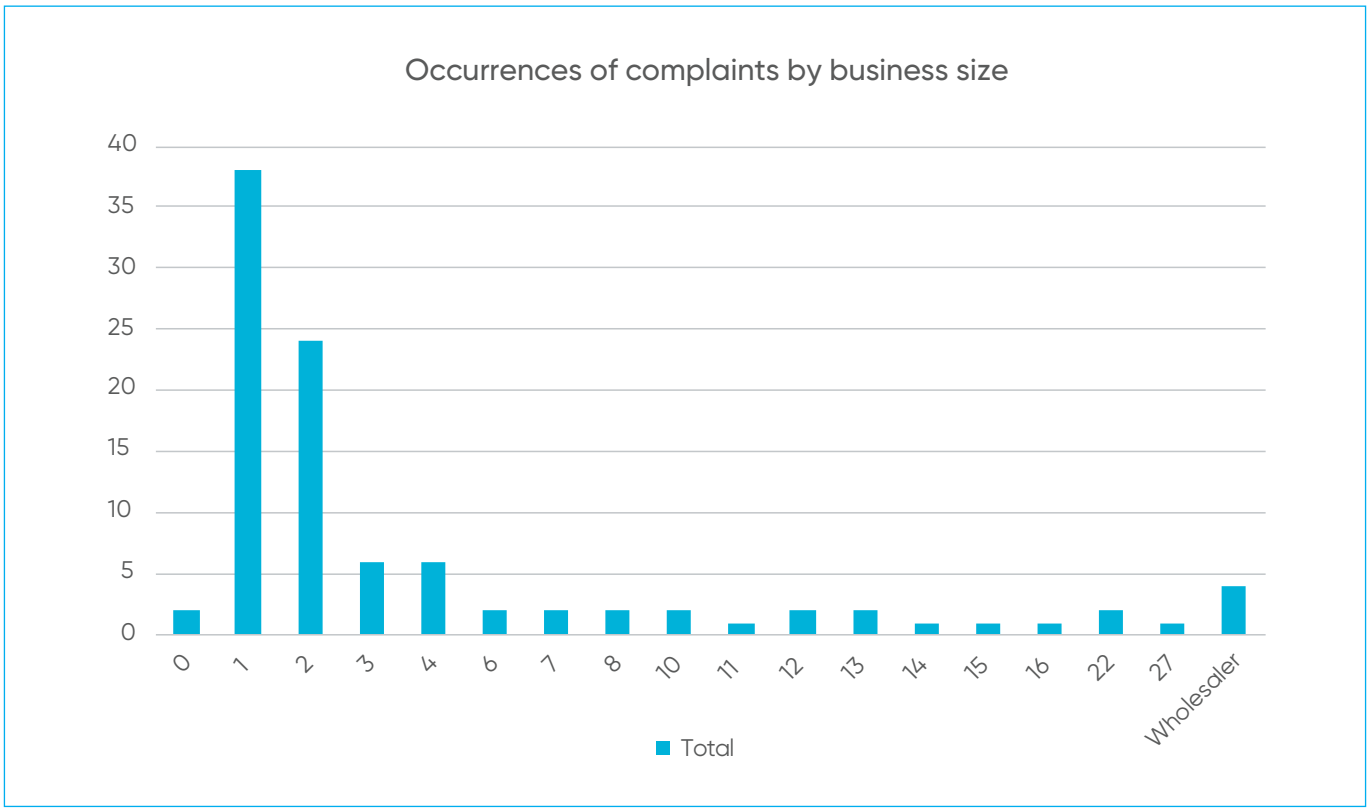

Figure 32: Occurrences of complaints by business size, 2024–25

The trend of complaints by business size is largely consistent with industry profile. Most complaints arise from small businesses, reflecting their greater representation. This is not a signal of more prevalent problems; rather, that their higher representation in the market naturally leads to a greater number of complaints.

The lower complaint counts from larger businesses may reflect better compliance systems or, simply, their lower frequency in the data set.

The incident data reveals several interesting patterns when comparing complaint sources to business size.

For example, businesses with one RHL linked to an RTA received 21 industry complaints compared to 15 from consumers, while those with 2 RHLs had 14 industry complaints and 8 from consumers.

This trend continues across other small sizes, suggesting that industry stakeholders are more active than consumers in reporting non-compliance. Consumer complaints tend to be fewer and more concentrated in the smallest business sizes, with very few directed at larger entities.

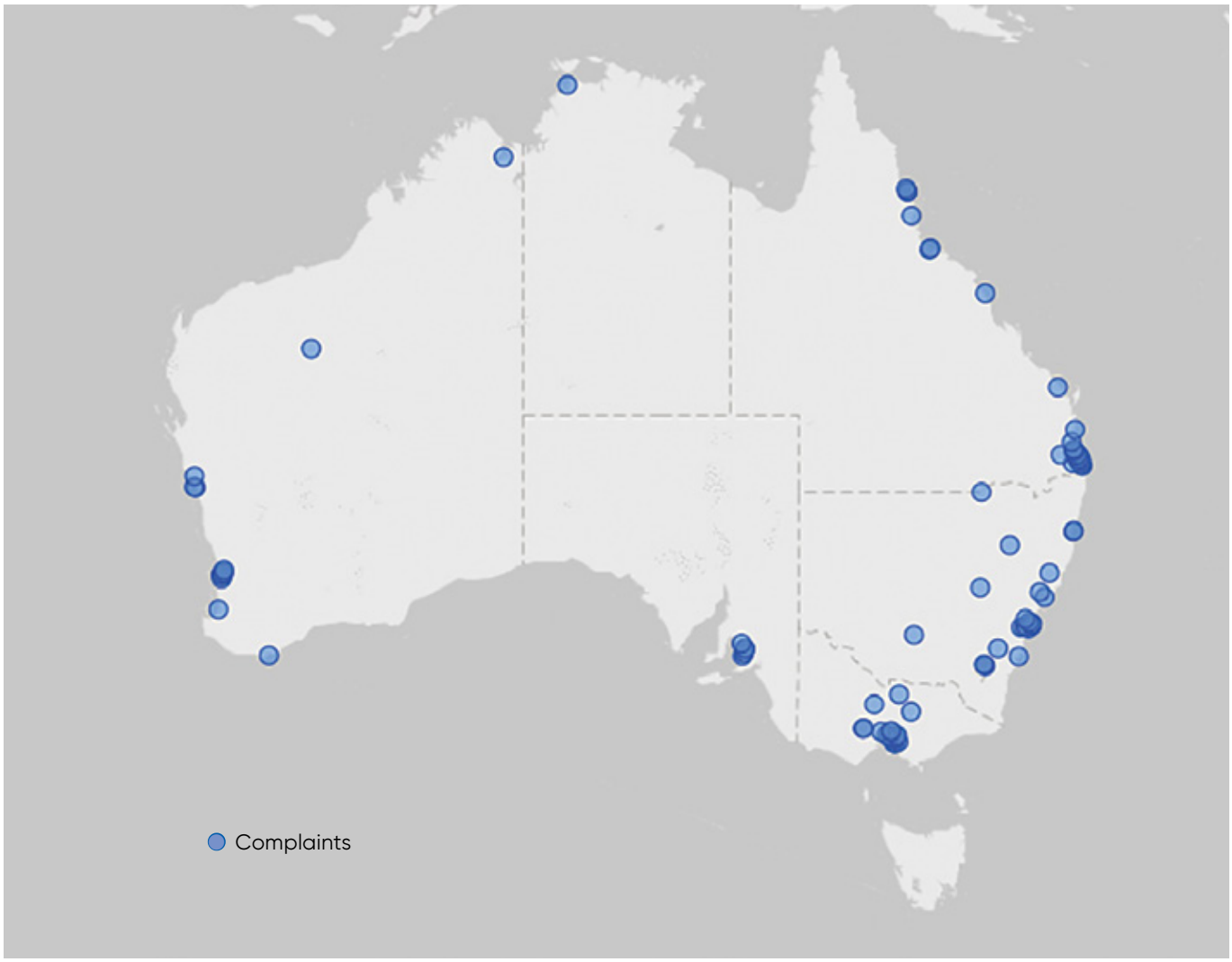

Figure 33: Occurrences of complaints by latitude and longitude, 2024–25

Among the complaints recorded, the most frequently cited industry segment is Split Systems A/C Installation, with 33 incidents, followed by Stationary RAC (27) and Automotive Air Conditioning (26). These 3 segments dominate the data set and likely reflect areas with high volumes of work and public interaction, which may increase visibility and scrutiny. Less common segments such as Domestic RAC (7), Refrigerant Wholesaler, and niche categories like Restricted Automotive Parts Recycler and Aviation appear infrequently, due to lower activity levels or fewer reported issues.

This information is useful input into the licence schemes compliance and enforcement strategy – ensuring that it is efficient and effective.

Distance between wholesalers and RTAs

Understanding the spatial relationship between wholesalers and RTAs is part of efficient refrigerant management. Industries and regions with limited access may face logistical challenges in complying with environmental regulations and maintaining refrigerant supply chains.

This exploratory analysis provides a sense of geographic coverage and accessibility across industry sectors. It focuses on the distance between RTAs and their nearest wholesaler – reflecting the 'typical' experience – highlighting where an RTA may be significantly underserved.

Importantly, these distances are calculated using straight-line ('as the crow flies') measurements between geographic coordinates. They do not account for actual road networks, terrain, or travel conditions. For someone driving, the real-world journey to a wholesaler would often be considerably longer, especially in regional or remote areas. Most RTAs are within 3 km of a wholesaler (median).

Industry	Average (km)	Median (km)
Automotive Air Conditioning	13.6	1.92
Aviation	9.36	2.49
Domestic RAC	9.63	2.54
Manufacturer	1.53	0.987
Marine	19.4	4.86
Restricted Automotive Parts Recycler	3.59	1.17
Restricted Metal Recycler	2.53	1.46
Restricted Refrigerant Recovery	2.81	1.86
Restricted Split Systems A/C Installation	14.4	3.53
Restricted Waste Management	4.52	2.12
Split Systems A/C Installation	11.3	2.63
Stationary RAC	9.24	2.28
Transport Refrigeration	3.46	1.26

Table 7: Average and median distance to wholesaler by industry segment

In the Manufacturer sector, the median distance to a wholesaler is just 0.987 km, with an average of 1.53 km. This suggests that most RTAs in this category are in or near urban centres, where manufacturing operations and supply chains are typically concentrated. Similarly, Transport Refrigeration RTAs show a median of 1.26 km and an average of 3.46 km, reflecting their presence in metropolitan or industrial zones where refrigerated transport infrastructure is more common.

Restricted Automotive Parts Recycler and Restricted Metal Recycler sectors also show low median distances of 1.17 km and 1.46 km respectively, with modest averages. These industries are likely to be clustered around urban recycling facilities or industrial hubs, which tend to have better access to wholesalers. The Marine sector shows a median distance of 4.86 km and an average of 19.4 km. These figures suggest that while many RTAs in this category are relatively close to wholesalers, there is still a notable spread in accessibility. Marine operations are often based in regional ports, coastal towns, or industrial waterfronts, which may not be as well-served by wholesaler infrastructure as metropolitan areas.

The elevated average, compared to the median, indicates that some RTAs are in more remote locations, contributing to longer travel distances for refrigerant handling. Split Systems A/C Installation and its restricted counterpart also show elevated average distances of 11.3 km and 14.4 km, despite medians of 2.63 km and 3.53 km. This indicates a wide spread in accessibility, likely due to the nature of these services being offered both in cities and in more dispersed residential or regional settings.

Automotive Air Conditioning, Domestic RAC, and Stationary RAC sectors all show median distances around 2 to 2.5 km, but their average distances range from 9.24 to 13.6 km. This suggests that while most RTAs in these sectors are well positioned, a subset may be in areas with limited wholesaler coverage, potentially impacting their ability to efficiently purchase or return refrigerants.

State/Territory	Average (km)	Median (km)
ACT	2.1	0.98
NSW	7.99	2.03
NT	24.2	1.68
QLD	11	2.05
SA	17.2	2.24
TAS	12.4	2.71
VIC	5.83	1.71
WA	20.8	2.21

Table 8: Average and median distance to wholesaler by state/territory

State-level accessibility to refrigerant wholesalers varies significantly across Australia. The Australian Capital Territory (ACT) shows the lowest average distance at 2.10 km and a median of 0.98 km, indicating that most RTAs in this region are located very close to wholesalers. Victoria (VIC) also demonstrates strong accessibility, with an average of 5.83 km and a median of 1.71 km. In contrast, the Northern Territory (NT) and Western Australia (WA) exhibit the highest average distances, at 24.2 km and 20.8 km respectively. WA also has the highest maximum distance recorded at over 2000 km, suggesting that some RTAs are in extremely remote areas.

Despite these high averages, the median distances in NT and WA remain relatively low (1.68 km and 2.21 km), implying that while most RTAs are well positioned, a few outliers significantly increase the average. Queensland (QLD), South Australia (SA), and Tasmania (TAS) fall in the mid-range, with average distances between 11.0 km and 17.2 km. Their median distances are consistently around 2 to 2.7 km, indicating generally good access with occasional remote RTAs. New South Wales (NSW) shows an average of 7.99 km and a median of 2.03 km, reflecting a balanced distribution of RTAs across urban and regional areas.

Overall, the data suggests that while most RTAs across states are within a few kilometres of a wholesaler, certain regions – particularly WA and NT – contain RTAs that are significantly more isolated, which may warrant targeted infrastructure or support to improve accessibility.

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