ACOR
AUSTRALIAN COUNCIL OF RECYCLING

EQUILIBRIUM

An Australian Recyclers Accreditation Program

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

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Contents

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Definitions and acronyms

For the purpose of this project the following definitions and acronyms apply:

Term	Definitions
Accreditation	Accreditation means recognition that a business or organisation that participates in a standardised approach to performance assessment has made a commitment to, and meets the requirements of, the national accreditation program for Australian recyclers
ACOR	Australian Council of Recycling
Applicant	Applicant means a business or organisation that is a legal entity with an Australian Business Number or Australian Company Number and has applied to become a participant.
ARAP	Australian Recyclers Accreditation Program
C&D	Construction and demolition
C&I	Commercial and industrial
Certification	Certification provides participants with an official document attesting to a status or level of achievement.
Circular economy	At the broadest level, a circular economy aims to change the patterns of natural resource use in the economy in order to achieve sustainable growth by slowing, narrowing or closing material loops. (*from the National Waste Policy Action Plan 2019*)
DCCEEW	Department of Climate Change, Energy, the Environment and Water
EHS	Environmental and Health and Safety
ISO	International Organization for Standardization
MRF	Material recovery facility
MSW	Municipal solid waste
Participant	Participant means a business or organisation that has received accreditation and made a commitment to meet the requirements of ARAP
Recovery rate	The rate (expressed as a percentage) at which a material is recovered from a recycling process.
Recycler	A business or organisation that undertakes one or more or all of the following: • the sorting / dismantling / decontamination of material into a “reusable material”. • the processing of materials into a form ready to be used in a new production or manufacturing process. • the use of recovered materials that would otherwise go to waste in a new production or manufacturing process thereby replacing virgin raw materials.
Recycling	Processes for converting materials that would have otherwise been disposed of into new materials.
Resource recovery	Making use of a waste material, including recycling of waste matter, and recovering energy or other resources from waste.
Waste	Material that has finished initial use and entered a waste stream. This includes the waste we recycle as well as the waste we send to landfill.
Waste and resource recovery industry	This is inclusive of business and organisations involved in collecting, sorting, processing, trading, transporting and disposing of waste.

Executive Summary

Australia's recycling sector is undergoing a transformation, with unprecedented government and industry investment and overwhelming public support for resource recovery, recycling and local remanufacturing.

The 2019 National Waste Policy Action Plan, which aims to support Australia's circular economy, has spurred momentum in the sector with actions such as banning the export of waste plastic, paper, glass and tyres; targeting an increased resource recovery rate; and committing to significantly increase the use of recycled content by governments and industry.

As recyclers evolve and transition to a more circular economy, there is a need to support better practice across industry and improve confidence in recycling outcomes.

Recyclers have a very broad range of capabilities and practices across the sector, and those engaged in poor practices can potentially affect the reputation of the entire industry.

At the same time, it can be difficult for stakeholders to distinguish between waste operations and recycling activities; and differentiate good and bad practice. As such, stakeholders are increasingly requiring third party verification of performance and outcomes.

An accreditation program for recyclers will deliver value to industry, government, and the community.

It does this by fundamentally providing confidence to stakeholders that accredited recyclers are operating legitimately, are at or are moving towards best practice and are proactively meeting appropriate quality outcomes.

With this in mind, the Australian Council of Recycling (ACOR) has developed the Australian Recyclers Accreditation Program (ARAP). The ARAP works by establishing an objective and consistent process for assessing a recycling operator's performance and providing assurance around the legitimacy of recycling operations.

Accreditation tests whether the operator is secure, sustainable, and resilient.

This report and underlying evaluation assess a national accreditation program for Australian recyclers and the range of benefits and impacts this program will have.

ARAP is different to broad-based certifications and standards. Those broad-based programs, such as International Organization for Standardization (ISO) certification, often test whether a system is in place that aligns with requirements to a specified standard. They do not necessarily test whether that system is working and check the actual performance of the organisation or facility. ISO certification is a good sign that systems are in place and is an indicator of good practice, but is not in itself evidence of good practice of a recycling operation. ARAP accreditation, on the other hand, gathers, checks and assesses evidence of good practice and performance.

The ARAP is an accreditation program tailored to Australian recyclers of all types, providing a framework for independent, objective, and consistent assessments of recycling operations on a site-by-site basis.

The ARAP framework establishes an audit procedure to review what a site is doing with respect to operational performance. It examines how the site receives, handles, processes, manages, and dispatches recyclable materials. It verifies factors and gathers evidence regarding legal compliance, health and safety, material handling and storage, permits and licences and other elements including meeting output specifications.

The ARAP provides the structure to evaluate a site based on operational and other risks and determine whether the site meets the ARAP standards or not.

The framework and audit also leverage off and use existing systems and certifications. For example, if a site has an ISO certified environmental and occupational health and safety management system, then the ISO can be assessed as part of the evidence of that site's performance, and the ARAP audit confirms whether the site is up to date on its ISO certifications or not.

The ARAP is designed to not only use but build on other certifications such as ISO, giving the industry access to a more in-depth review of operational performance and ability to meet community expectations and industry specifications, giving confidence in Australian recycling and reprocessing capabilities.

The ARAP is suitable for businesses and organisations, irrespective of the size and type of product/materials handled and recycled/reprocessed. As such, the ARAP provides greater choice for businesses of different sizes. Achieving ISO can be onerous and sometimes beyond easy reach of small and medium sized recyclers. Whilst ISO certification can be assessed, it is not a requirement to achieving ARAP. ARAP provides a means for small and medium recyclers to undertake a check of key performance and systemic behaviours without going through the whole ISO program.

The purpose of the assessment is to ensure a minimum level of performance against relevant EHS regulation and compliance requirements (national, state and local government) as well as other criteria.

The results and reporting from an ARAP assessment can be used to inform the market, government, and potentially the wider community, on whether the recycling site is achieving meets best practice and is delivering genuine recycling outcomes.

This report and its underlying research and analysis examine what such an accreditation program may achieve and how it may be implemented.

The research and analysis detailed in the evaluation section of this report comprises industry engagement, site audits and assessments to examine in detail the potential impact of an accreditation program across resource recovery, the circular economy, and national standards. It further examines the potential economic, regulatory and market impacts of an accreditation program.

The analysis has found that the ARAP is a practical and effective program with favourable industry support that aligns with many existing certification requirements to deliver a range of benefits to the recycling industry, government, and the community.

Key outcomes

The evaluation and further development of ARAP to date has found that ARAP presents a range of benefits and can achieve outcomes including:

Value proposition

The value of ARAP is that it:

- Complements compliance requirements across National and State regulation and legislation through checks on conformity and raising industry standards
- Provides accreditation that goes beyond ISO standards and includes the ability to assess site operations against output standards and specifications.
- Is applicable to any sized operational site while offering benefits that are greater than just maintaining ISO accreditation and adhering to regulations and legislation requirements.

The value to businesses' irrespective of their size, and material handled and processed is that ARAP:

- Provides a single framework by which similar operations can be compared and therefore enable competitive advantages to be realised
- Will maintain a website and database in which participating businesses can be listed, therefore giving a strong focal point for marketing and promotional activities
- Allows for industry-wide recognition that can be used to demonstrate activities that addresses legal and other regulatory compliance
- Offers strong industry-wide branding
- Is a transparent program that is underpinned using third party auditing and reporting to ensure confidential information is contained.

Small and medium businesses

ARAP will provide cost effective and easy-to-access accreditation for small and medium recyclers. The ARAP costs are proportional to an organisation's size and impact and enables small and medium business to start the accreditation process and build capacity and capability over time.

ARAP provides a number of additional benefits for small and medium size businesses:

- Facilitates growth of capability in EHS best practice.
- Provides confidence for suppliers and stakeholders of best practice.
- Displays transparency and accountability. Increases competitiveness of small and medium businesses.
- Raises performance across the sector – from small to large business.
- ARAP accreditation is a cheaper and easier option for small and medium recyclers than ISO certification, whilst giving a broader a more detailed evaluation of the business' activities.

Stakeholder engagement has found that while small and medium businesses may at times be cautious about accreditation processes potentially being time consuming, the ARAP is viewed favourably as it is tailored for the recycling industry and is fit-for-purpose.

Output standards

ARAP supports national performance standards for material recovery and secondary processing facilities as the presence of any such standard, and whether the recycling site can comply with it or not, forms verifiable evidence in the ARAP audit process.

Verified recycled content

ARAP strengthens the market for use of recycled content in making new products. The ARAP provides confidence that accredited recycling facilities and their outputs are to a certain quality and are reliable. This in turn supports and endorses the use of the recovered materials in downstream remanufacturing processes. It is expected that ARAP can support and reinforce related programs such as 'buy recycled' directories and the Australian Government's 'Remade in Australia' initiative.

Findings and recommendations

- It is recommended that the ARAP should be the national accreditation program for use by all recyclers and should be supported by Government for implementation
- ARAP has been tested and evaluated with the recycling and resource recovery industry and will support resource recovery through an independent program that will ensure transparency and accountability, that industry standards are raised, and sites are able to implement best practice initiatives
- It addresses circular economy principals by providing transparency and accountability on the downstream end market for recyclable materials, thereby promoting and ensuring reuse of recovered materials, and that recovered materials have reliable end markets including identifying and supporting domestic processing capacity and capabilities
- ARAP complements compliance requirements across national and state regulation and legislation through checks on conformity and raising industry standards
- It succinctly provides up to date market information about the current performance of a facility and therefore assists with the tender, purchase, and on-going use of recycling services
- It is aligned with, and leverages off, other programs and standards including ISO, national standards for recovered materials from Material Recovery Facilities (MRFs) and the Institute of Scrap Recycling Industries (ISRI) specifications
- It complements and supports other targeted and/or general sustainability and environment programs such as Climate Active, Australian Government Accredited Product Stewardship or B Corp as a facility's accreditation to such schemes contributes towards ARAP accreditation

- It will inform the market, and thereby promote security and reliability, with elements such as a live database and accessible industry intelligence including recognition of site operational performance and adherence to standards
- ARAP can be implemented in the short term with about six months before going live and then a staged rollout and availability to all recyclers across Australia
- ARAP funding can be managed with Government support for the implementation phase, and then the on-going program funded by industry through a user pays approach

Next steps

- The protocol outlined in the original ARAP program guide that is presented in Appendix 5 is relevant and will form the basis of an accreditation program.
- Accreditation against output performance standards and specifications, such as the recovered materials specifications being delivered by NWRIC, be adopted as relevant on a case-by-case basis into ARAP, noting that they will be expanded and tailored according to program requirements and taking into account the type of facility, operations and recovered or processed outputs.
- Any standards or specifications that have been identified as relevant to a particular site and operations will be included in the ARAP where the outputs and subsequent use can be established and verified.
- Where sorting and/or processing specifications are established and can be provided for a particular facility, these will be assessed against outputs and to the extent possible further down the value and supply chain.
- Audits will be conducted on a site-by-site basis on an annual or rolling basis. There may be opportunities to review rolling audit programs for large recyclers, which may be based on a risk-based approach. Annual desktop reviews will be undertaken at a minimum to ensure risks are adequately addressed.
- ARAP will develop logos, marketing, and engagement to build a profile over time and to stimulate recognition within the market (especially the purchasers and users of recycling services such a local government) and potentially the broader public. This can also support relevant Government programs, such as 'ReMade in Australia' and 'buy recycled' directories, by providing a credible list of recyclers, whose operations and outputs have been confirmed as meeting appropriate specifications.

A benefit of ARAP is that industry is generally aware of it and is comfortable with its scope and purpose. This along with the development to date by ACOR means ARAP can be rolled out in the short term and be live within about a six-month timeframe.

Detailed costs and benefits of the implementation of the program will be one of the first tasks in the establishment phase and during the final program design.

Specific outputs from the development of the program will include:

- Detailed governance and operational documentation
- Website and other promotional material including branding that will be available to participants of ARAP
- Clearly articulated value proposition and industry wide recognition through potentially a publicly available and searchable register/database of all accredited Australian recyclers and any related relevant standards. This would leverage and be linked to other relevant information sources (e.g. Sustainability Victoria's 'Buy Recycled' Directory, Recycle Mate, Recycling Near You)
- Easily understood platform to enable participants to understand EHS risks and opportunities in their operations

The ability for participants to promote that they have achieved accreditation and are meeting, where applicable, national standards for recovered materials. Full details of findings and recommendations are contained in Section 7 as well as the funding and implementation program

1 Introduction

Australia's recycling sector is undergoing a transformation, with unprecedented government and industry investment and overwhelming public support for resource recovery, recycling and local remanufacturing.

The 2019 National Waste Policy Action Plan, which aims to support Australia's circular economy, has spurred momentum in the sector by banning export of waste plastic, paper, glass and tyres; targeting an increased resource recovery rate; and committing to significantly increase the use of recycled content by governments and industry.

As recyclers evolve and transition to a more circular economy, there is a critical opportunity to support better practice across industry and improve confidence in recycling outcomes.

With a very broad range of capabilities and practices across the sector, those engaged in poor practices can potentially affect the reputation of the entire industry. At the same time, it can be difficult for stakeholders to distinguish between waste operations and recycling activities; and differentiate good and bad practice. As such, stakeholders are increasingly requiring third party verification of performance and outcomes.

A secure, sustainable, and resilient recycling sector provides confidence to government and the community that the end-of-life materials that are collected for recycling are genuinely diverted from landfill and are being processed in an appropriate way. Essentially, this means that the materials collected for recycling are actually recycled. And it means achieving good health, safety and environmental outcomes and recycling in accordance with relevant legislation and regulations.

Achieving and maintaining that underlying confidence is dependent on multiple factors, as recycling is driven by markets, regulations, and technology.

Transparency and accountability for the industry and operators is fundamental to achieving and maintaining confidence.

An accreditation program is a means to generate transparency and accountability and thereby support and enhance underlying confidence.

The Australian Recyclers Accreditation Program (ARAP) is designed to deliver a broad range of benefits to businesses, including:

- A unified approach to verification of high-level process standards and product quality.
- Stakeholder confidence that accredited participants operate in compliance with Environment, Health, and Safety (EHS) regulations and are proactively managing EHS risks through best practise risk assessment and management systems.
- Potential for regulatory recognition and reward (e.g. ease of licensing and permitting) for accredited operations.
- Further accountability to meet recycling targets and leveraging accreditation to attract new customers.
- Less costly approach to accessing new markets for smaller businesses and organisations compared to investing in other management systems such as quality, environment and health and safety (ISO certification systems) which can cost significantly more than proposed by the ARAP.
- Reduced risk to the industry from negative media that may result from poor performers.
- Complement current systems (e.g. ISO certification and state-based regulator inspection programs)
- Avoids duplication and unnecessary costs by recognising ISO certification and other program outcomes.
- Support for innovation through meeting consumer demands (e.g., for new products).
- Potential to assist with gaining insurance and help manage the rising cost of insurance premiums should ARAP be widely adopted.

- Potential to underpin programs that prioritise recycled content, by identifying credible, accredited operations.
- A level playing field for performance of the industry and various sectors participating in ARAP.

ARAP is a site-based program specifically for recycling and resource recovery operations, including assessing key operational aspects across:

- Collection and transport of recyclable materials
- Primary sorting, dismantling, pre-treatment, and storage
- Secondary sorting and reprocessing.
- Downstream sale and distribution.
- Remanufacture of recovered / recyclable materials into recycled content products (RCPs). Management of supply chain relationships including local transport and export partners.

The ARAP assesses site-specific systems, activities, and aspects in addition to compliance requirements to best practice management of resource recovery and recycling facilities.

In 2020 the ACOR developed the ARAP program incorporating research, consultation and development of draft guidelines and an audit system.

In 2021 the Department of Climate Change, Energy, the Environment and Water (DCCEEW) prioritised the further development of an accreditation program as part of the delivery of the Australian 2019 National Waste Policy Action Plan (the Action Plan).

This report builds on the 2020 program development that was undertaken by ACOR.

An explanation of the workings of ARAP is detailed in Section 3 and the ARAP Guide is provided at Appendix 5.

This report presents findings and recommendations from an evaluation of the ARAP, analysing the potential impacts and assessing the potential benefits to industry.

Based on the evidence from the impact assessment undertaken as part of this evaluation, there is a clear benefit in progressing the rollout of ARAP and developing timelines for additional activities prior to market release.

Detailed findings and recommendations are provided in Section 7.

2 ARAP background

ACOR, in partnership with Equilibrium, was engaged by DCCEEW to recommend a national accreditation or certification program for Australian recyclers, that is available for use by all Australian recyclers.

In 2019-20, ACOR supported and funded the initial development ARAP, incorporating research, consultation and development of draft guidelines and an audit system.

The ARAP program was designed to be a site-based program specifically for recycling and resource recovery operations, including assessing key operational aspects across:

- Collection and transport of recyclable materials
- Primary sorting, dismantling, pre-treatment, and storage
- Secondary sorting and reprocessing
- Downstream sale and distribution
- Remanufacture of recovered / recyclable materials into recycled content products (RCPs).
- Management of supply chain relationships including local transport and export partners.

It has not been designed to consider waste management activities unless there is a significant portion of recycling and resource recovery.

ARAP is based on best practice programs that have been identified through literature research and other comparative programs that have been developed to support the resource recovery and recycling industries including tyre recycling, mattress recycling and the collection, transportation, and processing of handheld batteries.

ARAP draws upon a wide range of complementary programs including ISO standards for the protection of the environmental and human health as well as taking into account the national performance standards / specifications (i.e., output standards for plastics, paper, metals, glass, and organics) for primary processing and sorting facilities and secondary processing facilities (e.g., recovered resource specifications) developed by the National Waste and Recycling Industry Council (NWRIC).

The benefits of this program over others are that it delivers a unique and tailored approach that has been specifically designed for the recycling and resource recovery industry ensuring high quality outcomes.

A copy of the information request that forms the audit protocol is attached in Appendix 3. Within this document is a list of general regulatory requirements that site will be assessed against. A full list of the site requirements is outlined in Section 4 of the ARAP Program Guide (Appendix 5 of this report) and as summarised in Section 1 above.

ARAP is not material specific. It does not relate to any specific inputs and output from a resource recovery or recycling facility.

ARAP is not technology specific. It is not dependant on any particular processing plant and equipment that has been installed for a specific purpose.

In establishing ARAP on a larger scale, it may be beneficial to start with one sector (i.e., Material Recovery Facilities – MRFs) to further test and understand the benefits to the broader industry as well as advance discussions with a number of other types of recycling facilities including e-waste and organic processors.

3 ARAP operations

ARAP consists of a number of activities that are undertaken in order to assess a site and its operations against the adopted methodology.

ARAP is an independent and objective assessment of a recycling site that assesses current performance in order to determine whether the site is operating to the ARAP standard or not.

The assessment includes:

1. An initial information request to gather documentation and evidence such as environmental protection licenses, insurances, current certifications (such as ISO) and storage management and operational procedures. This information is then reviewed to assess currency, accuracy, and completeness.
2. A physical or virtual site inspection to view the site operations as well as understand the process flow and check and test the documents and information provided in the initial information request.
3. Preparation of a report detailing conformance gaps with ARAP, including as assessment of risks as well as specific findings and recommendations.

The ARAP process then provides an overall finding whether the recycling site meets the ARAP standard and therefore whether the site can claim to be ARAP accredited or not.

As noted earlier, the overall program for ARAP will also include data bases, recognition actions and engagement and communications that will enhance the transparency and accountability.

For more details on how ARAP works overall, a copy of the current ARAP guide is presented in Appendix 5.

4 ARAP, resource recovery and the circular economy

ARAP has been designed to support recyclers to maintain high standards of operational performance and continued improvement in recovery rates.

The ARAP accreditation audit process covers the full recovery cycle from materials collection, sorting and processing, and ultimately to downstream vendors. Operational site accreditation will be against the site requirements outlined in Section 4 of ARAP Guide (Appendix 5 of this report) and as summarised in the Section 1 (Introduction, above).

The following table has been presented to demonstrate alignment of ARAP principles with Australian circular economy commitments as defined in the National Waste Policy[1].

Table 1. Supporting resource recovery and circular economy principles.

Resource recovery and Circular Economy Principles	Program support toward meeting these principles.
Avoid waste and improve resource recovery	The program is designed to support recyclers to continually improve operational as well as processing performance, including increasing recovery rates, and identifying further re-use opportunities. It is intended that the accreditation program will involve co-ordination and support from the entire recycling industry through the peak bodies and organisations (lead by ACOR), and that participants will undergo an audit and review of performance. Accreditation audits will be conducted against the Site Requirements outlined in Section 4 of the ARAP Program Guide (Appendix 5). To achieve accreditation recyclers must demonstrate that site-based waste and recovery targets are established and performance against targets are monitored. Note, targets may be: • voluntary based e.g., to meet customer requirements, • required based on regulatory requirements, e.g., to comply with landfill bans on e-waste, or • to meet a certain specification around processing efficiencies and outcomes (e.g., for competitive advantage)
Increase use of recycled material and build demand and markets for recycled products	Recyclers seeking to build their customer base and expand product sales will consider accreditation program to leverage these opportunities with new customers. There is clear and increasing requirement for recyclers to demonstrate EHS management systems and processes in quotations and tenders (for risk management purposes) as well as demonstrate improvements to EHS operational management processes beyond ISO accreditations. Feedback from one recycler during the trial noted that "certification for expanding into new products is a key interest, specifically certifying product quality, to keep the standard and quality at a high level." This would also support current government initiatives (e.g. ReMade in Australia and Sustainability Victoria's 'Buy Recycled Directory'), by identifying legitimate and credible operations.

[1] National Waste Policy Action Plan, 2019. Page 2.

Resource recovery and Circular Economy Principles	Program support toward meeting these principles.
Better manage material flows to benefit human health, the environment, and the economy	Core components of ARAP involve direct review of performance against relevant EHS regulation and compliance requirements (national, state, and local government) Trial participants expressed concern that regulatory compliance against EHS regulations is requiring more specialist advisory and consulting services. ARAP, and in particular the audit function, present an opportunity to assist recyclers ensure they are maintaining compliance in technically complex areas where they do not necessarily have the internal expertise to understand their legal and other requirements and manage risks. Key areas of concern for recyclers that were expressed included meeting rapidly changing state-based regulations involving materials storage and fire risk management. Audit reporting will identify non-compliance issues against EHS compliance requirements (where present) and provide a constructive direction to meet compliance with relevant national and state-based regulation, including local government permit conditions and best management practices.
Improve information to support innovation, guide investment and enable informed consumer decisions.	Core to the social licence for recyclers is to ensure customers, and the general public, have confidence in recyclers performance. Feedback from recyclers, during the engagement process, was clear in that key stakeholders are increasingly requiring third party inspections and accreditation to ensure performance. This Program has the opportunity to provide stakeholders with an independent verification program to manage risk and make informed decisions, including business to business arrangements (e.g., downstream customers) and service providers (e.g., insurance companies) and the general public. One recycler noted that accreditation programs are important for accountability and can assist in verifying that 'we do what we say' to our customers.

5 ARAP and national standards

A national accreditation program for Australian recyclers will set a performance standard that can inform voluntary and regulatory approaches to recycling and resource recovery.

The implementation of a national accreditation program for Australian recyclers will support the implementation of national resource recovery standards and specifications, including:

- Standards for kerbside recycling collection, and
- Recovered material specifications for sorting and processing facilities (MRFs)

ARAP incorporates the performance of downstream processors against the program requirements (including sorters, secondary processors, and re-manufacturers). The program supports their ability to compete as well as setting minimum performance and an auditing function which could potentially inform waste and recycling contracts.

The auditing and reporting function of the accreditation program has been developed to identify and verify the relevant standards or specifications that apply to the output of recovered resources from MRFs.

By auditing not only the operational aspects of a recycling and resource recovery facility, but also the outputs, ARAP can be used to inform both deliverables.

The minimum audit standards have been provided in the original ARAP Program Guide (Appendix 5) and will be expanded and tailored according to program requirements and taking into account the type of facility, operations and recovered or processed outputs as well as best practice for the recovery and recycling of materials. Aspects on an operational level will include, but not be limited to the following:

- Quality of material outputs (in accordance with relevant standards)
- Fire safety and fire protection

- Systems and procedures for collection, separation, and dispatch
- Storage management
- Chemical Storage
- Emergency management and first response plans
- Equipment maintenance and use
- Incident assessment and reporting
- Employee engagement and training
- Permits and licenses
- Other codes of practice and regulations
- Regulator or involvement by other authorities, complaints from neighbours or other interest groups
- Insurance
- Employment Law
- Sales markets / contracts or trading history

Any standards or specifications that have been identified as relevant to a particular site and operations will be included in the audit Program where the outputs and subsequent use can be established a verified. Where sorting and/or processing specifications are established and can be provided for a particular facility, these will be assessed against outputs and to the extent possible further down the value and supply chain.

As this list is extensive and material (or outputs from the recycling process) specific, they have not been listed explicitly but will established through the desktop audit process for any participating facility. It is envisaged that additional accreditation items will be added as required and as different sectors adopt ARAP. These will be maintained in industry specific documents that would accompany and audit.

The following figure provides a case study of how a minimum output standard or specification could be assessed for accreditation in this program.

Figure 1. Example of ARAP assessment: ACOR PET Container specification

ACOR PET Container Specifications – audit protocol	Evidence
☐ Do you supply PET containers into markets that are based on the ACOR PET Container Specifications?	• Contractual arrangement documents to be sighted and reviewed
☐ Can you confirm that the only allowable contaminant materials are present in the recovered PET containers? ☐ Can you confirm that no prohibited materials are present in the recovered PET containers? ☐ Can you confirm that the maximum prohibited, and allowable materials meet the maximum level of contaminants in the recovered PET container (See Page 4 of the ACOR PET Container Specifications document)?	• Is automated detection equipment used to assess contaminant levels? • Manual sorting (visual) should be carried out to separate non- PET materials from the PET bale prior processing. Estimates of the amount (percentage) of contamination undertaken on the pre-baled materials. • Review contaminant reports used for recording supplier history and/or continuous improvement. • If it is confirmed that the bale is highly contaminated review contamination reports that are provided to the supplier.
☐ Can you confirm that the bale quality meets the bale quality guidelines (Section 4 of the ACOR PET Container Specifications document)?	• Visual inspection should be carried out to estimate that the bale quality meets the guidelines.
☐ Can you confirm that the delivery arrangements including documentation and bale weights meet the delivery guidelines (Section 5 of the ACOR PET Container Specifications document)?	• Evidence including sales contracts as aligned with contractual arrangements. • Product manifests and records

6 Evaluation project – scope and methodology

ACOR undertook an evaluation project (the project), led by Equilibrium, in order to recommend national accreditation program for Australian recyclers.

This project included undertaking industry consultations and trials with recyclers across the MRF, commercial and industrial (C&I) and construction and demolition (C&D) sectors to test how the recommended national accreditation or certification scheme could be implemented.

The aim of this project was to assess the viability and benefit of a national accreditation or certification program for Australian recyclers, including to:

- Explain how the program will support resource recovery and recycling in Australia, focusing on the circular economy (Section 4).
- Explain how the program can support the implementation of national resource recovery and recycling standards, such as recovered material specifications for sorting and processing facilities (Section 5).
- Undertake an assessment of the economic, regulatory and market impacts of the recommended program, including:
- Indicative financial implications and additional compliance costs (Section 6.1.2);
- Impacts on the ability of businesses to compete in the market or on any incentives to compete (Section 6.1.3); and
- Impacts on consumer demand for certain products (Section 6.1.4).
- Evaluate the findings of the trial to test the value of implementing a national program (Sections 6.1.9 and 6.1.10).
- Provide recommendations and indicative timeframes for the implementation of the recommended program based on the evaluation, including details of how ARAP will be made available to use by all Australian recyclers if viable (Section 7).

In order to achieve the objectives of the project the following activities were undertaken:

- Industry consultation and engagement activities including a series of webinars to test the concept of an accreditation or certification program for Australian recyclers.
- Trialling of the concept with a select number of recyclers to further understand how a national program could be established and implemented.
- Preparation of this report to support the findings of the consultation, engagement, and trial activities.
- Development of recommendations and next steps for ARAP.

Further details on the methodology adopted for this project have been detailed in Appendix 1.

Findings from this report will be used to guide further development of discussions with industry if required.

6.1 Industry engagement, trial audits and program assessment

This section details the key activities and results from the engagement, audit trial and assessment processes.

It includes findings based on the information obtained during both the consultation process and observations throughout the trial.

6.1.1 Accreditation and certification

There was no clear delineation between accreditation and certification that was identified through the consultation process.

There were also no strong views form stakeholders or leading examples on whether the ARAP should use the terms accreditation or certification, or follow an accreditation or certification path, as part of the framework for national acceptance and adoption.

ARAP has been recommended for further development under an accreditation model.

6.1.2 Financial implications

There is general acceptance amongst recyclers that any form of accreditation (or certification) will require costs to participate, in time and money, and either through direct fee for service or via industry membership-based arrangements.

With ACOR taking the lead on ARAP, arrangements with other peak bodies and organisations, such as licensing fees or other arrangements, could form the basis of a mutually beneficial system that services the entire recycling and resource recovery industry.

The costs to participate would depend on the size of the business and the complexity of the operations.

An audit under ARAP has been modelled on the process outlined in this trial including a request for information and data, site visit and inspection, report development, review meeting and report close out.

Equilibrium has estimated indicative audit costs per type of site, listed in Table 2 below. It is noted that:

- Costs are for assessment of a single operating site and have been formulated on previous auditing services and industry experience.
- Travel costs include extra costs for vehicle hire, accommodation, flights (where required).

These costs have been based on Equilibrium's professional experience in developing audit programs for the tyre, mattress and battery collection and recycling industries, including undertaking audits of a number of these facilities across Australia.

The time required to undertake the audit and prepare an audit report depends on a number of factors including the timely receipt of information and data required to assess the site, the size of the site and ability to be able to determine and report on the risks as well as close out any findings and recommendations.

Table 2. Estimated Program audit costs per operational site.

Operating Site	Auditor time	Operating Staff Time[2]	Estimated audit fee	Average Travel costs	Minimum estimated audit fee	Maximum estimated audit fee
Large complex site (greater than 10,000 m2 in property size)	3 to 4 days	2 to 3 days	$6,000 to $8,000	$500 to $1,000	$6,500	$9,000
Medium business (between 5,000 m2 and 10,000 m2 in property size)	2 to 3 days	1 to 2 days	$4,000 to $6,000	$500 to $1,000	$4,500	$7,000
Small business (up to 5,000 m2 in property size)	1 to 2 days	1 to 2 days	$2,000 to $4,000	$500 to $1,000	$2,500	$5,000

[2] Estimates based on feedback from trial participants, including time for site inspection.

During consultations, recyclers accredited to ISO standards for Quality (9001), Environment (14001) and OHS (45001) have expressed the view that ARAP audits should avoid duplication of effort and minimise costs. Auditing in these instances could simply involve assessment of any gaps, including site inspection. Based on this trial an audit may be scaled back to include:

- on-site review of detailed materials flow data
- on-site review of material outputs against industry standards
- on-site inspection of EHS systems in operation, and fire safety
- review of any information gaps
- reporting, review meeting and close out.

A summary of indicative costs for sites that maintain ISO certification is provided in Table 3 below.

A comparison of the differences and similarities between this Program and the three ISO standards is presented in Table 4, which provides an indication of what information could be used across each of the programs.

Table 3. Estimated Program audit costs for sites with ISO certification.

Operating Site	Auditor time	Operating Site Time[3]	Estimated audit fee	Average Travel costs	Minimum estimated audit fee	Maximum estimated audit fee
Large complex site	2 to 3 days	1 to 2 days	$4,000 to $6,000	$500 to $1,000	$4,500	$7,000
Medium business	1 to 2 days	1 day	$2,000 to $4,000	$500 to $1,000	$2,500	$5,000
Small business	1 to 1.5 days	1 day	$2,000 to $3,000	$500 to $1,000	$2,500	$4,000

6.1.3 Value proposition

Based on stakeholder feedback, for ARAP to be relevant to the industry it must add value, which in essence is to support business to thrive and improve competitiveness in the market. This was a view expressed across all recycling businesses regardless of sector.

ARAP should also underpin any regulatory approaches that seek to distinguish between resource recovery and recycling and waste management so that the industry has a program that is uniquely related to its business activities that benefits the industry.

For ARAP to be successful recyclers highlight that a strong brand presence is important, implying that participation in ARAP will enhance reputation with customers and other stakeholders. To improve competitiveness, it was clear that the industry values accreditation if it supports new contract opportunities, gaining a competitive advantage or maintaining or enhancing their social license to operate, including:

- to strengthen quotations and tenders and be a potential point of difference with (new) customers looking for confirmation relating to EHS risk management and compliance.
- to reduce the administrative burden when responding to tenders and quotations. For example, reduce the amount of documentation provided in tender situations.
- to make it easier to respond to customer requests and meet stakeholder expectations, interpreted to be providing customers and stakeholder increased levels of confidence in EHS risk management.

[3] Estimates based on feedback during the trial, including time for site inspection and other engagement activities

Other views expressed during the consultation process included that other important benefits to accreditation should include:

- The ability to assist to reduce operational risk for individual participants and across the recycling industry. Specifically, issues around fire risk and reducing fire incidents across the sector.
- Assistance with gaining insurance, potentially help manage the rising cost of insurance premiums. Noting this was observed to be an industry wide issue.

These aspects were included in the original program design with the audit employing a risk-based assessment that could potentially be voluntarily used to accompany an insurance application. It was noted that some insurers are using a similar risk-based approach to assessing applications, but this information is not publicly available so therefore could not be verified.

The majority of recyclers expressed that the cost and potential benefits, including expanded opportunities from ARAP to generate new opportunities, would be assessed on a case-by-case basis before committing to ongoing involvement.

6.1.4 Consumers

It was generally acknowledged through the engagement activities that there is a growing demand for independent accreditation processes and systems, although this seemed to be sector dependent. For example, it was identified that:

- Local governments are increasingly starting to require service providers to be able to provide detailed information around EHS processes, management, and reporting programs, however, feedback from the organic processing and composting sector is that there are variable expectations from customers requiring independent audits.
- Feedback from the plastics and paper recycling sector is that customers increasingly request information on EHS management and performance systems including reporting and Key Performance Indicator sector analysis with respect to recovery and performance.
- There is also a need for strong consumer confidence in recycling, ensuring what is collected is recovered and not landfilled.

6.1.5 Audit process

The detailed stakeholder feedback on the ARAP audit process has been presented in Appendix 4.

Key findings regarding stakeholder feedback on ARAP, and involvement in the trial, are summarised as follows:

(i) Recyclers are generally supportive of ARAP. However, to be involved it must add value.

- Both early consultations and trial identify that industry is generally supportive of ARAP design.
- Trial participants, irrespective of size, expressed that any future involvement, would require ARAP to provide a strong value proposition and business benefit.
- Key concerns expressed during early consultations included: the potential unnecessary overlap with other programs and schemes; potential to create further and unnecessary administrative burden for recyclers; and a minority view was that the only way for it to be successful (i.e., a ‘level playing field’) ARAP needs to be mandated.

(ii) Large / ISO accredited recyclers involved in the trial did not perceive significant barriers with ARAP process.

- Participating recyclers understood the process and did not find the trial difficult to navigate and participate in.

- Any overlap with ISO accreditation could be sufficiently managed through the proposed scope and framework.

(iii) Further rollout needs to consider support for small and medium sized recyclers.

- Large / ISO accredited recyclers are generally well prepared to participate given that they have systems to capture and maintain information
- Medium / non-ISO accredited businesses management systems are not necessarily set up for third party audits. Key issues involve lack of resources to participate, and potential financial constraints relating to audit and accreditation fees.
- Participants also observed that small businesses may not have the systems in place for effective participation in the current program design.

(iv) ARAP is not designed to replace ISO accreditation, but focus on functioning alongside ISO accreditation, and adding further value. Noting that ISO systems involve assessment and audit to ISO Standards, and, whilst there is overlap, ARAP is more targeted at ensuring regulatory compliance in accordance with relevant EHS regulations and best practise performance. A comparison of the differences and similarities between this Program and the three ISO standards is presented in Table 4, which provides an indication of what information could be used across each of ARAPs.

- ISO accreditation is recognised as a significant advantage for recyclers. The general view is that ARAP should not compete with ISO, and moreover should be designed to add further value to existing accreditation programs and schemes.
- ARAP clearly overlaps with many of the aspects expected in an ISO audit, but this is not perceived as a particular barrier to future participation.
- As an industry led program, value adding opportunities include: strong industry backing and representation; providing further confidence in recycler EHS performance and 'setting a minimum bar' within the industry;
- ARAP has potential to provide recognition with strong branding and backing that will help recyclers, build their business, and attract new customers. This was noted as particularly important for small and medium sized businesses.

In summary, the general themes arising as positive attributes, challenges and concerns from industry stakeholders included:

Positive Attributes for ARAP:

- An industry endorsed program provides a strong backing and has potential to enhance the reputation of the industry as a whole.
- It is a positive step for building stakeholder confidence that participants operate in compliance with EHS regulation and are proactively managing EHS risks through best practise EHS risk assessment and management systems.
- It can provide consumer confidence in recycling systems and outcomes.
- ARAP has potential to support innovation through meeting consumer demands (e.g., for new products). This could be through further accountability to meet increased recycling targets and leveraging accreditation to attract new customers.

Issues and Concerns:

- Some stakeholders did not feel there was a clear value proposition for ARAP. Accessing new markets is costly, and stakeholders wanted to understand if ARAP could help in this regard

- The rising costs of compliance is an issue already. There needs to be a clear vision to ensure ARAP is not a cost burden to industry.
- Potential duplication of effort with current systems (e.g., ISO certification) is a concern. This must be addressed as part of ARAP development.
- Customers are not all requiring accreditation or third-party audits. A level playing field for performance may require a mandatory approach, however, it could be expected that once ARAP is in place then the pressure to undertake a third-party audit may increase in the future as ARAP becomes adopted by the industry.

6.1.6 Audit trial

6.1.6.1 Information requests

Participants found it challenging to provide resources to this project and, for this reason, the participation rate was slightly lower than expected. Originally, the trial phase was expected to involve 10 audits, which was reduced to seven participants

We were fortunate to be able to attract seven businesses into the initial trial given the circumstances where a number of sites were impacted directly by internal COVID-19 cases which impaired their ability to respond and participate in the project.

These seven sites participated from a longer list of 15 businesses who initially expressed interest in ARAP.

Participants that were directly involved in the trial reported that the information request process was not onerous, and that the requests were logical with respect to the type of information that would be maintained by a recycling and resource recovery operation or facility. However, the effort required to respond in a timely manner was found to vary depending on the size (and resource constraints) of the recyclers involved. For example, large / ISO accredited businesses identified that their operations were generally well placed to respond to the information request.

These businesses did not perceive the collection of information and data as a barrier for participation. Indeed, during the trial the larger businesses identified that the information was readily available, citing that there is similarity with ISO and other stakeholder audits (e.g., insurer's, customer tender requests etc.).

There is an opportunity for medium sized/non-ISO accredited recyclers to realise the opportunities and benefits to be accredited under ARAP to potentially operate under a program where record keeping practices are such that future participation can benefit industry and program maturity.

Most recyclers identified confidentiality and protection of information as a concern. This was particularly the case for: raw data (e.g., materials flows, contamination data), customer details (company names, invoice information etc.), employment details (e.g., wage rates etc.).

To manage confidentiality issues, which was for the majority of cases, Equilibrium entered into Mutual Non-Disclosure Agreements (MNDA's) with participants. However, even with MNDA's in place, recyclers generally would not provide information involving raw data. Instead, the businesses were comfortable to provide general summary information and expressed that on-site review of data (without copies being made) as the preferred option.

Participants in the trial were able to provide detailed responses sufficient to trial the process. Any gaps in information were noted and discussed during review meetings and noted in feedback reports.

As a general comment, those businesses with ISO accreditation demonstrated comprehensive management systems, and were able to readily produce material once a resource had been assigned to the task.

Some trial participants noted that small and medium sized recycling operators would not necessarily be able to respond to such a detailed information request. This was a general comment and observation on the state of the business recycling sector. It was noted that issues of high levels of competition and price

pressure mean that small business in particular do not have the resourcing to gather and maintain extensive management systems. In these circumstances the opportunity is for ARAP to be scaled appropriately for small and medium sized business to participate along with the providing tools and resources for enhancing best practices.

It was observed that there are opportunities to improve the request process.

The ARAP information request was identified to be detailed and required management and handling over significant quantities of information. Recyclers identified opportunities to improve this process, including observations internally to 'streamline' their systems as well as update the requests to a 'higher' level. Specific feedback included:

- Where possible, requested evidence should target summary information rather than raw data. For example, request management summaries of materials data rather than seeking two months of raw data, noting that recycling businesses are not willing to share copies of raw data due to confidentiality concerns.
- One medium size / non-ISO accredited businesses identified that for future involvement further centralisation of management systems and data would help speed up the process. Also expressing the preference for on-site auditing where requests can be discussed and responded to in a more efficient manner.
- Large / ISO accredited recyclers are aware that maintaining and providing quality data is critical for third party audits, particularly in an environment where customers are increasingly focused on quality and risk management. To this end it was suggested that ARAP *could be an extension of the process (for major tender submissions),* i.e., ARAP could be designed to support industry responses to major tenders.

6.1.6.2 Virtual inspections

Physical inspections were offered to all participants and were conducted where practical. Inspections involved viewing both operational processing areas and materials storage.

Given the circumstances where a number of sites were impacted directly by internal COVID-19 cases, which impaired their ability to respond and participate in the project, we were fortunate to be able to undertake virtual site audits in the majority of the circumstances.

All sites inspected were observed to be well organised, including demonstrated storage practices consistent with documented plans (provided as part of the information request process). Processing areas were observed to be well maintained and no issues of concern were noted for the organisations that were involved in inspection program

Sites accommodated the virtual inspection without any issues of concern. Representatives from each recycler were understanding of the issues restricting site visits, including working within the current COVID-19 restrictions.

Most recyclers expressed a preference for on-site visits, and for any broader program rollout would prefer this as part of ARAP.

6.1.6.3 Other certification and accreditation

Participants identified that the information requested through ARAP trial is very similar to current external audits, most significantly with International Organization for Standardization (ISO) audits and compliance with AS 5377 relating to e-waste recycling. Other third-party audits were also cited including insurance companies and downstream customer audits. In all cases recyclers reported that the request for information was similar in content and detail required, therefore reducing unnecessary duplication.

Requirements for businesses to adhere to EHS compliance are specified in regulations, whether state based or national. ARAP draws upon any documentation including risk and other legal registers (required as part of ISO accreditation) and provides an assessment of site compliance which is not an ISO accreditation

requirement. This aspect of ARAP complements both ISO and operational EHS compliance by ensuring that the site has the necessary systems and procedures to minimise risk to human health and the environment.

ARAP has the potential to supplement, contribute and enhance other existing assurance, audit and compliance programs given alignment in the ability to reach expected outcomes on a program basis.

6.1.7 ARAP and International Organization for Standardization (ISO) certification

Broad based programs such as ISO certification commonly and primarily test whether a system is in place, not necessarily whether that system is achieving certain outcomes, or the actual and overall performance of the organisation or facility that is being ISO certified.

For example, ISO14001 environmental management system (EMS) certification of a recycling facility would mean that the site has a system in place for identifying the environmental risks associated with operating a baling machine, but it would not be checking the quality of the materials being baled and coming out of that baling machine. ISO14001 EMS would mean there is a system in place for staff to report an environmental incident, but there could be unreported environmental incidents because staff may fail to identify an issue as an environmental risk or problem.

ISO certification is a good sign. It is a sign that a facility has systems in place, and it is an indicator of good practice, but it is not in itself evidence of good practice of a recycling operation.

ARAP accreditation, on the other hand, gathers, checks and assesses evidence of good practice and performance.

Therefore, a recycling facility may have ISO accreditation for is environment, safety or quality management systems, and ARAP will check the validity and currency of any such accreditations and assess whether those systems are part of the facility achieving good operational performance and outcomes.

Also, ISO certification can be time consuming, relatively costly and requires people to manage, and therefore may not be readily accessible by small and medium businesses. Conversely ARAP is tailored for the recycling industry and understands the different imperatives for small, medium and large operators, and can therefore be more responsive to individual site circumstances and needs.

In this way ARAP and ISO may also enhance each other, as ARAP certification may build an organisation's capacity to be able to understand and implement ISO, and ISO compliance will be an indicator contributing towards ARAP certification.

ARAP has been designed to consider not only the operational performance but the up and downstream inputs and outputs to the processing capability of the business, which is outside of the ISO accreditation process. Importantly, recyclers with systems setup for third party ISO accreditation did not perceive any significant issues in overlap between the two programs. Most identified there were opportunities to enhance their operational performance by undertaking to participate in both programs.

ARAP has the potential to fill the gap as a potentially lower cost option to ISO accreditation.

ISO systems are large and can be costly to develop and maintain, generally requiring more resourcing than small to medium business are capable of providing. This Program's focus on compliance will support small and medium businesses without requiring an ISO systems approach.

ARAP involves assessment to a protocol designed specially referencing national, state, and local government EHS regulations for the recycling industry, and also includes industry best practice requirements. ARAP protocol is maintained independently of the organisation to ensure it is current.

In this way, ARAP complements ISO by ensuring an independent and up to date assessment against EHS regulations and compliance requirements, which do vary between jurisdictions and are regularly updated.

A comparison of the differences and similarities between ARAP and the three ISO standards is presented in Table 4.

Table 4. Comparison between ISO and ARAP

Scope of the standard/program	ISO Standards	ARAP
	General management system. Self-assessed and independently certified.	Industry specific program for recycling operations. Independently assessed and accredited.
Considers risks as well as emergency preparedness and response (environmental and EHS)	I	A
Considers awareness raising and communication (consultation – EHS) activities to be defined and undertaken at an operational level	I	A
Defines competencies with respect to either organisational or operational control	I	A
Considers a level of management review and improvement (either through processes or with respect to audit findings)	I	A
Incorporates delivery and post-delivery activities (quality and environment) incorporating standards, specifications, and other relevant codes of practice	I	A
Requires incident management and reporting processes to be developed and maintained	I	A
Standards for leadership in quality, environmental and OH&S policies and organisation roles and responsibilities	I	
Internal quality, environmental and OH&S objectives, planning and actions	I	
Monitoring and measurement resources, system, and processes	I	
Design and development planning and control (quality)	I	
Change control and performance evaluation procedures.	I	
Testing of operational and site-based risks against environment and OH&S assessments and management responses.	-	A
Independent review of risk management systems and site-based processes and procedures against best management practices for the recycling industry.	-	A
Assessment of fire risks and protection through specific management planning and technical recommendations including storage management plans and processes.	-	A
Identifies site throughput and ability to process and provide finished product for recycled applications.	-	A
Identifies and assesses against relevant adopted output standards	-	A
Consideration other chemical storage management and handling procedures.	-	A
Review of equipment use and maintenance programs which could be aligned with monitoring and measurement resources, system, and processes	I	A
Identification and consideration of specific codes of practice and regulations	I	A
Assessment of adequate insurance coverage for the scale of the operations including recommendations.	-	A
Assessment of fair work and other equal opportunity provisions.	-	A
Identifies downstream receivers of recovered or recycled outputs	-	A

One recycler noted that *'A recycler that is ISO (QMS, EHS, OHS) compliant should also meet the intended outcomes of the intended program*, or be audited only in areas where gaps can be identified. Where another recycler noted that ISO accreditation is very valuable and could not expect to 'go against ISO' in favour of another system such as ARAP**.**

The protocol outlined in the original ARAP program guide that is presented in Appendix 5 is relevant and will form the basis of an accreditation program. Where the site has met the requirements for a particular element of an ISO standard then this will be recognised in the ARAP audit report.

As previously discussed, any standards or specifications that have been identified as relevant to a particular site and operations will be included in the audit program where the outputs and subsequent use can be established and verified. Where sorting and/or processing specifications are established and can be provided for a particular facility, these will be assessed against outputs and to the extent possible further down the value and supply chain.

6.1.7.1 Third party auditing

It is important to note that 'consumer demand' is contextual depending on the recycling business. Most participants focused on direct next step downstream customers as consumers.

However, recyclers involved with public collection schemes also strongly considered general public consumers. Irrespective, recyclers across the board were very conscious of increasing consumer expectations, particularly relating to issues of protection of the environment, reducing issues of illegal dumping and improved recycling outcomes.

The feedback in relation to consumer demand appeared to be mixed. However, even with the small sample size of participants in the trial, general observations can be made based on business size.

Large businesses

In general, large businesses expressed that consumer demand is a key driver for seeking third party accreditation (consumer demand being a mix of client or council expectations for service quality and the general public or community desire for assurance on recycling).

Third party accreditation was noted as a key part when submitting large tenders, including local and state government related tenders. One recycler pointed out that key sections of the EHS components in a tender can be simply 'ticked' without requiring a detailed response.

Interestingly, one recycler noted that only a small portion of its client base required ISO accreditation. This client base was extremely important to the business which warranted the accreditation effort and expense.

Furthermore, large recyclers identified that the cost of doing business involves third party auditing required for a range of stakeholders. This includes audits required by insurance companies and downstream customers. One recycler cited insurance companies arranging specialist fire engineer audits as part of their ongoing risk management assessment.

Medium sized businesses

Feedback from medium sized businesses is that they were less concerned with formal EHS accreditation needed for current customer base. However, for business growth (and reaching new markets) the need for external accreditation is an important area requiring further evaluation.

One medium sized recycler noted that ISO accreditation would be essential for a new business offering currently under development. Another identified that external accreditation, such as ARAP, could help its business gain a 'competitive edge' when vying for new projects and broadening its client base.

Another driver for external auditing, and potential involvement with accreditation schemes, was noted to involve compliance pressures relating to fire risks. Local regulatory requirements have increased

significantly, and the business now finds it requires specialist consultants for fire risk management both now and likely into the future.

Small sized businesses

No small sized business participated in the review; however, it is likely that they would have similar feedback to a medium sized business by more likely to be more resource (time and money) constrained.

6.1.8 Program development

All sites expressed they would consider ARAP accreditation only if a direct benefit could be expected, or, if the program were required by customers.

Recyclers accredited to an ISO standard place a high value on this status and it is extremely unlikely they will relinquish their ISO status to move to ARAP. Importantly, however, these recyclers specify that significant value must be derived, including:

- Enhancing opportunities to win new work and gaining a competitive edge.
- Assistance with gaining insurance, potentially help manage the rising cost of insurance premiums.
- Make it easier to respond to customer requests and meet stakeholder expectations.
- Help manage, and reduce operational risk, across the recycling industry. Specifically, issues around fire risk and reducing fire incidents across the sector.

Aside from direct benefits, one recycler suggested that, as an industry program, ARAP may have a role to help link recyclers with strategic opportunities to improve outcomes. For example, being an industry led program there is the opportunity to look at the industry as a whole and identify opportunities to reduce transport issues (which is a significant cost to recyclers) and opportunities to improve productivity.

6.1.9 Program funding

There is general acceptance that any form of a recycling industry accreditation program will require a cost to participate, either through direct fee for service or via industry membership-based arrangements.

Feedback provided from recyclers is that for ARAP to have a future role in the sector it must have a clear value proposition. All recyclers will assess the participation costs against the value presented by ARAP.

Consultations identified that the following issues should be considered for future program funding and rollout:

- There is a clear link to adding value and demonstrating improved EHS compliance, with one recycler identifying that companies are more likely to be involved (and pay) for a service where EHS confidence can be strengthened.
- A ‘carrot and stick’ approach may be necessary, i.e. incentives for involvement with ARAP plus a driving force behind ARAP to become involved.
- Issues such as representation and advocacy for industry may be considered as an added value for participation.
- Accreditation must be well known. For example, ARAP would need to be an industry standard approach that is endorsed / supported by all levels of government.
- Subsidies, or reduced costs, for small and medium sized businesses should be considered. This approach will help financially, but also help incentivise businesses to join.

In order to initiate and implement ARAP, it is anticipated that further development and implementation will require funding by the Government in the order of about $500,000 (see Section 7.8) and then on-going program will be funded by industry and/or user pays models as identified by the feasibility study

6.1.10 Process and outcomes assessment

The following table summarises the outcomes of the assessment with respect to what was proposed and what was achieved through both the engagement and the audit trial phases.

Table 5. Outcomes of assessment

Assessment Question	Response
Was industry engagement and uptake sufficient?	This component was completed to a satisfactory level. Industry response was determined to be sufficient to enable meaning evaluation of ARAP. Engagement included: • 106 participants for the initial industry wide consultations, including 64 participants from industry and other stakeholders. • Seven recyclers participated in the trial, compared to an original target of 10 participants and a larger list of 15 sites initially willing to take part in the trial. • Issues relating to the ability of businesses to participate including resources constraints and direct impacts of COVID-19.
Is the process acceptable to industry?	Consultations through the trial identified that the process is very familiar and consistent with other external audits. As highlighted, the resources and costs involved in an audit are a key consideration for recycling businesses. It is considered ARAP needs to add further value rather than duplicate.
Is the data collected suitable and high quality?	Data collated during the trial was provided directly by sites. It consisted of internal management systems and procedures, as well as recycling performance information. It was evident that participating sites responded to the information requests to the best of their ability. Consultations were conducted in a manner allowing direct feedback and candid responses regarding thoughts on ARAP process and potential for further rollout. Where requested Equilibrium entered into NDAs to satisfy confidentiality requirements for participants.
Are the costs acceptable to industry and/or can processes be scaled up?	Participant feedback is that the process of the audit is acceptable and meets industry expectations. For further rollout, and to scale up the project, the ARAP value proposition will need to be acceptable for business to pay. Participants also note, that across the industry, small and medium sized recyclers may require support to participate. For example, subsidies for audits, advice, and information.
Will ARAP increase consumer confidence?	Participants identify that ARAP presents an opportunity for recyclers to enhance reputation and provide consumers with more confidence. Key elements in the value proposition that will support industry involve: • Potential to add value to demonstrating improved EHS compliance • Accreditation will be backed by the industry peak body. • ARAP could provide the recycling industry a standard approach that is endorsed / supported by government.
Is ARAP compatible with other programs, schemes, and systems?	Recyclers with systems setup for third party ISO auditing do not perceive any significant issues in the overlap. Noting that future involvement will depend on the value presented by ARAP and management of potential duplication issues with respect to time and costs associated with participating in ARAP (See Section 6.1.2).

6.1.11 Impact assessment

The impact assessment involved a SWOT (Strengths Weaknesses Opportunities and Threats) analysis. The analysis involved distilling evidence and feedback collected during all phases of the project. The SWOT covers the following key areas toward achieving the objectives of ARAP:

- Potential for scale-up
- Value for money and willingness to pay
- Stakeholder acceptance
- Impacts on consumer demands for products
- Unintended consequences

Outcomes of impact analysis is provided in Table 6 below.

Table 6. Impact Analysis

	Helpful to achieving the objective	Risks to achieving the objective
Internal industry environment	**Strengths** Scale up Potential • Program process, as trialled in this project, is generally acceptable to recycling industry. • An industry endorsed program provides strong branding and reputational endorsement within the industry. • ARAP is compatible with other systems and programs, including ISO accreditation. • Potential to support business competitiveness, particularly noted by medium sized recycling business. • Industry is generally willing to share information and data (including confidential information) for the purpose of a program like this.	**Weaknesses** Scale up Potential • In the current form, small and medium recyclers may not be well positioned to engage with ARAP. May require some redesign for engagement, involving potential reducing/scaling back of the information requests and developing tools to provide best practice support for SME's. • At this stage the value proposition is not clearly defined, further design work is needed before detailed costs and benefits can be fully established.
	Stakeholder Acceptance • Positive response during consultations from key parts of the industry (e.g., MRF's) • Trial feedback identifies positive response to ARAP process and see opportunity for further engagement. • Duplication with other systems is recognised but expected this can be managed effectively.	Stakeholder Acceptance • Some stakeholders advised they will only participate if it were mandatory. • Some industry participants from the broader consultations were very concerned about duplication with other systems, extra effort to participate.
	Consumer Demand • Generally considered that ARAP can provide further support to increased consumer confidence. • Large businesses experience is that consumer demand for accreditation is growing. • Medium sized business sees the opportunity to engage with ARAP as a way of potentially enhancing reputation and growing their business with a broader customer base.	Consumer Demand • Indications are that consumer demand for accreditation is limited amongst the customer base for small and medium sized recyclers. • Indicatively, customer demand for accreditation varies depending on the recycling sector that is being serviced.
	Unintended Consequences • Program design is acceptable to recyclers, particularly large industry, which helps reduce risk of any unintended consequences.	Unintended Consequences: • Potentially may be add an administrative burden on businesses, particularly those recyclers not already involved with accreditation schemes (e.g., small, and medium sized businesses). • Information requests and audit process viewed as too complex and difficult, negatively impacting business involvement and overall view of the scheme.
	Value for Money • Industry backing would provide enhanced reputation opportunity for recyclers.	Value for Money • Cost benefit potentially not aligning with recycler views and assessment.

	Helpful to achieving the objective	Risks to achieving the objective
	• Industry backed model and EHS side of ARAP is perceived as a strength for engaging with recyclers. • Common view expressed that increased participation in ARAP will help 'level the playing field across the industry' and overall raise performance standards.	• ISO accredited recyclers perceiving duplication, not seeing the value.
External stakeholder environment	**Opportunities** <u>Scale up Potential</u> • Potential to develop complementary incentives such as support for small and medium businesses with system and other processes to manage risks (i.e., pollution prevention management plans). • Parallels with ISO accreditation provides opportunity to streamline/tailor audits specific to recyclers. • Potential to plan a staged rollout for maximum market success and to grow the program over time.	**Threats** <u>Scale up Potential</u> • Insufficient value or audits viewed as too costly. • Some sectors, or individual recyclers, will not engage unless forced too. • Negative messaging from other external industry stakeholders, or competitors to ACOR.
	<u>Stakeholder acceptance</u> • An industry led program provides strong branding and reputational endorsement that can be leveraged for engagement with external stakeholders.	<u>Stakeholder acceptance</u> • Consumers not aware / not interested and do not identify with the value proposition.
	<u>Consumer Demand is Strong</u> • Leverage / work with external stakeholder sectors to build reputation for the program.	<u>Consumer Demand can be easily influenced</u> • Low acceptance / slower than anticipated consumer demand growth from customers of small and medium sized recyclers.
	<u>Unintended Consequences supporting rollout</u> • Stakeholder demand	<u>Unintended Consequences accelerated rollout</u> • Calls for faster than planned program rollout, difficult to manage.
	<u>Value for Money</u> • Building a program value proposition that resonates with external stakeholders. • Positive attribute is if certification comes at no extra cost to community	<u>Value for Money</u> • Customers of smaller recyclers potentially not seeing the value in accreditation, making it difficult to recruit / engage these recyclers.

7 Findings and recommendations

This project identified that there is support and interest from the industry for ARAP.

ARAP provides an opportunity to complement, rather than duplicate, other existing audit and certification programs, including state-based regulator site inspection programs.

ARAP is fundamentally able to provide the value that is needed for it to be successfully adopted by the industry.

Consistent feedback from key industry representatives is that there is the need across the industry to raise EHS performance standards and confirm good performance and that ARAP can provide value to the industry to help manage reputational risks. That is, ARAP can provide transparency and accountability and raise industry standards.

ARAP involves a direct review of performance against relevant EHS regulation and compliance requirements (national, state, and local government) as well as other criteria.

Any potential negative impacts of the program largely centre around concerns of additional costs and resources without significant benefits, and potential to add further administration burden to recyclers. However, these concerns are countered by growing demand for recyclers to review their EHS systems outside of ISO accreditation and other certification systems, and a need to bolster consumer confidence in recycling activities.

This has been noted in particular by recyclers servicing local government, and those providing materials to downstream receivers for plastics, paper, organics, and metals, for example.

Based on the support expressed by industry stakeholders, it is considered that there is sufficient evidence that there is a benefit in progressing options for rollout of ARAP and that:

- It is recommended that the ARAP should be the national accreditation program for use by all recyclers and should be supported by government for implementation.
- ARAP has been tested and evaluated with the recycling and resource recovery industry
- It will support resource recovery through an independent program that will ensure transparency and accountability, industry standards are raised, and sites are able to implement best practice initiatives.
- It addresses circular economy principals by providing transparency and accountability on the downstream end market for recyclable materials, thereby promoting and ensuring reuse of recovered materials and that recovered materials have reliable end markets including identifying and supporting domestic processing capacity and capabilities.
- ARAP complements compliance requirements across national and state regulation and legislation through checks on conformity and raising industry standards.
- It succinctly provides up to date market information about the current performance of a facility and therefore assists with the tender, purchase, and on-going use of recycling services.
- It is aligned with and leverages off other standards including ISO management systems as well as output standards and specifications such as national standards for recovered materials from MRFs.
- It will inform the market, and thereby promote security and reliability, with elements such as a live data base and accessible industry intelligence including recognition of site operational performance and adherence to standards
- ARAP can be implemented in the short term with about six months before going live and then a staged roll out and availability to all recyclers across Australia.
- ARAP funding can be managed with Government support for the implementation phase and then the on-going program funded by industry through a user pays approach.

The benefit of such a program across the entire industry and considering the different sectors is that it has been designed to support recyclers to continually improve operational as well as processing performance, including increasing recovery rates, and identifying further re-use opportunities.

To achieve ARAP accreditation and recognition recyclers must demonstrate that site-based waste and recovery targets are established and performance against targets are monitored. ARAP can provide a wide range of stakeholders with an independent verification program to support to manage risk and make informed decisions, including business to business arrangements (e.g., downstream customers), clients (e.g., local councils), service providers (e.g., insurance companies) and the general public.

7.1 Value proposition

ARAP is a different proposition to other existing certification standards such as ISO, or Forest Stewardship chain of custody Certification or other systems. Such systems generally certify specific elements of a recycling operation or activity or output.

ARAP provides a basis to assess the whole operation of a recycling facility. It does not, like ISO, only assess whether a system exists or not, but it assesses the actual performance of the site across all facets of activity.

ISO, for example, provides a recycling operation with certification that it has a system in place (safety, quality, environment or other), and that the system is being used effectively. It does not per se assess or certify the actual performance of the operation and is limited to the system being assessed. ISO is valuable an important because it enables an organisation to show it is performing to that standard.

ARAP however is a more valuable process. ARAP allows a recycling facility to go through a review of its whole operations and performance and understand how it performs against the ARAP framework, and opportunities for future focus and improvement. It is ultimately leading to development of the operation and the industry overall. It provides an assurance to customers, government, and the community about the overall performance of the recycling operation.

7.2 Other certification standards

While ARAP does not need or require recycling sites to be using or complying with other standards, it nonetheless leverages of other certification standards. For example, the information and detail provided as part of ISO certification will not be re-audited for ARAP, but rather complement the information required to be verified as part of ARAP. If a site has ISO, ARAP checks whether the ISO certification is current or not and it contributes towards the evidence of how the site is operating.

7.3 Small and medium businesses

ARAP provides a benefit for small and medium size businesses in particular. Such businesses often do not have the capacity or capability to undertake participation in certification programs as they may present financial or technical barriers. Conversely, ARAP is designed to support the recycling site to participate and in its application, it seeks to raise understanding and participation in greater transparency and accountability. Therefore, ARAP enables participation from all sorts of recyclers, whether they are familiar with accreditation and certification systems or not.

7.4 Output standards

ARAP can support national performance standards for material recovery facilities particularity with respect to the outputs and material reuse in the manufacture of recycled content products. ARAP achieves this because the presence of any such standard and whether the recycling site can comply with it or not forms another piece of verifiable evidence in the ARAP audit process.

7.5 Verified recycled content

ARAP strengthens the market for use of recycled content in making new products by providing confidence that accredited recycling facilities and their outputs are to a certain quality and are reliable.

This turn supports and endorses the use of the recovered materials in downstream remanufacturing processes. In this way, ARAP can reinforce related programs such as 'buy recycled' directories and the Australian Government's 'Remade in Australia' initiative; and confirm which companies should be represented in such directories.

7.6 Next steps

- The protocol outlined in the original ARAP program guide that is presented in Appendix 5 is relevant and will form the basis of an accreditation program.
- Accreditation against output performance standards and specifications, such as the recovered materials specifications being delivered by NWRIC, be adopted as relevant on a case-by-case basis into ARAP, noting that they will be expanded and tailored according to program requirements and taking into account the type of facility, operations and recovered or processed outputs.
- Any standards or specifications that have been identified as relevant to a particular site and operations will be included in the audit Program where the outputs and subsequent use can be established and verified.
- Where sorting and/or processing specifications are established and can be provided for a particular facility, these will be assessed against outputs and to the extent possible further down the value and supply chain.
- Audits will be conducted on a site-by-site basis on an annual or rolling basis. There may be opportunities to review rolling audit programs for large recyclers, which may be based on a risk-based approach. Annual desktop reviews will be undertaken at a minimum.
- ARAP will develop logos, marketing, and engagement to build a profile over time and to stimulate recognition within the market (especially the purchasers and users of recycling services such a local government) and potentially the broader public. This can also support relevant Government programs, such as 'ReMade in Australia' and 'buy recycled' directories, by providing a credible list of recyclers, whose operations and outputs have been confirmed as meeting appropriate specifications.

A benefit of ARAP is that industry is generally aware of it and is comfortable with its scope and purpose. This along with the development to date by ACOR means ARAP can be rolled out in the short term and be live within about a six-month timeframe.

Appendix 1. Detailed Methodology

Stakeholder Engagement and Participation

This phase of the project involved the following stages:

I. Consultation on the initial program design as developed by ACOR

Four webinars were delivered during August 2021 to seek feedback on the initial program design. A total of 106 participants attended the four separate webinars, involving:

- 64 industry participants including recycling operations involving: paper and cardboard, metals, organics, plastics, electronic waste, kerbside, commercial and industrial, container deposit schemes.
- 28 government observers from Commonwealth, state, and local governments.
- Six industry consultancies
- Eight peak industry body representatives representing the waste, recycling, and recovery sectors as well as organic and composting sectors.

The four webinars covered key topics, including:

- Details of the assessment framework, scope and reach of ARAP, and potential approach to implementation.
- Direct feedback regarding potential benefits and barriers for the proposed program.
- Inviting recycling businesses to be involved in the project trial phase.

A list of participating organisations who attended the webinars is provided as follows:

ACT NoWaste

Alex Fraser

AORA

Australia and New Zealand Recycling Platform Limited (TechCollect)

Australian Council of Recyclers

Australian Food and Grocery Council (AFGC)

Australian Paper Recovery

Big Bag Recovery

Bingo Industries Limited

Close The Loop (Operations) Pty Ltd,

Closed Loop Environmental Solutions

Department of Climate Change, Energy, the Environment and Water

Department of Industry, Environment and Planning NSW

Department of Water and Environmental Regulation (WA)

Dulverton Waste Management

E-Cycle Solutions Pty Ltd

EMRC

Environment, Planning and Sustainable Development Directorate ACT

Envorinex

IQ Renew

Job Site Recyclers Pty Ltd

JR Richards

Lismore City Council

Martogg & Company

MRA Consulting

National E-Waste Alliance (Sustainable Product Stewards Pty Ltd)

National Waste and Recycling Industry Council/state affiliates

Plastic Forests Pty Ltd

Polytrade Pty Ltd

Re.Group

Repurpose It

Shoalhaven City Council

SIMS Metal Management

Suez

Sustainability Victoria

TAS Department of Primary Industries, Parks, Water and Environment (EPA Division)

Veolia

Visy Recycling

Waste Management and Resource Recovery Association of Australia

WCRA

A summary of findings is provided in Sections 6.1.9 and 6.1.10 of this report.

Following the webinars, three direct one-on-one interviews were held with industry participants, representing the organic recycling industry, material recovery facilities and metal recovery and recycling.

II. Engaging with recyclers directly to be involved in ARAP trial.

15 recyclers expressed interest in participating in the trial during the consultations. This included recyclers of paper and plastic, toner cartridges and e-waste and organics as well as material recovery facilities and resource recovery centres.

14 out of 15 recyclers who expressed interest in participating in the trials were provided with a project summary, including a copy of an information request to obtain documentation relevant to ARAP to collect baseline information about the participant and start the desktop analysis to inform the audit. Note: one of the recyclers declined to participate during initial phone call to confirm interest. Refer Appendix 3 for complete details of the request.

Issues of confidentiality were managed using Equilibrium's Mutual Non-Disclosure Agreement.

Seven businesses participated in the trial out of a total of 15 business that were invited to participate.

III. Trialling the audit process.

14 recyclers were requested to compile a response to the information request. However, as a result of not being available to participate due to timing and other internal business pressures, not having the resources to assist with compiling the documentation and confidentiality issues only a total of seven of the 15 recyclers were able to provide a complete information submission to enable a trial of the audit process to be undertaken.

A list of trial participants has been provided above.

Due to COVID-19 restrictions, trials included either a desktop or virtual trial of the audit process. All sites participated in a desk-top audit and if they could not participate in a virtual (interview and site tour) information was sent through and a desktop audit was completed. The virtual audit involved an interview regarding information requests, discussing any gaps, and included a site tour (via virtual means) or review of images provided. A particular focus on materials storage, fire safety and processing was taken during the virtual assessments. A brief explanation of the method is provided in Appendix 3. Project Summary and Information Request

Information was exchanged via email and with the use of on-line file sharing systems.

All information submitted was reviewed, and a desktop assessment conducted to identify any gaps in the information recorded.

Company representatives participated in one-on-one consultation to seek feedback on the process and discuss potential benefits and challenges of ARAP.

Where possible virtual site inspections were arranged. In some cases, participants provided photographs and video of operations where virtual inspections were not practical.

All participants were provided summary reports identifying information gaps and potential improvement opportunities.

IV. In summary the analysis involved:

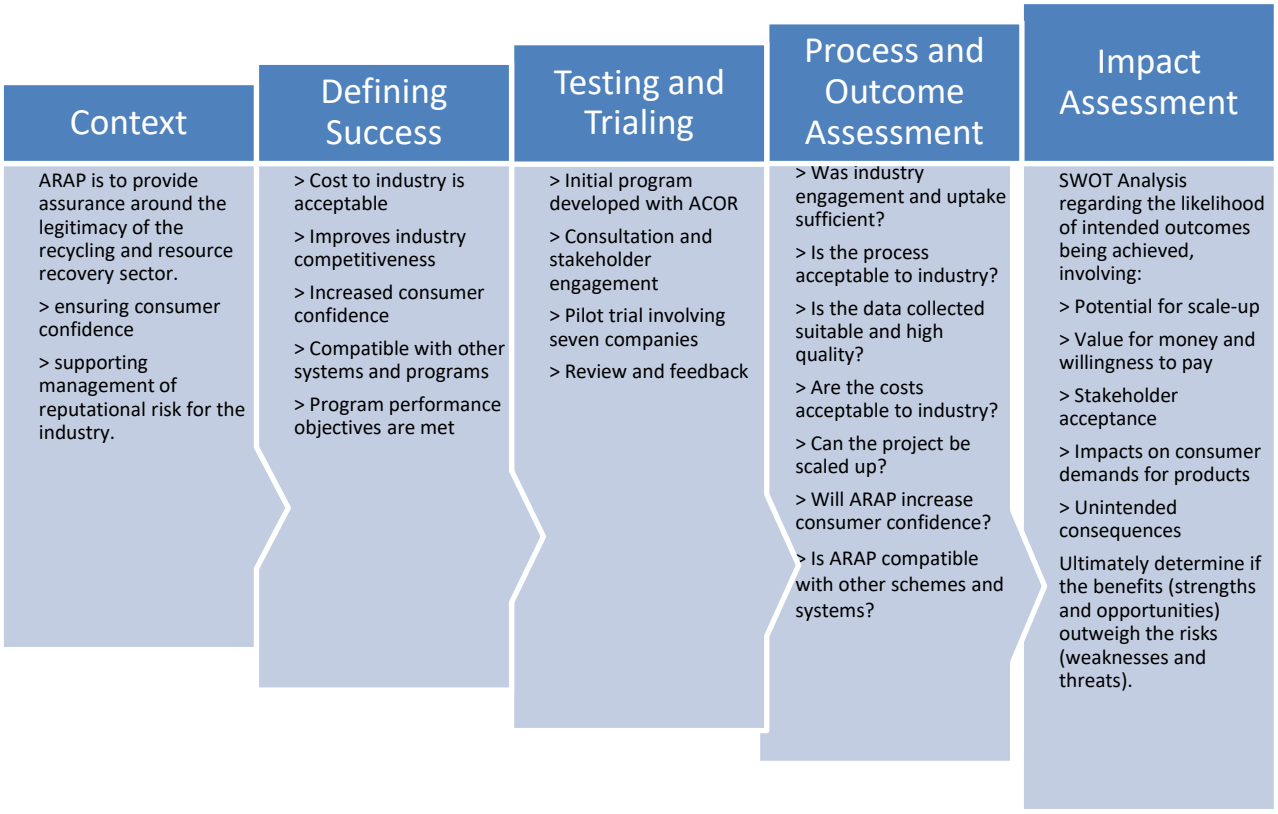
Documenting the consultations, including key feedback from participants regarding the audit process and potential future engagement with the program.

Undertaking a brief process and outcome assessment based on the findings of the consultations.

Undertaking the impact assessment in accordance with the agreed program assessment framework, as outlined in Figure 1 below.

A summary of trial findings is included in Sections 6.1.9 and 6.1.10 of this report.

Figure 2. Assessment Framework



Stakeholder participation

A total of 15 businesses that were identified during the industry consultation phase were invited to participate in the trial. Of those, seven participated and all seven sites were able to respond to the information requests and participate in a consultation session (with the exception of Outlook and Re-Group as site personnel were unavailable within the time frame). Desktop assessments of the information provided was conducted for all participating sites. Virtual site inspections were also arranged and conducted where practical to do so.

A summary of the trial methodology by stakeholder is presented as follows:

Table 7. List of trial participants

Participant	Tyre of operations	Current Accreditations	Virtual Inspection
Australian Paper Recovery	Paper and Plastic Recycling	None Advised considering ISO Accreditation for new processing technology under consideration.	Video footage of operations and storage viewed.
Close the Loop	Toner cartridges, e-waste recycling	ISO Accreditation (Environment, OHS and Quality) AS 5377 for e-waste recycling	Virtual tour of facility of processing and storage areas.
IQ Renew	Material Recovery Facility (MRF)	ISO Accreditation (Environment, OHS and Quality)	Viewing of extensive CCTV live vision of the site operations
Outlook Environmental	Resource recovery centre	ISO Accreditation (Environment, OHS and Quality)	Not available within the time required. Desktop audit conducted.

Participant	Tyre of operations	Current Accreditations	Virtual Inspection
PACT / Astron	Plastic recovery and recycling	Not for this site	Not available for inspection within the time required. Desktop audit conducted.
Re Group	MRF	ISO Accreditation (Environment, OHS and Quality)	Photographs provided of outdoor storage areas.
Veolia	Organics recycling facility	International standards ISO/IEC 17065, ISO/IEC 17021, ISO 19011	Photographic evidence provided during virtual meeting.

It is anticipated that ARAP will involve physical sites audits to confirm the findings of the desk-top audit.

In relation to businesses that did not participate in ARAP:

- 3 companies did not respond to the initial request.
- 3 were supportive but did not have the available resources to participate within the timeframe
- 1 withdraw citing confidentiality issues etc.
- 1 declined to be involved expressing concerns the project was not of direct benefit to the business.

Appendix 2. Project Summary and Information Request

Program Audit Protocol - Information Request

Purpose

The purpose of this audit protocol is to assist with undertaking the trial audits which will used to inform an impact assessment based of the developed framework and the draft Australian Recyclers Accreditation Program (ARAP).

Background

ARAP involves site-based accreditation of recycling and resource recovery operations, and has been designed to cover operational areas and activities including

a) The collection and transport of recyclable materials from the Australian domestic (MRF), commercial and industrial (C&I), and construction and demolition (C&D) sources and sectors.
b) Primary sorting, dismantling, pre-treatment, and storage of recyclable materials.
c) Secondary sorting and reprocessing of recyclable materials.
d) Downstream sale and distribution of recyclable materials.
e) Remanufacture of recovered / recyclable materials into recycled content products (RCPs).
f) Management of supply chain relationships including local transport and export partners such as brokers and sellers of recovered recyclable materials.

Objectives

The specific objectives of the program are to:

- Improve and enhance recycling and resource recovery activities across Australia.
- Increase the amount of recyclate used and therefore recycled content in the manufacture of new products from recovered materials.
- Support the industry to adopt best practice risk management for protection of the environment and human health and safety.

Audit process

The aim of this Pilot Trial is to test ARAP process. It involves:

1. An information request provided in Table 1 (below). With responses, including supporting documentation, to be provided back to Equilibrium via email.
2. Participating in a short interview/survey to confirm or test elements of the response to the document/information request in addition to providing feedback on the process. This will help us understand the impacts of ARAP process, including positive benefits and any challenges to overcome.
3. Participation in a virtual site inspection where practical to do so.
4. A summary report will be prepared detailing: conformance gaps with ARAP, including explanation.

Program Protocol Trial Information Request

Component	Relevant documentation	Information Provided
Certifications, accreditations, audits, or other inspection reports	Please detail 3rd party schemes or programs your business is participating in: ☐Environmental (e.g., ISO 14001), please list: <insert text> ☐Quality (e.g., ISO 9001), please list: <insert text> ☐OHS (e.g., ISO 45001), please list <insert text> ☐Other, please list relevant external or 3rd Party schemes or programs (please list> ☐Not currently participating in an accreditation or certification program.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Fire safety	• Fire safety study, or equivalent • Operational Environment Management Plan • Bushfire risk assessment • Relevant safe work method statements • Hot Work Permit Procedure • Site storage plans, including, separation from boundaries, smoking zones and chemical storage areas.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Fire protection	• Relevant fire block plans (sprinklers, hydrants, fire alarm). • Annual hydrant test / commissioning (e.g., annubar test to block plan specifications including • Annual fire safety statement, e.g., for building owner compliance in NSW. • Most recent routine service test certificates for fire equipment (AS 1851:2012) • Most recent routine service test certificates for electrical equipment (AS3760:2010) • Most recent routine service test certificates for emergency lighting (AS 2293.3, ASNZS 2293.2:2019)	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Systems and procedures for collection, separation, and dispatch	• Up to two months of data and evidence for collection and dispatch, including weigh bridge dockets, financial billing information or inventory databases. • Records for monitoring material streams, including quality and contamination.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>

Component	Relevant documentation	Information Provided
Storage management	• Storage management plans. • Site environmental risk register and management plans. • Pollution incident response plan. • Site plans including designated materials storage and handling areas. • Business continuity and closure plans	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Chemical Storage	• Site chemical register, including chemical Safety Data Sheets (SDS). • Procedures for management and use/handling of chemicals. • Chemical collection records. Note: where relevant, e.g., for sites that operate community chemical drop off points.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Emergency management and first response plans	• Site emergency response plans, including identified emergency scenarios and procedures. • Pollution incident response plans. • Emergency system training records. • Local fire emergency services written feedback regarding site planning (where relevant).	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Equipment maintenance and use	• Standard operating procedures, including Safe Work Method Statements for equipment use and maintenance. • Pre-start, start and shut down procedures. • Daily safety checks of mobile plant and equipment. • Equipment isolation procedures (Lock Out / Tag Out). • Routine service test certificates for electrical equipment (AS3760:2010)	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>

Component	Relevant documentation	Information Provided
Incident assessment and reporting	• Occupational Health and Safety Management System • Incident and hazard identification, reporting and assessment procedures. • Incident/hazard report and investigation register and records. • Records and documents related to significant incidents within the past 12 months, including notifications where regulators have been involved (e.g., Worksafe, EPA) • Training records identifying staff have been trained in the use of the incident reporting procedure.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Employee engagement and training	• Work Health and Safety consultation procedures and records. • Site safety systems training register and records. • Emergency response training records.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Permits and licenses	• Environmental licences to transport waste, receive waste and operate a resource recovery facility • Council Permits / Development applications and determination notices • Licence to transport waste • EPA annual returns	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Other codes of practice and regulations	Management plans demonstrating conformance with the Building Act 1993 and National Construction Code, and relevant state and territory materials storage requirements and regulations may be requested, as follows: • **ACT:** Guideline for Stockpile Management. • **NSW:** Fire Safety in Waste Facilities • **NT:** Fire and Emergency Regulations 1996 • **QLD:** Fire and Emergency Services Act 1990; and Building Fire Safety Regulation 2008 • **SA:** Guideline for stockpile management: Waste and waste derived products for recycling and reuse • **VIC:** Management and storage of combustible recyclable and waste materials – guideline	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>

Component	Relevant documentation	Information Provided
	• **WA and Tas:** Refer BCA, no other specified storage limits.	
Regulator or involvement by other authorities, complaints from neighbours or other interest groups	• Any formal notices provided by regulatory bodies regarding compliance matters, including local council, EPA and Work Safe (in the past 12 months) • Copies of any formal company responses to regulatory notices (in the past 12 months) • Stakeholder communications regarding complaints, including complaints from neighbours or interest groups (in the past 12 months).	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Insurance	• Valid liability insurance certificates (public and product). • Valid WorkCover Insurance certificate. • Valid Equipment insurance certificates. • Valid vehicle insurance certificates	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Employment Law	• Fair Work, including wages rate setting and resolving disputes. • Equal Opportunity, including employment equality to prevent discrimination.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>
Sales markets / contracts or trading history	• Contracts of sale or other contractual arrangements with downstream vendors. • Agreements with brokers or agent. • Evidence to verify downstream vendor locations, and end use locations for recycled materials, either direct to customers or through brokers and agents. • Shipping documents for up to 2 months of consignments including: bills of lading, sea waybills.	☐Yes, all relevant reports and information have been provided. ☐No, we are unable to provide this information at this time. If you answered No, can you please provide the reason (tick all relevant items): ☐ Information is too difficult to obtain right now. ☐Information is confidential and cannot be shared ☐Other reasons, please explain: <insert text>

Appendix 3. Detailed recycler feedback

I. Recycler feedback regarding collating and providing information

Company	Feedback
Recycler 1	• Was not difficult, however there were a number of people involved to bring it together. • Time wise, took the full week to gather. Majority of information was with OHS manager, however information was needed to be gathered across the business. • A key focus is to ensure contamination reports are of high quality. • Confidentiality is a concern for pricing and other specific customer details that are of commercial in confidence.
Recycler 2	• Not difficult to obtain the information. • Internally, some barriers were identified, but not a significant issue. • Local EPA regulations also a driver for continued improvement for site systems.
Recycler 3	• All was straightforward. • Reluctant to send outbound contracts due to confidentiality • A lot of the information was similar to ISO, and not dissimilar to that process. • For other recyclers (in the sector) the level of information requested may be a stretch at the moment for the industry generally. • Smaller businesses – would really struggle with ARAP level of detail.
Recycler 4	• Not really difficult to pull together, however, did take some time. • 2 days to prepare the material (over a period of 1 week). • Most documents were easy to find as the file systems/structures were already in place. • Smaller companies may struggle, due to limited resources. • Questions were at a good level. • 2 months data was readily available • Confidentiality concern of wage rates and sales channels. • Know that smaller businesses are challenged to comply (with providing the level of information requested). • Currently doing updates to systems due to EPA permissions requirements.
Recycler 5	• Was not a problem to pull together, majority is updated on a 12 monthly basis. • Compliance and internal audit requirements in place require these systems to be readily accessible • ISO surveillance audits conducted on a random basis across the company, at a minimum must be performed every 3 years. • From a time perspective this (ARAP) would not be difficult to be involved with. • Do not like sharing customer details (for confidentiality reasons), but happy to provide summary information, including specifics of front end or tail end customers. • Across the sector there are three tiers – large, medium, and small businesses • Large businesses generally well enough resourced to participate. • Med sized businesses expect to have compliance information at hand, • Small businesses however may not have information storage organised but will have licences in place.

II. Opportunities to improve request process

Company	Feedback
Recycler 1	• If this were a regular item then would be able to streamline the information collation, i.e., setup a common drive for information and data storage to be updated. This would help reduce time taken. • At the moment not a specific EHS role in the business and rely on assistance from specialist consultants to assist with bringing together documents.
Recycler 2	• Information requests could be streamlined and raised to a higher level. For example, request information to demonstrate that compliance with employment laws rather than specific requests for wage rate setting documents etc. • Instead of requesting 2 months of materials data (large and complex files), request recyclers to provide appropriate evidence regarding monitoring of materials flows (e.g., management reports and summaries). • A concern for all recyclers was sharing of raw materials data, as this information can be manipulated. A process for ensuring confidentiality and security is needed, e.g., working only with summary documents, or only reviewing raw data when on-site without making copies. • Recognized and trusted accreditation (such as ISO accreditation) is valuable in that it provides confidence to in data for stakeholders. • It is important that customers and stakeholders have confidence that 'we do what we say we do'.
Recycler 3	• Customers must have confidence in operations and are now becoming more granular with extensive questions around DSV and OHS. • ISO gives a 5-star tick to these issues • ARAP could be an extension of the process (for major tender submissions) i.e., design ARAP specific to support industry responses to major tenders.
Recycler 4	• Would prefer to have an auditor work alongside to go through the process and enabling two-way discussion for checking on the way. (Expect that an on-site audit would be smoother)
Recycler 5	• ARAP is very similar with ISO auditing, no specific feedback on improvement.

III. Opportunities to improve request process

Company	Feedback
Recycler 1	• No specific feedback provided.
Recycler 2	• No problem with the double up, as the information is readily available (the site is used to providing information and has streamlined the process).
Recycler 3	• A recycler that is ISO (QMS, EHS, OHS) compliant should also meet ARAP. • If a recycler is not ISO accredited, then it should be audited (under ARAP). • There may need to be some assessment if there are gaps in information (i.e., ISO accreditation vs ARAP).
Recycler 4	• No specific feedback provided.
Recycler 5	• ARAP is very similar with ISO auditing. • The company already maintains ISO accreditation. Would not 'go against ISO', as this is valuable to the business.

IV. Consumer demand

Company	Feedback
Recycler 1	• Currently customers are not requiring third party audits. • However, looking at certification for expanding into new products. Key interest specifically certifying product quality, keep the standard and quality at a high level.
Recycler 2	• Verifies for the customer that says we do what we say. For example, customers want to know that items are recycled, not stored (issues around illegally disposing and dumping of waste). • Proof that (systems and management of waste) is in the audit report. • Other drivers include in EHS performance, risk management which an audit will demonstrate that processing is conducted legally. • Important thing is the transparency, also provides minimum requirements for being in the sector – recyclers should be accredited for the confidence to the general public. • Third party auditing supports core business with ongoing improvements for compliance, customer confidence, and meeting stakeholder expectations.
Recycler 3	• Insurance is a real issue for the industry. Currently, cannot get local insurance and only offshore insurance is available. • Insurer's do their own due diligence, including fire engineers • Fire guidelines from state government authorities are exhaustive (requiring specialists to audit). • Customer competition within the market is driving better performance.
Recycler 4	• Potential competitive advantage for attracting new customers.
Recycler 5	• Certification is key for the sector. • Only 5% of customers are asking for this level of accreditation (but this is an important part of the market) • ARAP would be useful for new customers with specifications (e.g., State and Local Governments) • Expect that some larger (corporate) customers will be seeking certification in the future. • Smaller customers are purely price driven, and do not ask (for certifications or accreditations).

V. Potential for continued involvement

Company	Feedback
Recycler 1	• Key issues of concern: must provide value the business. • Quality of material is key for customers and adding value to would hinge around this issue mainly.
Recycler 2	• No identified conflicts with other accreditation systems already involved with. • Potential to enhance business credentials with customers and stakeholders. • Insurers are asking very similar questions (as per this trial) for their audits • Following the same lines as the insurance industry. • If a business were accredited under ARAP – should be fed into insurance companies research (would hopefully help for discount on premiums). • Fires across the industry have not helped with rise in premiums. • Insurance premiums are not likely to drop, but ARAP has a good role to play to reduce risk across the industry and minimise risk for all.
Recycler 3	• No conflict with current accreditation • ARAP would be an extension of ISO though, not a replacement.

Company	Feedback
	• ARAP driving co-operation within the sector, with strategic thinking and identifying opportunities for improving resource recovery and processing. Easier for an industry led program to do this type of linking e.g., suitable located businesses to recycle materials to reduce environmental impacts. • Aggregating where possible, sharing loads and materials efficiency for processing. Concept for True North, including reverse logistics. Reduce transport emissions and productivity benefits.
Recycler 4	• Would prefer audits every 2 years (similar to insurance audits), annually would seem to frequent. • Will help with insurers giving more confidence in managing risk. • Insurance premiums would need Government backing to reduce costs (i.e., unlikely that Insurer's would reduce premium's for just one company), • Other reasons include: specified mandatory involvement (i.e., there may be a sector benefit that will help if wide uptake of the program is in place). • Program involvement would need to be a selling point for customers, e.g., would need a certificate and promotional opportunities (i.e., to assist with attracting new customers)
Recycler 5	• Could manage participating in ARAP, however, will need to receive the value back to be part of the program (to assist with potentially growing the business). • Would need consumers/customers to be asking (for accreditation with ARAP). • Insurance companies and major clients want certification. • Major tenders are asking for accreditations. If not provided, then major tenders will require detailed responses (which would be expected in an ISO audit). • It is easier to submit a major tender with accreditation already in place.

VI. Program funding considerations

Company	Feedback
Recycler 1	• Really must be hinged around benefits to the business. • Accreditation must be well known and be a benefit. For example, ARAP would need to be an industry standard approach that is endorsed / supported by government. • Already doing internal auditing, which is working well for current customer base. • ARAP must provide a demonstrated benefit that would support (added cost) from an external audit.
Recycler 2	• Must have a value proposition. • Value can be: safety, or recycling or better manage EHS for legal requirements then companies are more likely to go for it. • Needs to be hooked into something, carrot (value and return) and stick (driving force behind needing to be involved)
Recycler 3	• (Across the industry) there needs to be an agreement on some form of the minimum bar for resource recovery performance.
Recycler 4	• Ideally if there were a subsidy (to support small/medium business), with a payment also from the company.
Recycler 5	• Membership programs – value for money, information, or representation for the money.

Appendix 4. Example Summary Report

Aspect	Review Details	Improvement Opportunities Identified
1	Certifications, accreditations, audits, or other inspection reports	No further improvement opportunities identified.
2	Fire safety	To ensure compliance with Victorian Regulations it is recommended that site develop a site fire risk assessment and management plan, including storage plan, in line with the VIC EPA Management and storage of Combustible Recyclable and Waste Materials – guideline. Refer www.epa.vic.gov.au for further detail. Advised during review session the site has reached agreement on meeting the CRWM with the EPA, including maintaining current systems for compliance. No further improvement opportunities identified.
3	Fire protection	It is recommended that site ensure a central register is in place detailing testing status for fire protection systems. Key documents maintained in the register can be used for future audits and stakeholder requests. Information may include testing conducted to meet relevant standards, including: • Inspect and test emergency lighting systems AS 2293.1, AS 2291.2 • Inspect and test portable firefighting equipment AS 1851 and AS 2444, AS 2441 • Flow test of hydrants AS 1851, AS 2419.1, AS 2118.1 • AS 2118.1 2017 Automatic Fire Sprinkler Systems Advised during review session this is managed through the lease agreement. A copy of the lease guide was shown during the virtual inspection, noting it is the responsibility of the building owner to ensure systems meet BCA requirements for the facility and operations within. No further improvement opportunity identified.
4	Systems and procedures for collection, separation, and dispatch	No further improvement opportunities identified.
5	Storage management	To ensure compliance with Victorian Regulations develop a site storage plan and procedure in line with the VIC EPA Management and storage of Combustible Recyclable and Waste Materials CRWM – guideline. Refer www.epa.vic.gov.au for further detail. (noted in Aspect 2. Fire Safety) Advised during review session the site has reached agreement on meeting the CRWM with the EPA, including maintaining current systems for compliance. No further improvement opportunities
6	Chemical Storage	No further improvement opportunities identified.
7	Emergency management and first response plans	It is recommended that site potentially seek review of the site's current emergency plans in consultation with the local fire emergency service.
8	Equipment maintenance and use	No further improvement opportunities identified.
9	Incident assessment and reporting	No further improvement opportunities identified.
10	Employee engagement and training	No further improvement opportunities identified.

11	Permits and licenses	It is recommended that site ensure Council Permits are maintained on file, with conditions reviewed on routine/regular basis. Discussed and resolved during review session. It is also recommended that site review / confirm environmental regulatory requirements for receiving, processing and transport of waste materials in-line with recently introduced VIC EPA regulations, including: • registration for storage, refer **epa.vic.gov.au/registrations** • waste tracking, refer **epa.vic.gov.au/wastetracker** Advised during review session the site has been working on these issues with EPA, and actions are in hand.
12	Other codes of practice and regulations	No further improvement opportunities identified.
13	Regulator or involvement and complaints management.	No further improvement opportunities identified.
14	Insurance	It is recommended that site maintain a central register of relevant insurance certificates for ready access as the need arises, e.g., for future audits and stakeholder requests. Advised during review session the site maintains these on a central system, available when needed.
15	Employment Law	It is recommended that site maintain a central register with evidence of compliance with Australian Employment Laws. Key documents in the register can be used for future audits and stakeholder requests. Information may include, for example, documents relating to: • Wage rate setting • Dispute resolution • Employment policies pertaining to employee rights and discrimination prevention. Advised during review session the site maintains these on a central system, available when needed. Noting that some matters are also of a confidential nature.
16	Sales markets / contracts or trading history	No further improvement opportunities identified.