CIRCULARITY IN AUSTRALIAN BUSINESS 2021

Awareness, Knowledge and Perceptions

AUSTRALIAN CIRCULAR ECONOMY HUB

PLANET ARK

Planet Ark Environmental Foundation is an Australian not-for-profit organisation that helps individuals, communities, governments and businesses reduce their impact on the environment. We are one of Australia's leading environmental behaviour change organisations, with a focus on working collaboratively and positively.

ACKNOWLEDGMENTS

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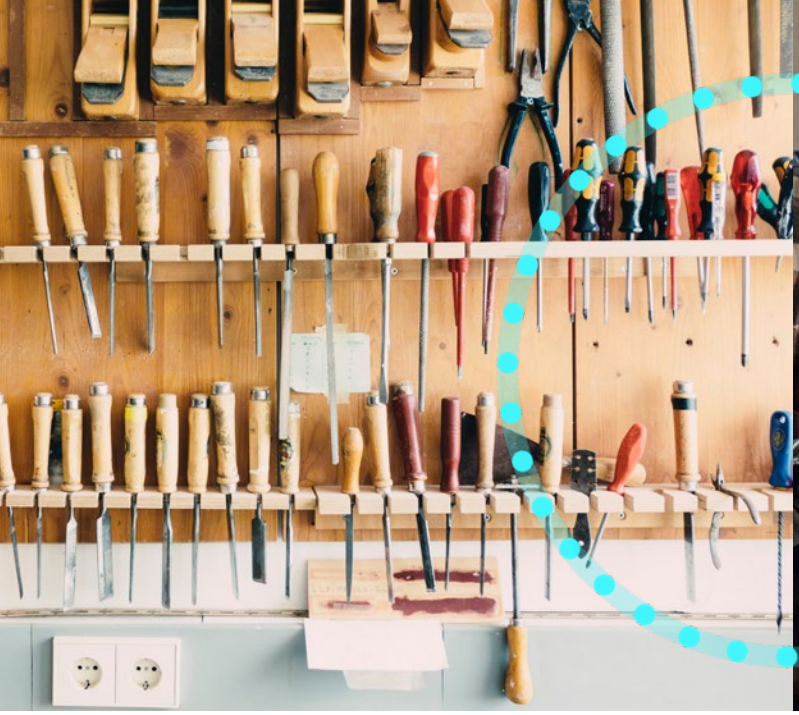


FOREWORD

Australia's landmark 2019 National Waste Policy Action Plan identified that a circular economy is central to Australia taking care of its own waste. The Morrison Government invested funding to establish Planet Ark's Australian Circular Economy Hub (ACE Hub), launched in November 2020.

In a circular economy, when a product is no longer useful or required for its initial purpose, it can be either reused, recycled, or remanufactured to create new or different products. Recognising our waste as a valuable resource is at the heart of a circular economy and allows Australia to produce new products from our waste that would previously have gone to landfill.

Other benefits of Australia moving to a circular economy include more local jobs to support recycling and remanufacturing, financial savings on raw materials, reduced emissions from energy used to extract virgin resources, less pollution from toxic substances and health benefits for humans and the environment.

The Morrison Government's $190 million Recycling Modernisation Fund is already achieving significant results in leveraging over $800 million to create the engine room of Australia's circular economy. Through our partnerships with other governments and industry, we have co-funded 78 new recycling and remanufacturing infrastructure projects with many more to come.

> ***Recognising our waste as a valuable resource is at the heart of a circular economy.***

But there is no point in boosting recycling if there is no market for goods containing recycled content. That is why Australian Government agencies must now consider recycled content and the potential to recycle at end of life in purchasing decisions. The government's Sustainable Procurement Guide is a significant step to help make this practice a reality.

The key to overcoming the barriers and embracing the benefits of a circular economy is collaboration and knowledge sharing.

The *Circularity in Australian Business 2021* report reveals that the private sector also clearly recognises the opportunities and benefits of transitioning to a circular economy. We must work at improving linkages so that sustainability experts can share knowledge with business decision makers.

The key to overcoming the barriers and embracing the benefits of a circular economy is collaboration and knowledge sharing: organisations need to work together to achieve circularity.

The good news is that the ACE Hub can act as a 'transition broker' and provide a platform for this collaboration. If adopted, it can be a place to matchmake interested and enthusiastic companies to share information, learn and broker mutually beneficial partnerships. After all, one person's trash is often another person's treasure.

I encourage all innovative business leaders to act now to secure their place in Australia's new circular economy. For my part, I look forward to continuing to work with Planet Ark and the ACE Hub team to help build the transition to an Australian circular economy where the value of our waste is fully recognised.

Trevor

The Hon. Trevor Evans MP

Assistant Minister for Waste Reduction and Environmental Management

EXECUTIVE SUMMARY

In November 2020, Minister for the Environment, the Honourable Sussan Ley, launched the Australian Circular Economy Hub (ACE Hub) as a national focus point for the circular economy.

To inform the work of the ACE Hub, the 2020 launch also incorporated the release of the first *Circularity in Australian Business* report. This annual research project was commissioned to understand the state of circular economy thinking within the Australian business community.

The ongoing purpose of the *Circularity in Australian Business* report is to help the ACE Hub team, all levels of government and circular economy practitioners, understand awareness, knowledge and perceptions of the circular economy in the Australian business community. The report aims to enable better circular economy implementation by improving understanding and highlighting opportunities for collaboration among businesses, government and other circular economy stakeholders.

The report is informed by attributes, perceptions, knowledge and understanding of circular economy shared by 14 C-suite executives and 500 business decision makers across Australia – most of whom recognised the circular economy as important to the future of business. Surveying these Australian business leaders resulted in the following key learnings.

Customers and investors are driving a shift to circularity in Australian businesses. This is despite the recognition that current knowledge of how such a shift will play out in the long term is limited. Ongoing circular economy awareness and action by these groups will continue to encourage uptake by Australian businesses.

88%

of business decision makers surveyed agreed the circular economy would be **important to the future of their business.**

Knowledge and understanding of what a circular economy means, however, is limited. The report identifies a contradiction where those who have the most confidence in their circular economy knowledge, have the least actual knowledge. Most business decision makers see recycling as the defining term for circular economy, with only C-suite executives with sustainability responsibilities able to articulate the need to redesign the system from the start of a product's lifecycle. This discrepancy reveals a knowledge gap between first movers and those just now starting their circular economy journeys and an opportunity for the ACE Hub to facilitate increased knowledge transfer between these groups.

81%

of business decision makers said they felt **knowledgeable about the concept of the circular economy.**

27%

However, only 27% could **correctly identify the definition of circular economy.**

The top three benefits identified by those surveyed were 'reducing costs', 'increasing efficiency' and 'aligning with public opinion'. C-suite executives believe that circular economy represents an opportunity to gain competitive advantage and/or increased economic resilience. Business decision makers appear more concerned with reputational issues and improving public trust in this year's report than in 2020.

42%

of business decision makers identified **'reducing costs'** as a benefit of the circular economy – the most common answer.

Lack of information on how to implement circular economy was the most commonly reported barrier. Other barriers reported by survey participants were financial issues or lack of capital and uncertainty about the benefits of return on investment. One finding offering promise is the shift from high representation of technical issues in 2020, to low representation in 2021. This finding could indicate Australian businesses are developing a broader knowledge of the complexity of circular economy adoption, recognising that it is not just a technical transition.

...for globally integrated organisations, the risks of not adopting the circular economy are too high to ignore.

40%

of business decision makers identified **'lack of information on how to implement circular economy practices'** as a barrier – the most common answer.

The take-make-use-dispose economic model is to blame for unsustainability. Organisations have traditionally worked within their own supply chain to put products onto markets. This research finds a lack of collaboration and limited leadership in transitioning out of this linear economic model as both a challenge and an opportunity.

Australia risks becoming less competitive on the global market unless it increases its adoption of circular economy business models. Participants noted that risk mitigation, by aligning with society's desire for sustainability, is far greater in regions such as Europe. Participants identified more competitive markets and higher legislative and bi-partisan political will as drivers of the circular economy there. Indeed, for globally integrated organisations, the risks of not adopting the circular economy are too high to ignore.

The three major constraints to the adoption of circular economy business models in Australia are:

1. **Structural issues for companies**
2. **Short-termism**
3. **Resistance to change**

The ACE Hub can support and promote change in policy, regulations and the creation of enabling conditions to encourage circular economy investment. It can inspire and educate Australian businesses and governments to connect and collaborate. The ACE Hub can also amplify the work of existing businesses and government agencies to make circular economy more mainstream.

The biggest task of the ACE Hub, therefore, is to encourage greater understanding of and engagement in the circular economy in Australia. Survey participants saw the ACE Hub as a good initiative that meets the needs of business due to Planet Ark's credibility and trust in delivering tangible action and facilitating connections. Businesses expect the ACE Hub to deliver both information and connection to support Australia's transition to a circular economy.

A complex system change is needed to adopt circular economy in Australia. It requires knowledge and understanding of the concept, how it applies to different sectors and appreciation of the benefits in the long term. Australia is on the cusp of a tipping point. The ACE Hub offers a comprehensive resource to support these needs to expedite adoption of circular economy for the benefit of all.

The ACE Hub can amplify the work of existing businesses and government agencies to make the circular economy more mainstream.

CONTENTS

THE CIRCULAR ECONOMY ACCORDING TO BUSINESS LEADERS

An innovative way of rethinking the way we use products and services for the benefit of the society. It's an economic system aimed at eliminating waste essentially at its core.

- Mark Kehoe, CEO, Gumtree

...circular economy is about reuse to the greatest extent possible. I think there's some really interesting business models coming up around consumer goods, such as clothing.

- Kate Vidgen, Executive Director, Global Head of Energy Principal, Macquarie Bank

Put simply it is three words NET. ZERO. EVERYTHING ... when you say "net zero", people know you are talking about carbon emissions. So I'd give that a twist and just say, "well it's not just carbon emissions, it's also how much we dig out of the ground, how much of the elements we take out of the air, all the pollution and the waste, the landfill; all of those things have an impact on the environment as well as human health. We need to consider all of it.

- Joseph Capurso, Head of International Economics, Commonwealth Bank of Australia

The circular economy, where products are recycled and the materials are reused and in circulation for as long as possible, is a critical aspect of ensuring companies are being as sustainable as possible. Closing the loop in manufacturing also enables consumers to embrace more sustainable practices, so **it really is a win-win when both businesses and consumers embrace the circular economy.**

- Michael Boyle, Managing Director South Pacific, Hewlett-Packard

Lots of traditional economies work in a linear fashion - you make something, you use it and you throw it away. Circular is **looking at how we can actually create stuff that then can go on for a different or new and repurposed life**. It's really helping to reduce waste, it's helping to address complex problems like climate change, resources, et cetera.

Cate Harris, Head of Global Sustainability, Lend Lease

People are starting to try and come to an understanding of the impact that each decision that they make is having on the next decision that is made. And so, from a circular economy [perspective] it's really saying if you understand where you're going to start, you also need to understand where that's going to finish, and then, what sort of resources are you going to consume to get there and balance that out.

Glenn Crane, Chairman, Inlogik Pty Ltd

1. INTRODUCTION

1.1 PURPOSE

In November 2020 Planet Ark launched the ACE Hub with the mission to facilitate the transition to a circular economy in Australia.

To inform the work of the ACE Hub, an annual research project was commissioned to understand the state of circular economy thinking within the Australian business community. The first edition, *Circularity in Australian Business 2020*, was released to coincide with the ACE Hub launch in November 2020. The first report provided a baseline understanding of circular economy knowledge in the business community. This second iteration has been designed to identify shifts in Australian business' knowledge of, interaction with and sentiment towards the circular economy

This report also outlines opportunities for the ACE Hub to act as both a knowledge repository and a networking platform that inspires, informs and facilitates the collaboration necessary for Australia's transition to a circular economy.

The purpose of this report is to help the ACE Hub team, all levels of government and circular economy practitioners understand knowledge, perceptions and behaviour towards circular economy across Australian businesses and identify ways to move the dial on implementation by businesses, government and other circular economy stakeholders.

1.2 OBJECTIVES

This report has three objectives:

1. Understand the current knowledge of and interest in the circular economy amongst Australian business decision makers.
2. Understand perceptions of the benefits of and barriers to the transition to a circular economy amongst Australian business decision makers.
3. Inform the ongoing development of the ACE Hub, and its Strategic Action Plan and Work Plan.

1.3 METHODOLOGY

The data collected for this report involved two distinct methods and samples:

1 **Qualitative interviews** with C-suite executive decision makers with responsibility for sustainability

2 **Quantitative survey** with a mix of C-suite, non-executive and senior management decision makers

Throughout the document, the two icons above are used to identify the findings from the qualitative and quantitative participant samples.

1.3.1 QUALITATIVE INTERVIEWS
WITH C-SUITE EXECUTIVES

The first method involved qualitative research using in-depth interviews. In total, 14 C-suite executives with responsibility over sustainability initiatives in their organisations were invited to participate.

Participants were recruited from peer-to-peer recommendations and professional networks and received no incentives for their time. Some chose to remain anonymous for the purposes of this report. A summary of the participants is presented in Appendix A.

Throughout this report, these individuals are referred to as 'qualitative interview participants.'

1.3.2 QUANTITATIVE SURVEY
WITH MIXED LEVEL DECISION MAKERS

The quantitative phase of this research used online sampling and survey. Pollinate partnered with an ISO approved sampling panel to ensure quality of respondents and data throughout the life of the project. The sample required respondents to be 'a decision maker' in their business. A range of industries and business sizes were included to ensure a robust sample.

The sample size was n=500. The sample size of business decision makers was increased from 200 in 2020 to 500 in 2021 to enable deeper insights. With this sample size, the margin of error in this research is +/- 4.4%. Comparisons across sectors were not considered due to base sizes for some industries being low or not representative of sector size, making it unsuitable to assess any significant differences. Appendix A presents key sample indicators for this dataset.

In this report, this sample is referred to as 'quantitative survey participants.'

2. WHAT DID THE RESEARCH SHOW?

2.1 ATTRIBUTES, AWARENESS AND PERCEPTIONS

2.1.1 QUALITATIVE INTERVIEWS

Several common attributes were distilled from the 14 qualitative interviewees:

- **Prioritising the environment** and sustainability was intrinsic to all.
- **They were strategic**, considering long term implications in their decision making.
- **They were pragmatic** and recognised the need for utility and action.
- **They were open-minded** and looked for the opportunity in every challenge.
- In terms of their values and ethics, adopting circular economy principles and practice was '**the right thing to do**'.
- They saw circular economy as both **inevitable and an evolution** of better business practice.
- They believed that circular economy **represented an opportunity** to gain competitive advantage and/or increased economic resilience.

Among these interviewees, there were typical views on the future of circularity captured in comments such as:

> ***Part of it is customers are saying, 'If you don't change, we'll go somewhere else.' It's also investors saying, 'This is a risk to your business. You better do something about it.'***
>
> *- Joseph Capurso*
> *Head of International Economics,*
> *Commonwealth Bank of Australia*

An important reflection from another interviewee was:

> ***I think that while we still don't have a great understanding of how [circular economy is] going to play out, more and more people are becoming far more concerned about what they're consuming, not only where it's come from, but where it's going to go.***
>
> *- Glenn Crane, Chairman, Inlogik Pty Ltd*

This statement suggests businesses know the circular economy is important and is being driven in large part by increasing awareness of the environmental impact of products among consumers, but more knowledge about how to implement circular principles is required to translate this into action.

This overarching statement from one interviewee captures where Australia is placed relative to the circular economy:

> ***It feels like the circular economy is at a tipping point.***
>
> *- Anonymous interviewee*

2.1.2 QUANTITATIVE SURVEY

Amongst the quantitative survey sample there was almost universal stated awareness of circular economy.

When asked the question 'How knowledgeable would you say you are about the concept of the circular economy?' the majority (92%) had some awareness. This is slightly down from 96% in 2020 but within the margin of error.

92% of business decision makers have **heard of the circular economy in some capacity.**

Across the quantitative sample there was a corresponding high level of perceived understanding of circular economy: 81% said they felt knowledgable about the concept. This is consistent with the 2020 research where most decision makers surveyed thought they knew about circular economy (86%).

This slight drop in confidence may be the Dunning Kruger effect at work - as knowledge grows, the more you realise there is much you don't know (see Figure 3 in section 2.2.3).

2.2 UNDERSTANDING AND KNOWLEDGE

2.2.1 QUALITATIVE INTERVIEWS

Qualitative interview participants understood circular economy principles and practices very well, as exemplified by the responses below:

> Unlike the wasteful linear model, the circular economy is **regenerative by design**.
>
> *- Mark Kehoe, CEO, Gumtree*

> Breaking that [linear] mould and looking at how we can **create items that can continue in a repurposed life**.
>
> *- Tanya Barden, CEO, Australian Food and Grocery Council*

> The circular economy closes the loop on manufacturing by **using recycled materials to produce new products**. The materials stay in circulation for as long as possible and out of landfill while creating new products that we know and love.
>
> *- Michael Boyle, Managing Director South Pacific, Hewlett-Packard*

> Circular economy is **truly not ever having a wasteful product** or something that is discarded.
>
> *- Anonymous interviewee*

These interviewees articulated the need to redesign the system to ensure waste is reduced to zero and create ever-increasing efficiencies of material and energy capture within a circular process.

2.2.2 QUANTITATIVE SURVEY

The quantitative survey participants were asked the question:
'To the best of your knowledge, which of these below best describe your understanding of a circular economy?'

In response, participants could select from one of four choices to define their understanding of the circular economy. The choices were informed by the Ellen MacArthur Foundation definition of circular economy, using three principles, all driven by design: 1) Eliminate waste and pollution; 2) Circulate products and materials; and 3) Regenerate nature[1]. This is encapsulated in the correct definition identified in Figure 1.

Of the four choices, only 27% of the sample correctly identified the definition of circular economy. This is a decrease from 34% in 2020. This highlights that there is no commonly accepted definition of circular economy in business. Most quantitative participants thought the concept of circular economy was about recycling or waste.

DEFINITION OF CIRCULAR ECONOMY (%) AMONGST THOSE AWARE:

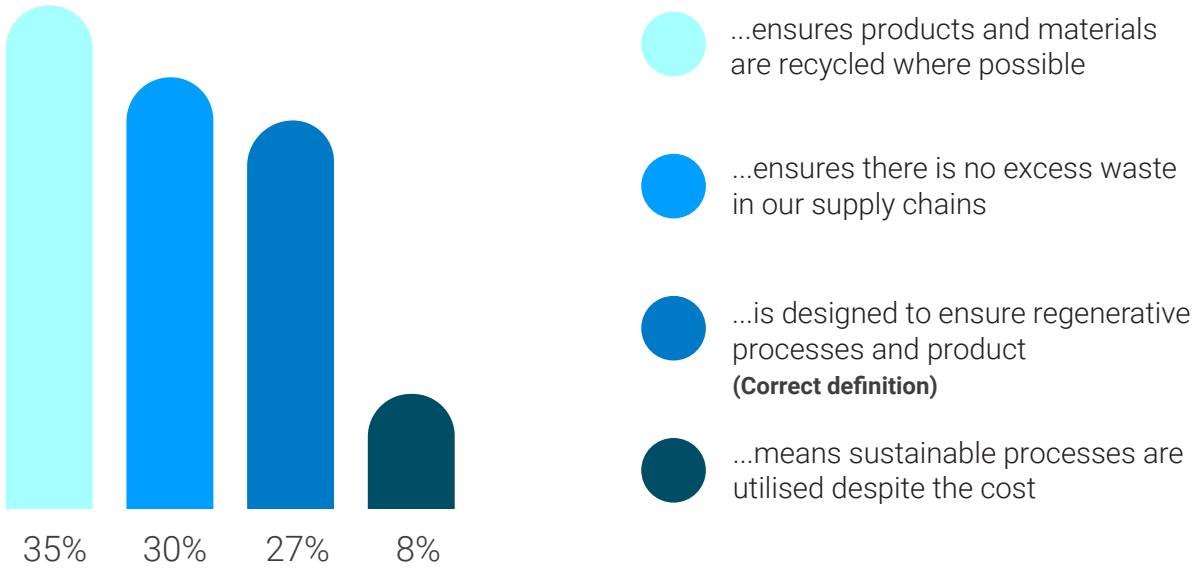


Figure 1: Defining the Circular Economy

Australian businesses are still in the 'recycling mentality' when thinking about circular economy.

Most business decision makers think circular economy is about waste reduction.

[1] Ellen Macarthur Foundation, What is a circular economy?

The results showed some differences in knowledge between business sectors (see Figure 2). Key takeaways include:

- Decision makers in **small or medium sized businesses were more likely to know the correct definition** of circular economy (31%) than larger businesses (20%).
- The lowest level of correct knowledge of circular economy came from those working in **financial and insurance services** (15%).
- Those least likely to correctly identify the definition of circular economy were **participants who claimed to be 'extremely knowledgeable'** about circular economy (16%).
- Those who had the highest correct attribution for circular economy were **individuals who said they were 'somewhat knowledgeable'** about circular economy (34%)
- Those who said they 'Have heard of it but do not understand the details' also had **higher correct knowledge** (31%).

Understanding of the circular economy:

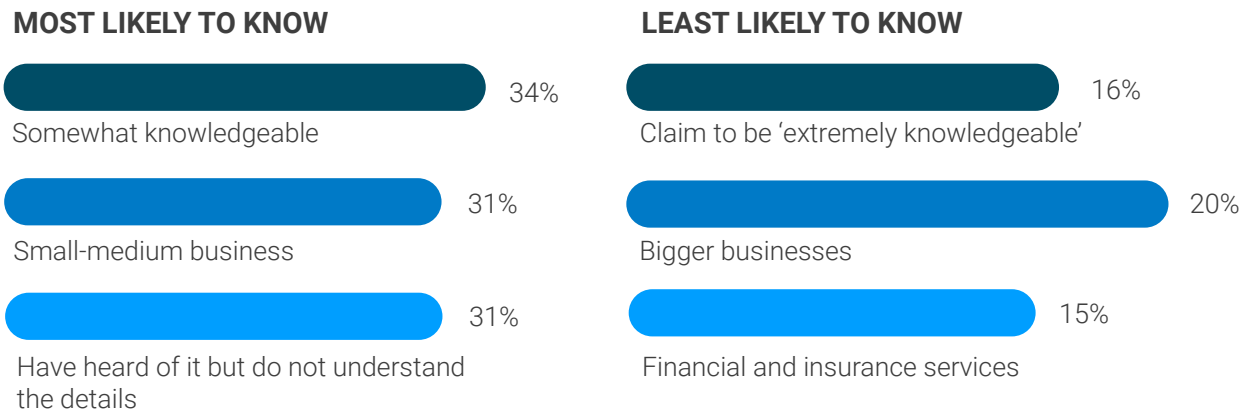


Figure 2: Those who understand the circular economy

To summarise, the key results of the quantitative sample show:

1. **Awareness of circular economy is high**
2. **Confidence in knowing about CE is also high**
3. **Actual understanding is low**

2.2.3 THE KNOWLEDGE GAP

The research exposed a gap in knowledge:

- **Those who say they are most knowledgeable know the least.**
- **Those who work in financial and insurance services, know the least.**
- **Those who say they know the least actually know more.**

The Dunning Kruger model of cognitive psychology might present a good explanation as to why people who are confident of their knowledge appear to have less actual knowledge.

The model demonstrates that people are most likely to think they know more than they do when they actually know very little.

This conviction is immediately followed by a precipitious decline because the model suggests that, with complex concepts, as our knowledge of the subject increases our confidence plummets.

However, a point is reached where the concept starts to make sense and confidence and knowledge both improve (see Figure 3).

THE DUNNING KRUGER EFFECT

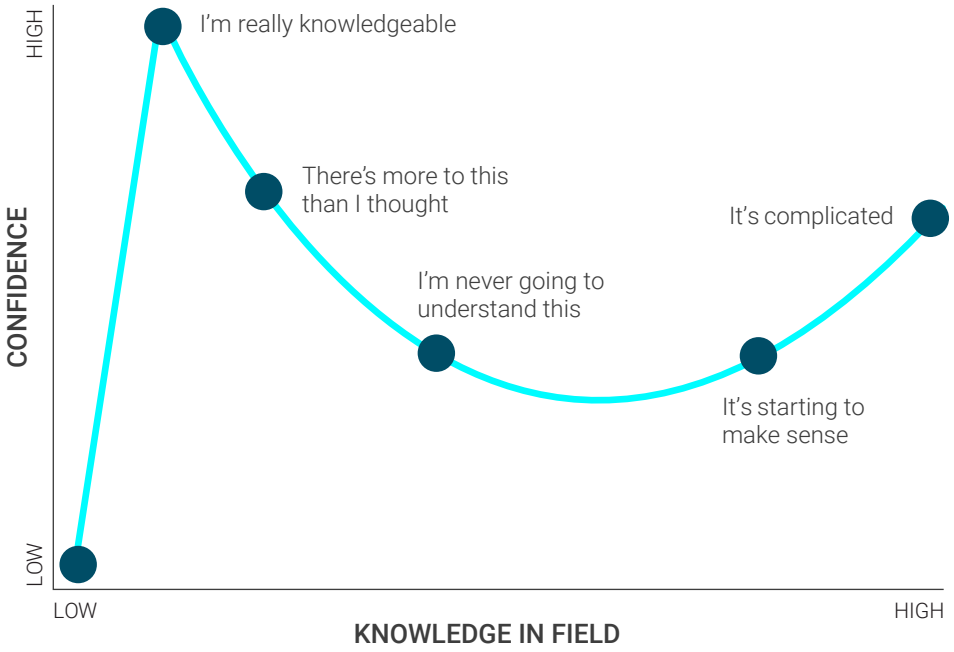


Figure 3: The Dunning Kruger effect of knowledge versus confidence

Quantitative survey participants with the most confidence had the lowest knowledge while those who were least confident had much higher knowledge. The qualitative interviews demonstrated consistently high levels of knowledge regarding both the principles and practical application of the circular economy.

The gap between awareness and understanding that becomes evident when the data is analysed against the Dunning Kruger effect reinforces the need for a program like the ACE Hub to educate and inspire.

2.2.4 IMPLICATIONS

Most of the qualitative interview participants – who have an interest in or resourced commitments to sustainability – knew what circular economy is and were actively looking beyond waste and recycling to more complex issues such as supply chain transformation. Note that these interviewees were from businesses likely to have dedicated resourcing on environmental, social and governance (ESG) matters and, hence, greater knowledge of circular economy than relatively smaller sized businesses.

Most of the quantitative survey participants were aware of the term circular economy but did not understand what it is.

The gap between awareness and understanding is apparent. The question is therefore:

How can C-suite executives help other business decision makers to understand the true meaning of circular economy?

This speaks to the strategic pillars of the ACE Hub to inspire and amplify circular economy principles and practices to make it mainstream, as well as educate and connect people and initiatives.

2.3 IMPORTANCE TO BUSINESS

2.3.1 QUANTITATIVE SURVEY

There was almost universal agreement from the quantitative survey participants that the circular economy will be important to the future of business to some extent as shown in Figure 4 below.

In this sample, 88% of business decision makers surveyed agreed that the circular economy would be extremely, very or somewhat important to the future of their business. This was consistent across different types of businesses and different sized organisations. This result is only slightly higher than what was found in the broader survey sample for the 2020 iteration of this report (86%). However, the proportion who thought the circular economy would be extremely important increased significantly from 21% in 2020 to 34% in 2021.

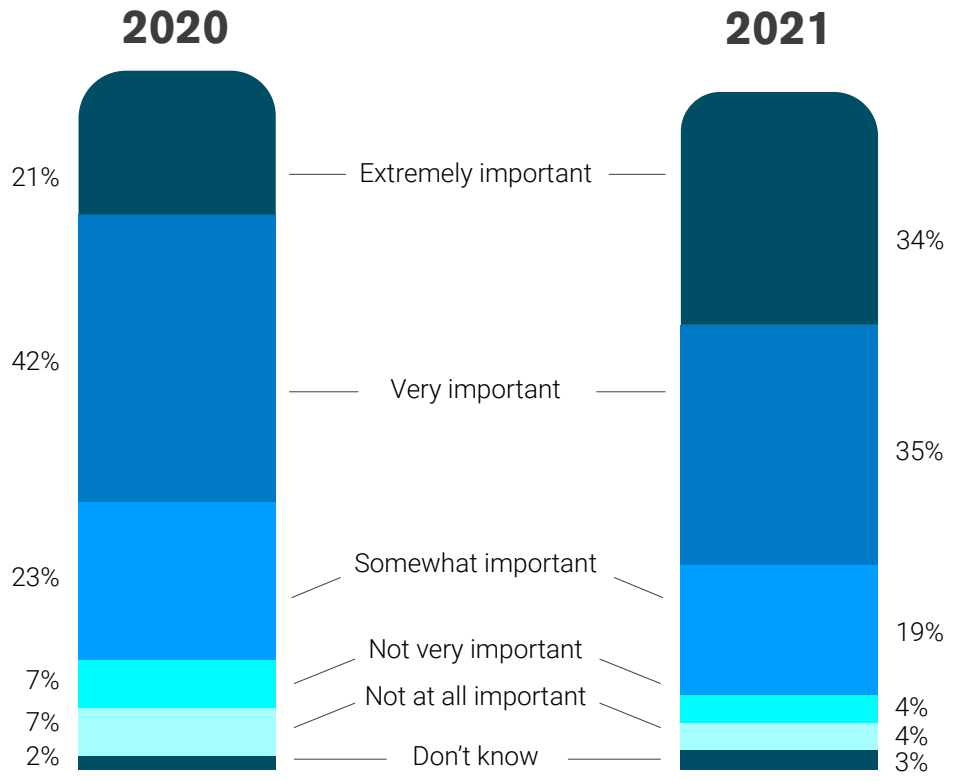


Figure 4: The importance of circular economy to business

Nearly 9 in 10 Australian businesses surveyed **think circular economy will be important to the future of their business.**

2.4 IDENTIFYING BENEFITS

2.4.1 QUANTITATIVE SURVEY

Quantitative participants were given a list of possible benefits in the survey and asked: *'Which, if any, of the below do you feel are potential outcomes of adopting circular economy models within your business/ organisation?'*

Interestingly, despite agreement about the importance of a circular economy in general, responses on the outcomes of implementation were surprisingly varied.

The single highest response was reducing costs, but only 42% of survey participants agreed their business would benefit in this way. None of the options listed were considered a potential benefit of adopting circular economy models by a majority (see Table 1).

Another observation is that while in 2020 there was more focus on increasing efficiency and reducing costs, in 2021 participants appeared more concerned with reputational issues like aligning with public opinion and improving customer trust alongside addressing resource availability.

BENEFITS	2020	2021
Reducing costs	48%	42%
Increasing efficiency	52%	39%
Aligning with public opinion about sustainability	30%	39%
Addressing resource availability	32%	38%
Improving customer trust	29%	38%
Aligning with expectations of corporate sustainability	34%	34%
Identifying innovation and product opportunities	29%	32%
Reaching new customers/markets	25%	31%
Improving customer engagement/retention	27%	29%
Increasing visibility and collaboration with supply chain	28%	29%
Improved brand equity	24%	28%
Improving staff engagement	28%	28%
Increasing profits/revenue	25%	27%
Don't know	9%	5%

Table 1: Perceived benefits of circular economy - 2020 versus 2021 results

There is some variation across organisation sizes for each benefit.

Question: Which, if any, do you feel are potential outcomes of adopting circular economy models within your business/organisation?

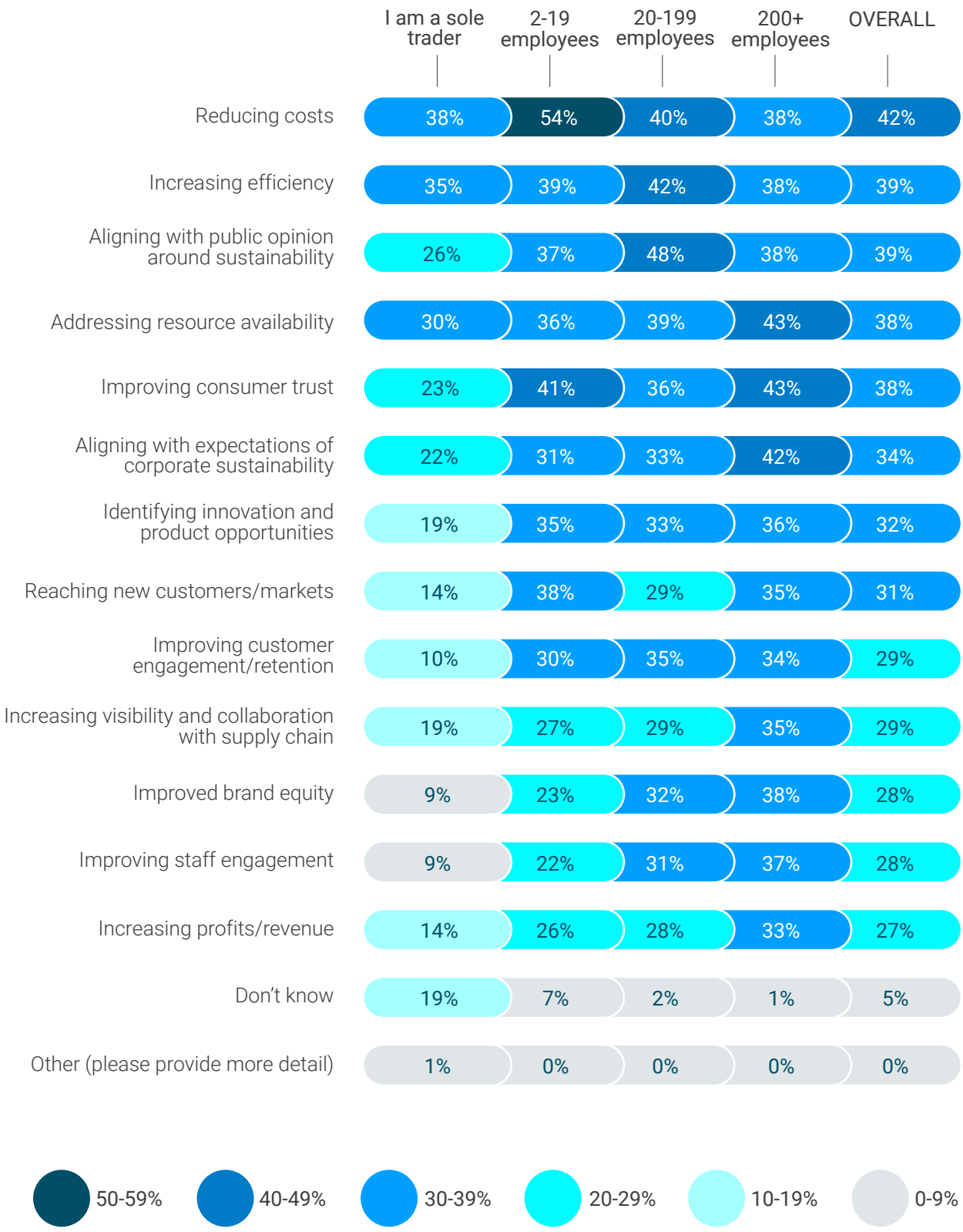


Figure 5: Perceived benefits of circular economy across organisation sizes

2.5 IDENTIFYING BARRIERS

2.5.1 QUANTITATIVE SURVEY

Survey participants were given a list of barriers and asked: *'Which, if any, of the below do you consider to be barriers to implementation of circular economy models within your business/organisation?'*

The results showed participants chose more barriers in 2021 than in 2020. On the other hand, a significantly lower percentage of participants saw technical issues as a barrier in 2021. These figures could indicate a deepening engagement with the circular economy where participants are understanding the broader complexity of circular economy adoption – that it is not purely a technical solution.

The results also indicated lower recognition of barriers than potential benefits among quantitative survey participants. The biggest barrier to implementing circular economy models was lack of information and this was only acknowledged by 40% of people surveyed (see Table 2). Again, this reinforces the need for a platform such as the ACE Hub to share information among stakeholders. Interestingly, only 1% indicated 'other' barriers suggesting the list provided encapsulates the most common issues for participants.

BARRIERS	2020	2021
Lack of information on how to implement CE practices	36%	40%
Financial issues/do not have the capital	37%	35%
Uncertainty about the benefit to ROI	26%	32%
Lack of R&D resources	26%	29%
Business culture/lack of executive engagement	22%	29%
No policy or legislation requirement	21%	24%
Do not see the need for it	15%	15%
Don't know	7%	8%
Technical issues	20%	7%
Other	0%	1%

Table 2: Barriers identified - 2020 versus 2021 results

There was slight variation in barriers identified based on business size.

Question: Which, if any, do you consider to be barriers to to implementation of circular economy models within your business/organisation?

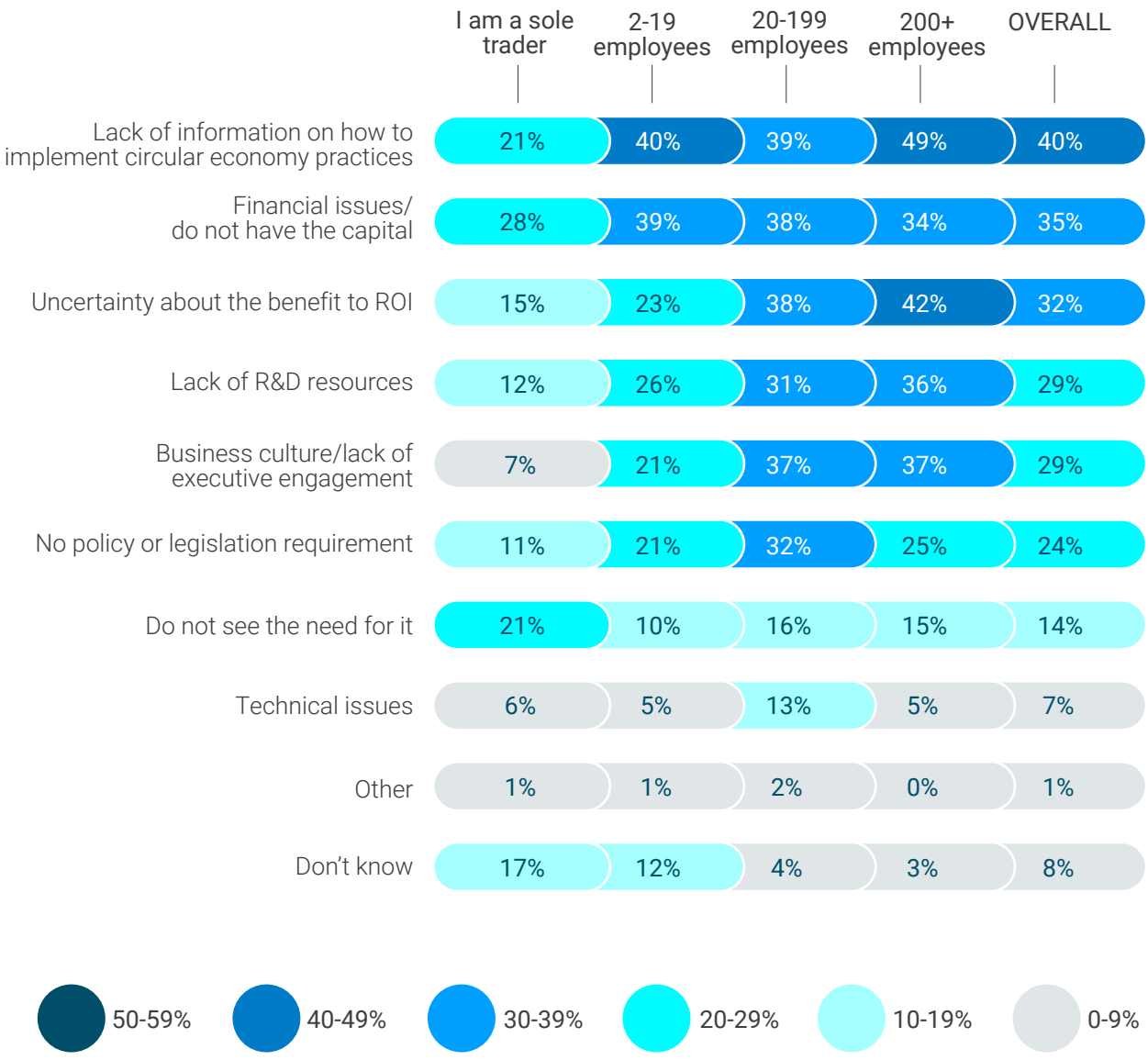


Figure 6: Perceived barriers to circular economy across organisation sizes

2.6 WHO IS LEADING IN THE CIRCULAR ECONOMY?

2.6.1 QUANTITATIVE SURVEY

Quantitative survey participants saw no clear leaders in the circular economy in Australia. Participants were asked: *'When you think of the term circular economy, which organisations, if any, do you see as pioneers?'*

In Figure 7, 'don't know' is the highest response from the survey participants and the collection of single mentions under 'other' is the second highest response. These categories together represent over 80% of all responses.

In the 'other' category, participants provided free text responses to reveal either big tech or other big companies as possible leaders. People have traditionally seen technology as a likely solution to complex problems and assume the biggest problems require the biggest organisations to solve them, making these answers a logical response.

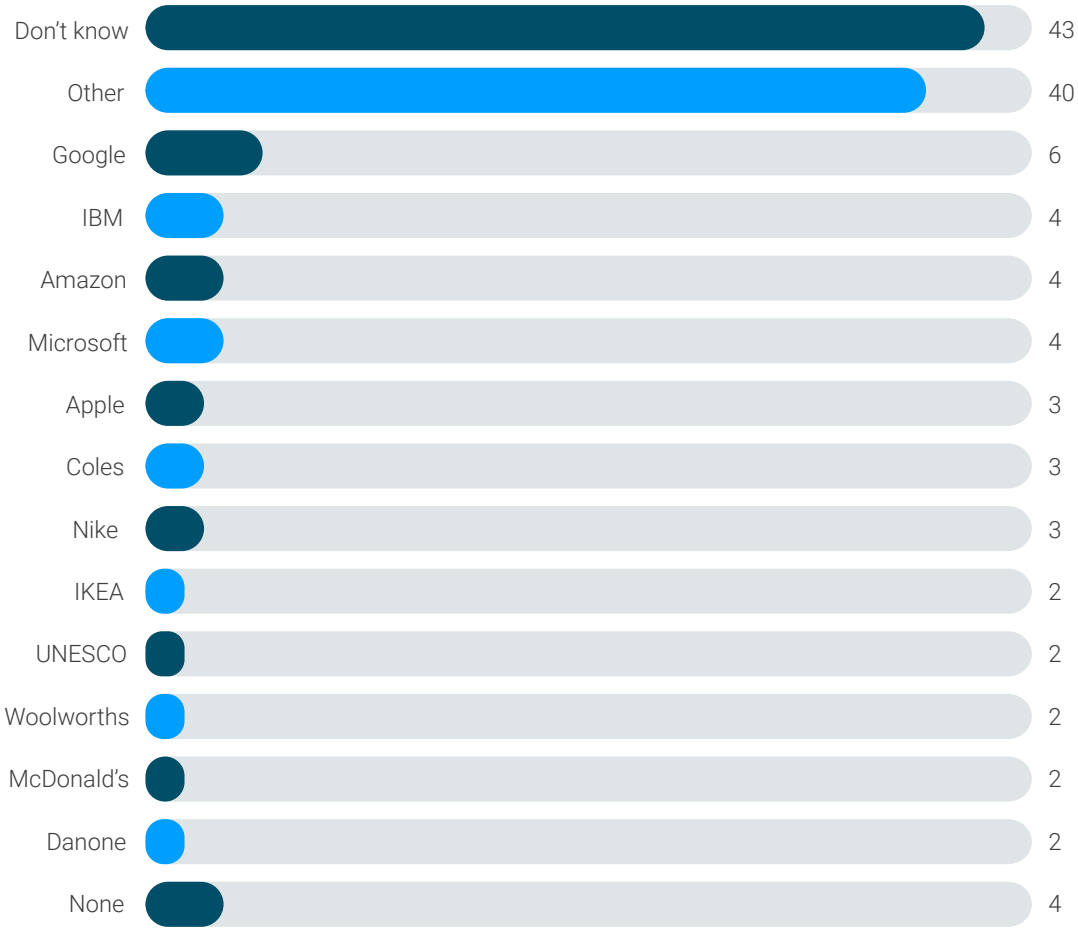


Figure 7: Circular economy leadership

2.6.2 QUALITATIVE INTERVIEWS

The qualitative interviews enriched the data exploring circular economy leadership with several insights.

With circular economy leadership in Europe[2,3] represented through strong policy, participants from global corporations were more familiar with legislative, political and cultural expectations to implement circular economy models in their Australian divisions. This was despite there being no overt competitive advantage in Australia, where the legislative, political and cultural impetus to transition to a circular economy is in its infancy.

For these participants, the key element motivating action to implement circular economy models and practices was risk. Many participants talked about the risk of not adopting circular economy.

This risk was expressed in different ways depending on the nature of their organisation but included:

- **Running out of resources**, which was especially an issue for food production
- **A lack of funding** and investment.
- The need to **continually attract funding**.
- **Losing their social license** to operate with their consumers and institutional shareholders.

Genuinely investing in transforming business operations to a sustainable model was seen to be of paramount concern from the board room down and the ground up, with comments including:

> Companies will have to **answer to their shareholders** culturally.
>
> *- John McMurdo, Chief Executive Officer, Australian Ethical*

> Both consumers and investors **see through inauthenticity**.
>
> *- Mark Kehoe, CEO, Gumtree*

[2] EU 2020, European Commission adopts Circular Economy Action Plan
[3] Government of the Netherlands 2016, A Circular Economy in the Netherlands by 2050

The interviewees recognised the need to be attractive to investors and the huge opportunities available to those who demonstrated leadership in sustainability. They recognised there were a large number of potential investors seeking opportunities in sustainable organisations.

Participants also said there was an increasing reluctance and cost to investing in companies, organisations and countries that were seen as unsustainable.

There was a perception, however, that the Australian business context is structured in a way that can deny organisations opportunities to cooperate and collaborate. Interviewees saw significant duplication of assets, production and processes due to the current legislation initially designed to create a competitive marketplace. This legislation stands in opposition to the reality that the circular economy requires collaboration – no one organisation can achieve circularity alone. Companies and governments need to work more closely together.

Many of the experts said the linear model of take-make-dispose is to blame for unsustainability. Most organisations create waste, have 'gaps' in their circularity and lack the knowledge and resources to close these gaps.

In a circular economy, waste and pollution are designed out and materials and products are kept in use for longer, all while balancing or regenerating natural systems. Collaboration is key. For example, one company alone may find it does not have the scale to efficiently or effectively manage an aspect of circularity, but a number of organisations working together can deliver a solution that benefits all of them.

In summary, responses indicate that regulatory instruments appear to be seen as a greater motivator than

> ***Many of the experts said the linear model of take-make-dispose is to blame for unsustainability.***

incentive instruments when it comes to implementing circular economy models and practice at this point. Participants reflected that the need to mitigate risk is far greater in regions such as Europe, which have much more competitive markets, higher legislative and social demands for sustainability and concerted, bi-partisan political will aligned with society's desire for sustainability. For globally integrated organisations, the risks of not adopting the circular economy are too high to ignore.

> ***The implication is clear: Australia risks becoming less competitive on the global market unless it increases its adoption of circular economy models.***

3. ACE HUB AND PLANET ARK

3.1 ACE HUB

3.1.1 QUALITATIVE INTERVIEWS

The mission of the ACE Hub is to facilitate the transition to a circular economy in Australia.

The ACE Hub plays the role of a 'transition broker' — a term coined by circular economy expert Professor Jacqueline Cramer. Professor Cramer defines this role as one that will:

> …search for promising circular initiatives, find an interested lead business actor, connect this actor with relevant parties, help realise the necessary preconditions for system innovation and **make sure that impactful, circular initiatives can be established**[4].

As a recent initiative of Planet Ark, it is important to understand how business views the ACE Hub in its first full year of operating. These views included:

- The ACE Hub was seen as a good initiative that can meet the needs of business.
- It was not yet widely known.
- A few had not heard of it at all.
- Some only knew of it but were unsure what it offered.
- Others were familiar with it and what it was.
- Few had actively engaged with it.

[4]Cramer, J (2020) *How Network Governance Powers the Circular Economy: Ten Guiding Principles for Building a Circular Economy,* Based on Dutch Experiences, Amsterdam Economic Board, p.97

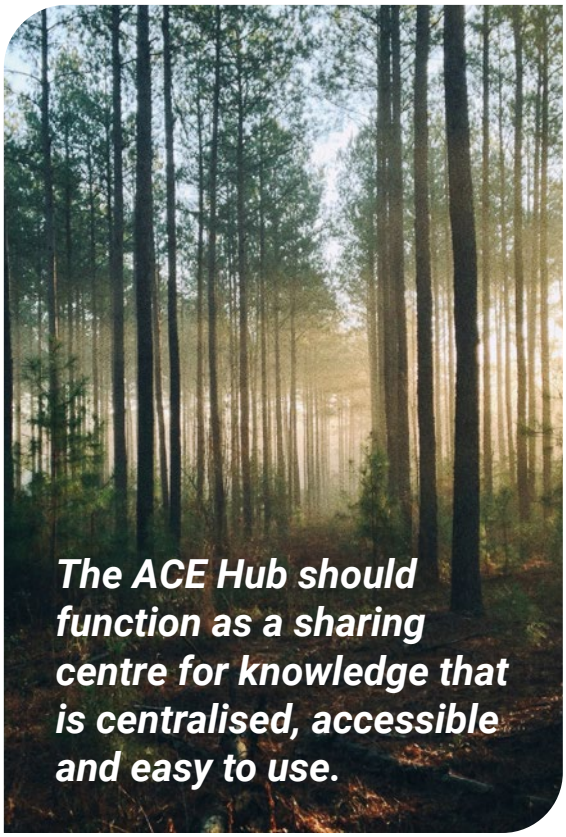
Expectations from the group suggested the ACE Hub is a place to learn and to broker mutually beneficial partnerships. Its two functions were seen to be information and matchmaking as described by these two quotes:

> Marrying **need** and marrying **opportunity**.
>
> *- Anonymous interviewee*

> Fantastic initiative, early days but **taking it to the next level**.
>
> *- Anonymous interviewee*

Information on the ACE Hub was expected to be locally focused, but also provide global best practice. The ACE Hub should function as a sharing centre for knowledge and information that is centralised, accessible and easy to use. This is in line with findings that showed there is a knowledge gap to overcome for greater implementation of circular economy models.

The ACE Hub should be more than just a platform: it must link different organisations together based on common needs and create matchmaking opportunities between parties for beneficial partnerships. Investors and technology need to combine, and a brokering role is needed between those with waste and those with demand for waste and materials. This will create opportunity for collaboration and sharing of ideas that enable entities to work and build circularity together.



3.2 PLANET ARK

3.2.1 QUALITATIVE INTERVIEWS

It was also important to understand from participants how the affiliation between the ACE Hub and Planet Ark helped increase awareness of the circular economy with business leaders. Again, opinions of Planet Ark were limited to the qualitative research.

Planet Ark was viewed positively by all and very favourably by some. It was mostly well known, but a number of people interviewed associated Planet Ark with more general aspects of positive environmental behaviour change, recycling programs or leadership in the environmental non-government organisation (ENGO) sector. Some were unaware of its association with the ACE Hub.

There were seen to be three main benefits to Planet Ark's association with the ACE Hub:

1. **Planet Ark is a well-known organisation**
2. **Planet Ark is trusted**
3. **Planet Ark delivers tangible outcomes**

Well-known organisation

Planet Ark has a very high-profile reputation as an ENGO built on consistent awareness over many years and a long history working to reduce waste in all forms. There was some suggestion that Planet Ark literally 'created' awareness of recycling.

Trusted organisation

There was complete agreement from participants that Planet Ark brings credibility and trust to the ACE Hub. Trust is a word that is easily employed by people but is complex to understand because it entails both intent as well as utility. Planet Ark was recognised as having an active role coordinating the actions of others and being a trusted source of information.

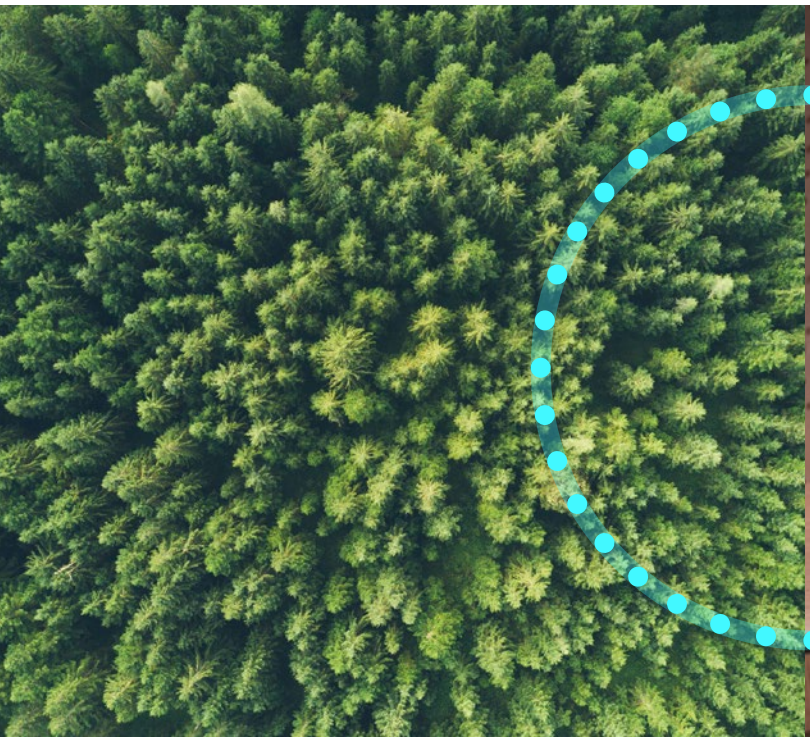
Tangible outcomes

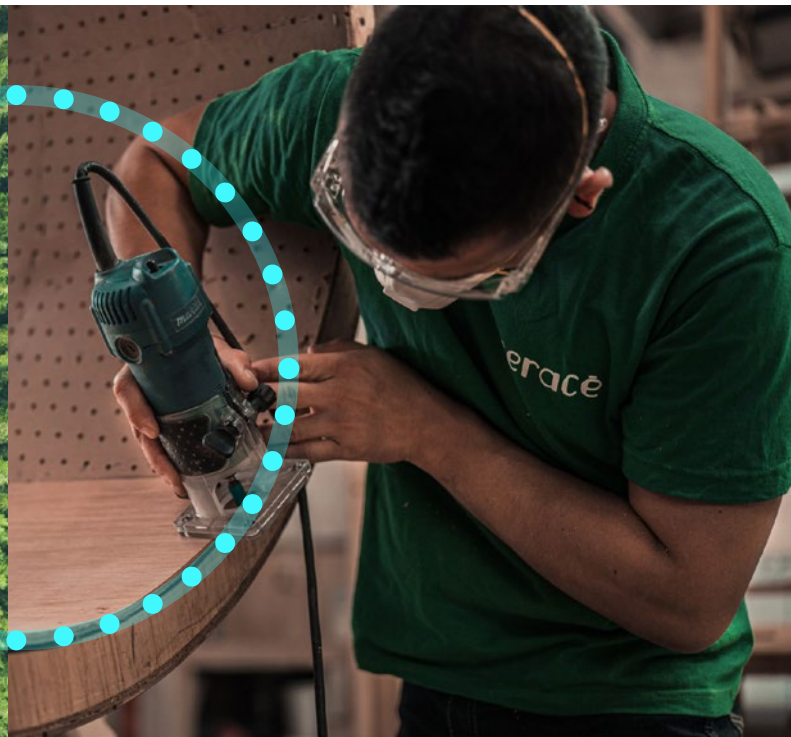
This sense of action and tangibility works to further build trust and credibility. This tangibility allows Planet Ark to step above often-conflicted issues and play an effective role identifying actors and catalysing change.

> ***Planet Ark coordinates factions of unlikely allies.***
>
> *- Anonymous interviewee*

> ***Planet Ark is the foundation. ACE Hub is the opportunity to make goods and services to feed the circular economy.***
>
> *- Mark Kehoe, CEO, Gumtree*

In summary, the foundational awareness of Planet Ark as a brand is an important catalyst to increase awareness of the ACE Hub. Building on this trust, the ACE Hub must demonstrate the tangible benefits to government, business and the community derived from the adoption of the circular economy and embed a more comprehensive understanding of the concept. It is on these foundations that the ACE Hub will continue to grow and support more businesses, governments and communities on their circular transitions.





4. SUMMARY AND CONCLUSIONS

There is a sense among the qualitative interview participants that circular economy thinking and practice is building momentum, with the quote mentioned earlier describing a tipping point capturing this well. The biggest task of the ACE Hub would therefore seem to be encouraging greater understanding of and engagement in the circular economy in Australia.

The knowledge gap can be addressed by creating a network of knowledge sharing. The qualitative interviewees require greater access to more organisations and businesses to help fill the gaps in their own organisations' circularity. Other mainstream organisations need to collaborate with these interviewees to learn how to engage with circular economic models and practices.

Based on the research findings, one of the keys to success for transitioning Australia to a circular economy is to address concerns about risk and to increase knowledge of the benefits.

> ***The knowledge gap can be addressed by creating a network of knowledge sharing.***

The ACE Hub therefore needs to continue to drive recognition that although the transition to a circular economy is a long-term process, the need to transition becomes more urgent every day. The longer Australian businesses leave it before they embrace circularity, the greater the cost and risk. Not only are they potentially missing out on efficiency benefits but also opportunities for catalysing innovation, jobs growth and reducing climate impact.

4.1.1 CONSTRAINTS AND OPPORTUNITIES

Based on the qualitative responses and supported by results from the quantitative sample, the future adoption of circular economy models in Australia appears to have three major constraints:

1. **Structural issues for companies**
2. **Short-termism and a lack of generational planning**
3. **Resistance to change**

Structural issues

Structural issues include a lack of government support to mitigate risk and costs and protect those organisations that innovate. Several interview participants highlighted the need for government support combined with innovation:

> Companies pay an enormous price to bring innovation to market … those organisations **need to be protected**.
>
> *- Glenn Crane, Chairman, Inlogik Pty Ltd*

> The government **has to step in**.
>
> *- Anonymous interviewee*

> Global companies have a duty to be **good corporate citizens**.
>
> *- Michael Boyle, Managing Director South Pacific, Hewlett-Packard*

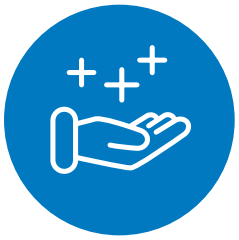
> Circular economy is in **investors' line of questioning** now.
>
> *- Joseph Capurso, Head of International Economics, Commonwealth Bank of Australia*

ACE HUB OPPORTUNITY

To support and promote change in policy, regulations and the creation of enabling conditions for circular economy investment. These changes can be achieved by working with relevant stakeholders and bringing together subject matter experts.

Short-termism

Short-termism is baked into the corporate and government psyche but is not solely an Australian problem. Businesses operating in most advanced economies suffer from a focus on the short term because of accounting and shareholder reporting requirements. There is a lack of multi-generational planning and a systemic failure to plan more than a few years ahead. Examples in contrast include the UK with their 30 year, bi-partisan energy transition policy. Long-term thinking and planning are required to accelerate circularity in Australia.



ACE HUB OPPORTUNITY

To inspire and educate Australian businesses and governments to consider long-term benefits of a circular economy, as well as connect circular economy practitioners and first movers to bring about value-added change.

Resistance to change

Resistance to change is evident in the current system, however the growing realisation that the current system is not working is encouraging the need for transition. Not looking for alternative systems will leave many businesses with stranded assets but there is currently a lack of tangible action to address this. As one participant reflected:

> ***[There is] the ethos of 'if it ain't broke...'***
>
> *- Anonymous interviewee*

The circular economy requires a system overhaul, and the longer Australia waits, the more painful it is expected to be. Qualitative interviewees suggested:

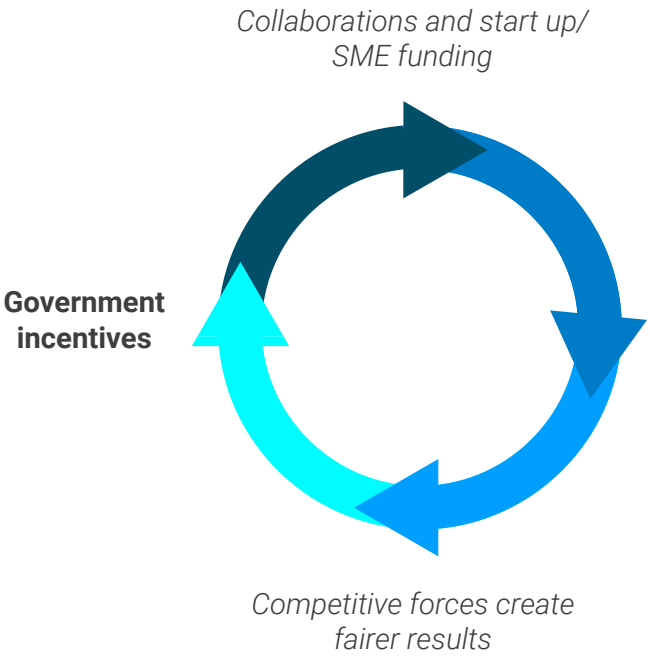
> There's an awful lot of things we've become reliant upon that **we don't need**.
>
> *- Glenn Crane, Chairman, Inlogik Pty Ltd*

> We need to shift to use raw materials that have already been used: **local not global at a very reasonable price**.
>
> *- Anonymous interviewee*

> **Circular economy is hard!** It breaks traditional partnerships.
>
> *- Anonymous interviewee*

One qualitative interview participant made the case that the circular economy is a natural evolution of the economy as a complex adaptive system. They saw the need for government incentives to target start-ups and small to medium enterprises to drive innovation and protect them from the risks inherent in innovation. They stated that invention and improvement will result and then be taken up by competitive forces of the market economy to create fairer results and wider production and adoption. They saw that this in turn would drive further incentives to fuel the cycle of improvement and growth (see Figure 8). This view of the circular economy as an 'investment strategy' was mentioned by several interviewees.

THE CIRCULAR ECONOMY AS AN INVESTMENT STRATEGY



> ***Thinking more broadly about CE as more of an investment strategy.***
>
> *- Anonymous interviewee*

A cycle: incentive and collaboration drives invention/improvement and competition, which in turn drives opportunity and need for greater collaboration, and so on.

Figure 8: The cycle of circular economy

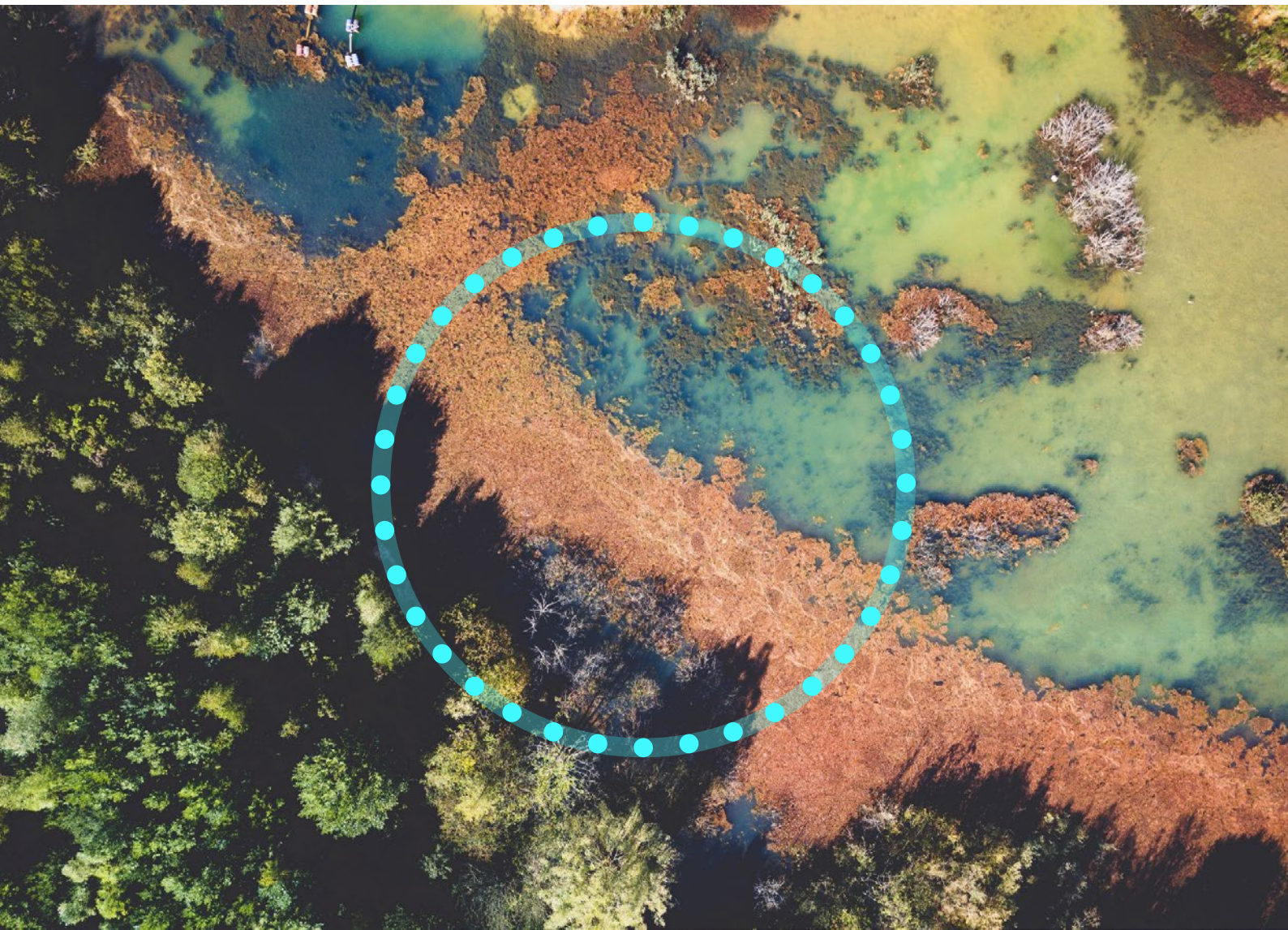
ACE HUB OPPORTUNITY

To support collaboration by providing the 'dance floor of innovation' by way of the online ACE Hub Portal, as well as facilitating the establishment of prioritised initiatives via Working Groups.
To amplify the work done by business, government and the community to make circular economy mainstream.

In conclusion, a complex system change is needed to adopt the circular economy in Australia. It will require knowledge and understanding of the concept.

This report demonstrates high confidence in circular economy knowledge but low actual understanding amongst business decision makers. An improvement in knowledge and understanding will help drive the required shift in business, government and community mindset to acknowledge the benefits of a circular model.

The ACE Hub offers a comprehensive resource for all businesses, governments and communities to increase knowledge, collaborate and expedite the adoption of a circular economy in Australia for the benefit of all.



5. APPENDIX

SUMMARY OF RESEARCH SAMPLING

Figure A1 presents the size of organisations represented by the qualitative interview participants.

Figure A2 presents organisational size and positions indicated by the quantitative sample.

The qualitative interviewees represented organisations that were predominantly larger in size than those identified by quantitative survey participants.

Comparatively, qualitative participants included a mix of multi-national and domestic (Australia only) organisations operating with the sustainability vanguard. The sectors represented in both samples are presented in Table A1 (see page 38).

Qualitative sample

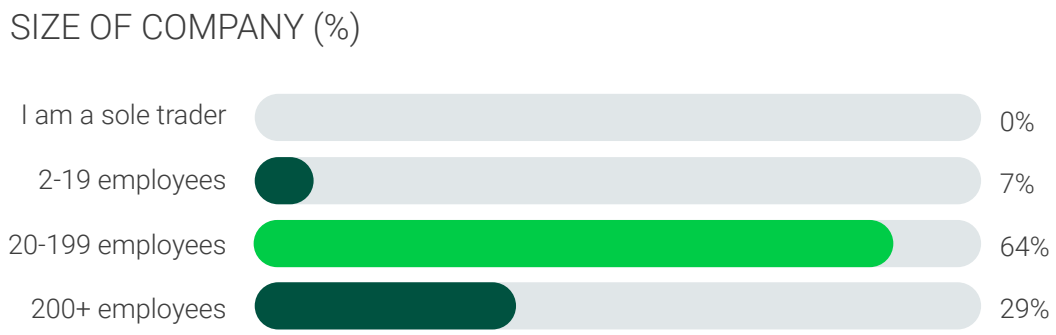


Figure A1: Company sizes represented by qualitative interview participants.

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Quantitative Sample

Pollinate conducted a survey with n=500 business decision makers as the key audience.

Sample size: n=500 *Margin of error: +/- 4.4%* *Dates of fieldwork: 18 June - 9 July 2021*

SIZE OF COMPANY (%)

POSITION (%)

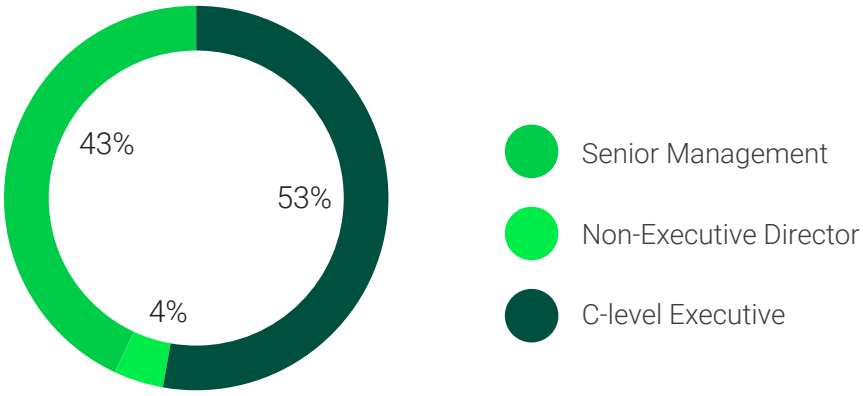

Figure A2: Quantitative survey key indicators

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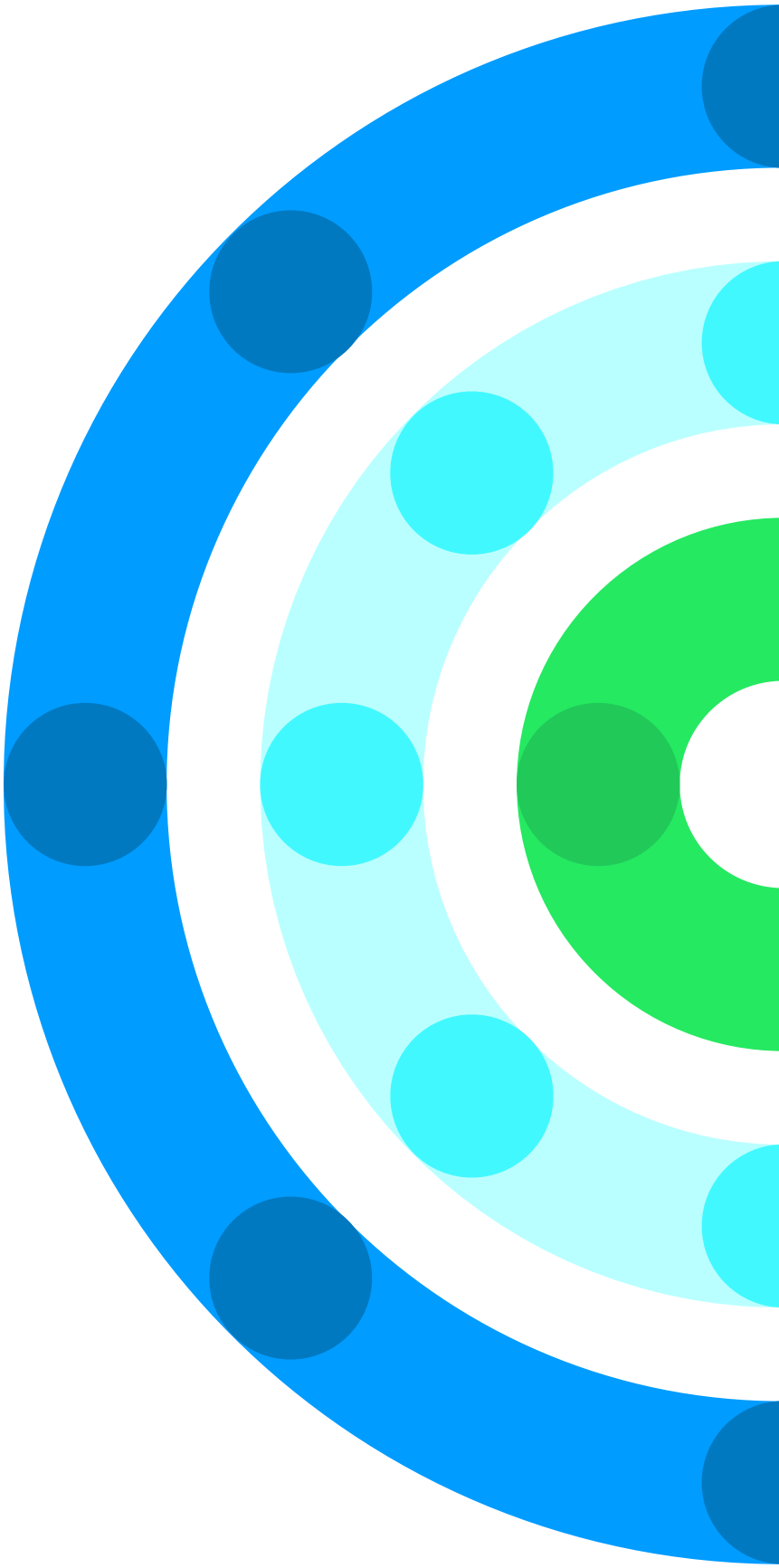
Q3. Which of the following categories best describe the industry you primarily work in?	Quantitative survey sample	Qualitative interview sample
NET	100%	100%
Financial and Insurance Services	23%	29%
Retail Trade	10%	0%
Construction and Manufacturing	11%	14%
Information, Media and Telecommunications	10%	21%
Profession, Scientific and Technical Services	8%	14%
Education and Training	7%	0%
Other	6%	7%
Arts and Recreation Services	5%	0%
Accommodation and Food Services	4%	0%
Health Care and Social Assistance	4%	0%
Administrative and Support Services	3%	0%
Transport, Postal and Warehousing	2%	0%
Agriculture, Forestry, Fishing and Hunting & Mining	4%	0%
Electricity, Gas, Water and Waste Services	1%	14%
Public Administration and Safety	1%	0%
Rental, Hiring and Real Estate Services	1%	0%
Wholesale Trade	1%	0%
Total sample; unweighted	Base n=500	Base n=14

Table A1: Sample industry representation of all participants as shown



AUSTRALIAN CIRCULAR ECONOMY HUB

PLANET ARK

November 2021

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