

Product stewardship benefits assessment

Business report

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KEY INSIGHTS

BUSINESSES ARE NOT VERY AWARE OF PRODUCT STEWARDSHIP AND CIRCULAR ECONOMY

Of the businesses that were surveyed, it was made apparent that they are only somewhat familiar with the concepts of product stewardship and circular economy. They are more familiar with the terminology, and the concept of, sustainable product design. Much of businesses' current involvement in product stewardship activities may be an outcome of the desire for financial sustainability (or striving for good business practices) rather than driven by specific consideration of, or formal policies on, product stewardship.

This is evidenced by high levels of engagement in the prompted list of product stewardship considerations and actions; yet relatively low uptake of formal stewardship/sustainability policies and engagement with external initiatives.

Low level knowledge about product stewardship concepts and initiatives provides an opportunity to start conversations with businesses – particularly where it can be linked to financial benefits and 'best practice'.

Connection of product stewardship and circular economy to the terminology of 'sustainable product design' will also help to ensure the message is relevant to businesses' areas of key focus.

BUSINESS EMPHASIS IS ON PRODUCTION AND CONSUMPTION STAGES OF THE PRODUCT LIFECYCLE

Businesses that were surveyed demonstrated that they are most engaged with product stewardship activities that relate to the **Production** stage of the lifecycle, especially consideration of improved material choices and responsible supply chain practices (this is also consistent with how sustainable product design is a more well-known concept than product stewardship and circular economy).

These businesses are also active in informing consumers about how to use their products better and promoting higher quality and reusable products. However, these activities also serve financial sustainability via promotion of their product to the end consumer. It is likely that their involvement in **Consumption** stage activities are strongly linked to financial outcomes rather than to a specific consideration about how they influence better product use and a circular economy.

Gaps in engagement in the Production and Consumption stages relate to activities that go beyond production and marketing and may be seen as extending existing business models: clean resource use, leasing / sharing models, and offering product trade in or repair services. As there may be barriers to the uptake of these activities, they are likely to require specific emphasis from external parties such as government or consumers to promote a transition to these alternatives.

Communicating how these types of activities will provide financial benefits to a business will be important to driving uptake.

KEY INSIGHTS

WHILE BUSINESSES-LESS ACTIVELY CONSIDER POST-CONSUMPTION PRODUCT STEWARDSHIP, THERE IS REASONABLE CONSIDERATION OF THE END-OF-LIFE OF PRODUCTS AND MATERIALS USED

Businesses are generally less focused on **Post-consumption** issues than on Production and Consumption – although approximately half of businesses surveyed provide options for, or actively understand, their end-of-life product or material recovery. Other post-consumption activities are not as high in businesses' consideration and their engagement in external product stewardship initiatives is limited when compared to the Consumer and Local Government audiences.

However, once a business starts to engage more holistically with product stewardship activities (either to a higher degree or via more activities across the business) it appears that they are more likely to understand and consider post-consumption areas they can influence.

Information provision also has a role in encouraging participation in post-consumption and considering the end-of-life of products and materials they are using. Businesses could be made more aware of the role they could play in the Post-consumption stage, including external initiatives that could be relevant.

FINANCIAL INCENTIVES AND COST SAVINGS ARE LIKELY TO YIELD FURTHER ENGAGEMENT

Businesses surveyed, both those engaging with product stewardship activities and those who are not, strongly consider that the provision of financial incentives would be most effective in increasing their overall engagement.

Some of the businesses surveyed seek financial outcomes from involvement in product stewardship activities.

It is therefore important to assist businesses by providing evidence of potential cost savings from product stewardship activities and supporting them to realise these benefits.

KEY INSIGHTS

MORE EXTENSIVE ENGAGEMENT WITH PRODUCT STEWARDSHIP IS ASSOCIATED WITH REALISATION OF BENEFITS

Currently, the key motivation for participating in product stewardship initiatives is to benefit the environment. Potential brand / company image benefits and internal cultural improvements are influential to a lesser degree. Many of the businesses surveyed that are currently engaging in product stewardship initiatives do not perceive a direct benefit to their business.

Some businesses that were surveyed are engaging on the basis of environmental priorities. However, environmental priorities alone will not encourage wide spread engagement without other factors such as consumer expectations, cost savings and internal company values also exerting an influence on decisions.

Given that financial benefits are not always realised by these businesses and can be hard to measure, increased linkage of product stewardship to 'best practice' business operations may assist in providing secondary reasons to engage in product stewardship. Supporting improved measurement of benefits and industry/initiative-specific indicators of impact across environment, social and health domains may encourage uptake.

The results highlight that it is only when these businesses are engaging with a higher number of initiatives that benefits such as cost savings are able to be realised. Businesses that are only beginning to engage with product stewardship are at risk of considering these activities ineffective. This may be a potential barrier to adopting an increased level of product stewardship.

SIGNIFICANT OPPORTUNITY EXISTS TO BUILD GREATER FORMALITY AROUND PRODUCT STEWARDSHIP

Formal policies and procedures on product stewardship or sustainability within a business is limited to about one in five of the businesses surveyed. However, informal action exists to a greater degree.

Supporting introduction of formal product stewardship policies, especially for businesses with higher turnover or staff numbers, would likely encourage uptake.

This is unlikely to be a short-term endeavour, and would require establishment of a good understanding of the concepts of product stewardship, the desire from consumer and government stakeholders for businesses to adopt stewardship activities, demonstrated real benefits (both internal and external to businesses) and supporting examples and tools to aid development of policies, will all support more formal integration within businesses.

STRATEGIC CONTEXT FOR ENCOURAGING ACTION WITHIN BUSINESSES

1

ENCOURAGING ACTION WITHIN BUSINESSES

PROFILING BY INDUSTRY HAS LIMITED VALUE

The research utilised ANZSIC codes to actively target industries involved in the production lifecycle to understand nuances across sectors and the products they are engaging with. The aim of which was to provide an ability to align strategy and prompted product stewardship activity engagement specific to varying industries.

As a key profiling variable, industry and ANZSIC code is only a small to moderate distinguishing factor in how the businesses surveyed perceive and engage with product stewardship.

- For some areas there are some industry specific differences evident (such as products/materials engaged with, broad lifecycle stewardship activities focused upon and barriers).
- However, in most other areas, there are fewer differences across industry.
- Where differences do exist, they often only apply to one or two industries. There are many instances that show no differences at all (such as awareness and understanding, perceived benefits and motivating factors).

There is certainly a role in understanding industries, how to align product stewardship with their activities and specific communication strategies that are likely to be effective (including targeting via industry associations or providing general marketing content specifically tailored to the industry). However, the research shows that industry-base profiling is only a rough proxy for the product stewardship context of any given business, given all the different business types that may comprise a sector.

Standardised messaging and appeals will be relevant across many industries when targeting initiatives and financial incentives.

KEY TARGETING FACTORS

The survey highlights other distinguishing features of businesses that may be useful for targeting and engaging businesses:

- Business size (with a focus on turnover rather than employee size – although the two are correlated)
- Existing engagement in product stewardship behaviour and initiatives

All results in this report are provided by these two factors in addition to industry and there is further discussion about the relevance of these two targeting factors on the next slide.

ENCOURAGING ACTION WITHIN BUSINESSES

KEY TARGETING INSIGHTS

The research has identified **two key factors** that differentiate engagement with product stewardship initiatives:

1

Businesses with higher turnover

The research shows that the businesses that were surveyed with **higher turnover** are more likely to engage with product stewardship in a range of ways, and plan to do so more in the future. This is likely to be related to the level of disposable funds and staff resources available to larger businesses.

Businesses surveyed with larger turnover more typically have a larger staff base allowing for more specific roles to be designated, including those with a focus on business improvement and policy. In addition, larger turnover may be indicative of a longer-term, well-established business, with greater ability to have a stable and forecastable income stream.

2

Businesses with higher engagement

Businesses surveyed that are **already engaging in 4 or more external product stewardship initiatives** or are **engaging in post-consumption activities** (which are less likely to be engaged in than other stages) are:

- more engaged across a range of activities (including production and consumption life stages)
- more informed
- seeking and realising benefits to their participation
- have a higher likelihood of formally implementing policies

These more highly engaged businesses have the greatest propensity to adopt even more actions as they become more familiar with concepts and are likely to be open to messages or proactively seek further information. In addition, this group of engaged businesses are key advocates that can be used as examples of what can be achieved and how to go about it.

Both types of businesses can play a pivotal role in increasing other businesses' understanding of, and engagement with, product stewardship and circular economies. There are opportunities to grow engagement among businesses with lower turnover and businesses that are less engaged. However, it is likely that many of these businesses will have higher barriers to uptake product stewardship concepts, actions, and initiatives.

ENCOURAGING ACTION WITHIN BUSINESSES

TARGETING NUANCES

Other insights show that:

Responsibility for product stewardship is often shared across multiple individuals within a business. Given that awareness of product stewardship concepts is still relatively low, it is likely that, in many businesses, it is informally shared across several individuals or teams, potentially without holistic oversight on these issues.

Further to this, interviewer feedback on the difficulties associated with identifying a person who is fully responsible for decisions that relate to any environmental or human health impacts of products (in order to complete this survey) highlights that these roles are not well defined across businesses. This makes the process of actively engaging with businesses more complex and relies on individuals within businesses to be more proactive in seeking information on product stewardship.

Sustainable product design is a better understood concept than either product stewardship or circular economy.

A lack of knowledge, resourcing concerns and cost considerations are all key internal barriers to becoming involved in product stewardship activities. These fundamental barriers need to be specifically addressed for all businesses.

The messages being sent to those businesses that are not yet involved in product stewardship initiatives need to focus on overcoming any concerns about cost impacts, as well as highlighting the secondary benefits that businesses can enjoy if they adopt product stewardship (i.e., aligned to best practice operations, brand or reputation, consumer expectations or workforce benefits).

RESEARCH CONTEXT

Background, objectives and methodology

2

RESEARCH BACKGROUND AND OBJECTIVES

Background

This report is part of a larger project conducted by the Institute for Sustainable Futures (ISF) at the University of Technology Sydney, along with the Product Stewardship Centre of Excellence, to evaluate the effectiveness and benefits of product stewardship, including Extended Producer Responsibility (EPR) activities across Australia. The current research focuses on the *business* audience as a key audience group to assess awareness and understanding when evaluating benefits assessment as purchasers, users and disposers of products.

Objectives

The primary objective of this research is to assess *awareness and understanding* of product stewardship (PS) in Australian businesses, and the *drivers for being involved*. Additional areas of focus were established to drill down further into their relationship and perceptions of PS. These priorities were used as a central part of the project's design and analysis throughout the report.

Primary Objectives	Key focus area	
	Assess awareness and understanding	What is the level of understanding and engagement with PS?
	Drivers	Understand the business case for participating in PS activities? What are the drivers for being involved in existing and emerging initiatives?
Secondary Objectives	Secondary objectives	
		What products are businesses focussed on?
	Collect data on activities	Highlight activities that we are not aware of. Are they participating in initiatives already?
	Collect data on environment / social / ecological indicators	What data are businesses collecting on env/eco/social indicators (ESG, modern slavery, Circular economy metrics). What are the future opportunities or priority products for future focus (by product class).
	Identify gaps, by product class and lifecycle stage	What businesses could be doing more based upon their profile?
	Future opportunities	How do current activities align with Minister's List?; mapping out their activities - analysis to overlay rather than content. Opportunities for promoting uptake.

METHODOLOGY

Approach

A total of 601 interviews* were conducted by the Ipsos CATI team via Computer Assisted Telephone Interviewing (CATI). This approach was selected as it enabled Ipsos to capture the specific target audience during business hours, have the option to call back if needed, and reach our targets within the specified timeline.

Data collection was completed between 21 March and 3 May 2022, with two pauses in fieldwork to reduce survey length. The final full interview length came to 18 minutes.

Target audience

Businesses with more than 6 employees, within Australia, operating in industries of interest. ANZSIC codes were used to target specific industry sectors of interest: repair and maintenance, construction, food and beverage services, manufacturing, wholesale trade and retail trade. These are Australian Bureau of Statistic codes used to classify the industry an organisation operates in.

In addition, individual roles of the respondent were screened to engage with those who are *'involved with decisions regarding the environmental and human health impacts of products used within your organisation'*.

Data

Where results do not sum to 100%, this may be due to computer rounding, multiple responses, or the exclusion of 'don't know' categories.

The sample was stratified to target high priority groups, and rim weighting to the latest (Dec 2021) ABS counts of businesses by state and industry ANZSIC codes was applied to the dataset to ensure that the sample was representative within our population of interest.^

▲ ▼ Arrows indicate when there is a significant difference **higher** or **lower** than the total population at 95% confidence level and above.

Notes

Following quality assurance data checks, 9 cases were removed from the sample due to missing data in Q9 and Q10 from scripting discrepancies. **The total sample used for this research is n=592. 14 cases of Q5_1_NTCRS were recoded as the initiatives Ecycle and TechCollect were combined into one category part way through fieldwork to reduce survey length.*

^Due to the target audience, data collected from small businesses with 6-19 employees was weighted to ABS population data for 1-19 employees.

METHODOLOGY

Definitions

Product stewardship lifecycle actions

Product stewardship involves activities across the whole product lifecycle from product design, manufacture, consumption and at the end of a product's life (post consumption). For example, this could include activities like making better material choices, extending product life by sharing/reusing or recycling used products, or providing options for socially responsible recycling or disposal for customers. Product stewardship activities are referenced in Q3 and Q6 of the survey.

Product stewardship lifecycle actions are the practices that businesses engage in that promote good product stewardship behaviours.

The term 'product stewardship lifecycle actions' is used throughout the report in reference to Q4 of the survey, where participants were asked to indicate whether they are doing any of the following:

- Improving material choices
- Conducting responsible supply chain practices
- Providing consumer information that promotes better product use
- Clean and efficient resource use
- Providing material recovery for products
- Promoting higher quality and reusable products
- Improving product design and packaging design
- Offering product trade in and/or repair services for products
- Providing new end markets
- Promoting leasing and sharing models

Product stewardship initiatives

Product stewardship initiatives can be collective schemes providing product stewardship solutions for multiple businesses putting similar products on the market, or they can be individual company initiatives.

Profiling variables

The following variables are used throughout the report to look at different ways of profiling the data:

- Initiative engagement level
 - A variable was constructed to count the number of initiatives in total that businesses engage with, where none=0, low=1, medium=2-3, and high=4-14 initiatives.
- Product stewardship lifecycle actions
 - This variable is based on the question in the survey which asked whether businesses are carrying out any PS actions, and is categorised by the product lifecycle framework stages (production, consumption, post-consumption, and not engaging in any PS actions).
- Industry
 - Based on ANSZIC categories (confirmed by screener question SQ2)
- Annual turnover
 - Based on Q19 and used as a proxy for business size within this research

HOW TO READ THE PROFILE TABLES IN THIS REPORT

Purpose

The profile tables break down each question by areas of interest for the study. This way we can see what, if any, differences exist in the responses of different groups.

Profile variables are different for each audience. In this survey, we used the following profile variables: engagement level, product stewardship lifecycle actions, industry and annual turnover (shown in **grey font** at the top of the data tables).

How do I read the table? Each profile section (separated by grey lines) is read and understood separately. For example, this table indicates column % is used, so reading down the **initiative engagement level** column we can see how the different audience responses differ to each of the statements in bold on the left-hand side. To see how responses differed for each statement, look across the row.

What does the text underneath 'Column %' mean? Questions can have more than one response option (e.g., yes or no), and this text specifies the option selected for analysis.

What is a sample size? The number of responses within each category. Each section will add up to the total number of responses, which in this instance is 592.

1

The triangles (▼ and ▲) indicate where a figure is statistically significantly lower or higher than the average of the rest of the categories in that section of the row.

We can say with 95% confidence, that there is a significant difference between the categories.

2

Comparing the responses of businesses by engagement levels, 34% of businesses who selected they have a formal product stewardship program (n=113) had high initiative engagement. Whereas 14% of the sample who selected they had a formal program were engaged with no initiatives. These are significantly different when compared to each other.

3

Although there are some obvious differences in the data shown here, they are not statistically significant due to the low sample sizes. These observations may still be valuable, but should be treated with caution.

4

This column indicates the total % for each response code. In this instance, 20% of all respondents selected 'There is a formal product stewardship...' for this response code.

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Total Any product stewardship activities	67% ▼	80%	82%	90% ▲	79% ▲	82% ▲	85% ▲	50% ▼	77%	452
Product stewardship activities occur, but there is no formal program	34%	43%	37%	35%	38%	39%	39%	16%	37%	229
There is a formal product stewardship or sustainability program	14%	17%	25%	34% ▲	22%	23%	26% ▲	15%	20%	113
There are a few product stewardship activities	18%	20%	20%	20%	19%	19%	20%	18%	19%	110
There are no product stewardship activities	24% ▲	16%	16%	9%	16% ▼	13% ▼	11% ▼	46% ▲	18%	115
Don't know	7% ▲	4%	2%	1%	4%	4%	4%	4%	4%	20
Other	2%	1%	1%	0%	1%	1%	1%	0%	1%	5

5

The question asked and the base size are shown down here.

▲ ▼ significantly higher or lower than total at 95% confidence level and above



BUSINESSES SURVEYED & THEIR CHARACTERISTICS

3

A select sub-set of Australian businesses in industries relevant to product stewardship were engaged for this survey – the sample is therefore not representative of all Australian businesses

SAMPLING APPROACH

ANZSIC codes were used as the basis for selective sampling with a focus on industries where the nature of their products and materials has links to product stewardship initiatives.

Businesses were also screened to exclude sole traders and businesses with fewer than 6 employees.

BUSINESS PROFILES

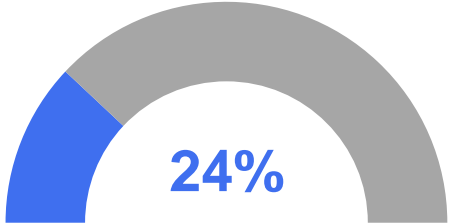
The following slides highlight some nuances to the business sample and its characteristics that are important to understand from both an interpretation perspective as well as a targeting perspective.

For ease of reference the term 'businesses' is used to describe the sample even though it is not a true representation of all Australian businesses.

		Unweighted %	Weighted %	n		Unweighted %	n	
Industry sector	Manufacturing	25%	15%	148	Number of employees	6-10 employees	32%	210
	Retail Trade	17%	26%	99		11-19 employees	19%	125
	Wholesale Trade	17%	14%	99		20-50 employees	34%	183
	Accommodation and Food Services	13%	22%	75		51-100 employees	11%	47
	Construction - Residential Building Construction	13%	10%	148		101-200 employees	4%	18
	Repair and maintenance	13%	11%	99		200+ employees	1%	9
	Construction - Heavy and Civil Engineering Construction	4%	2%	99		Don't know	0%	0
Location	NSW	30%	35%	177	Annual turnover	\$0-\$50,000	1%	5
	VIC	28%	28%	163		\$50,001-\$200,000	1%	7
	QLD	20%	19%	119		\$200,001-\$500,000	2%	11
	WA	10%	9%	60		\$500,001-\$2,000,000	18%	116
	SA	8%	6%	49		\$2,000,001-\$5,000,000	22%	131
	TAS	2%	2%	14		\$5,000,001-\$20,000,000	23%	134
	ACT	1%	1%	6		More than \$20,000,000	11%	73
	NT	1%	1%	4		Don't know	12%	57
						Prefer not to say	10%	58
Not-for-Profit	Registered Not for Profit	2%	-	11				

Managers who engage with product stewardship tend to share decision making about environmental or health impacts of products with others

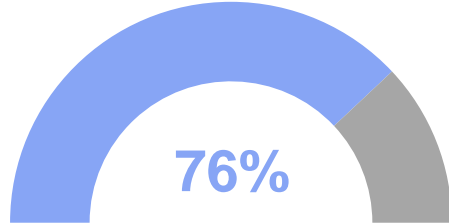
Businesses surveyed with higher turnover and within the Accommodation and Food Services industry, are especially likely to have multiple people within the company making decisions regarding environmental and health impacts.



Yes, fully responsible

Although not statistically significant, businesses that have the following characteristics were more likely to have someone **singularly** responsible for these decisions:

- Manufacturing (35% fully resp.)
- Retail trade (30% fully resp.)
- Businesses with 11-19 employees (29% fully resp.)



Yes, partially responsible

Although not statistically significant, businesses that have the following characteristics were more likely to have someone **jointly** responsible for these decisions:

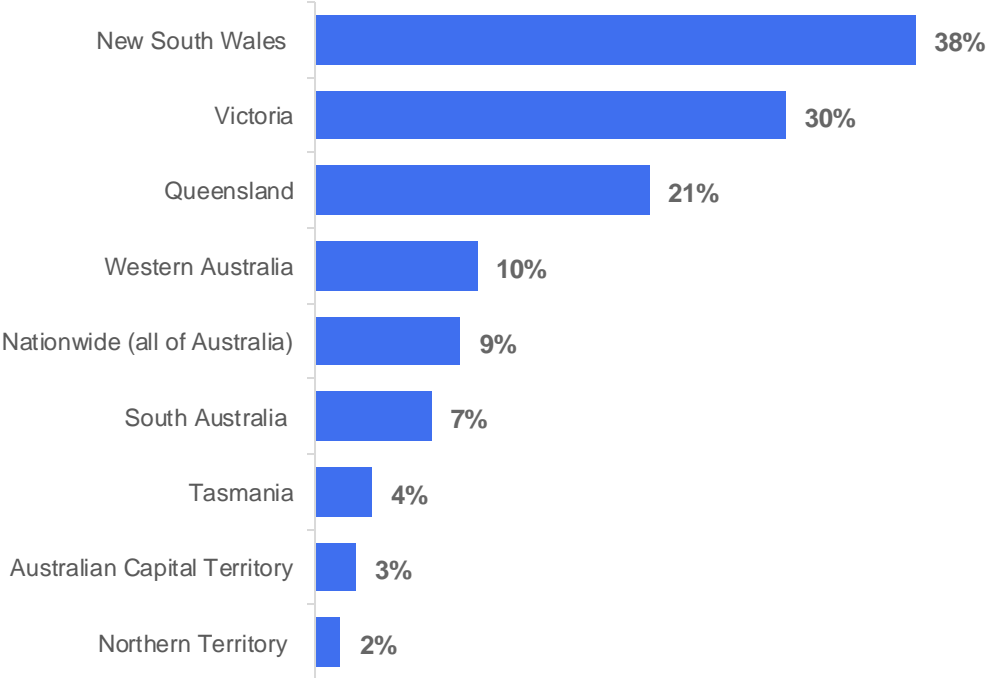
- Heavy and Civil Engineering and Construction (80% partially resp.)
- Accom. and Food Services (88% partially resp.)
- Wholesale trade (81% partially resp.)
- NSW based (80% partially resp.)
- TAS based (83% partially resp.)
- 20-50 employees (80% partially resp.)
- 51+ employees (87% partially resp.)
- Registered not for profit (82% partially resp.)



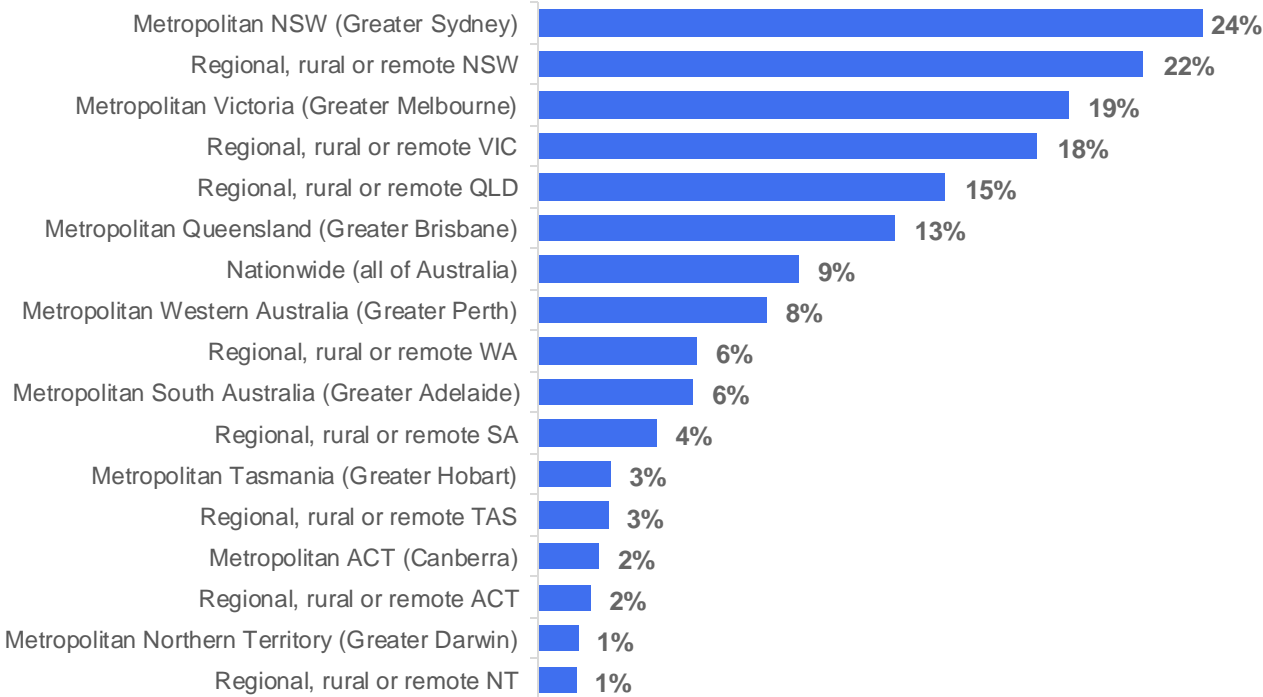
The businesses surveyed operate across Australia, but are mainly located in New South Wales, Victoria, and Queensland

These businesses tend to operate more in metropolitan areas of states and territories, rather than regional areas. Nine percent of the businesses operate nationwide. They were not asked if operations extended to overseas, only within the context of Australia.

States / Territories where business operates



Metro / regional area breakdown of business operation locations



Levels of engagement with product stewardship are similar across most states and territories

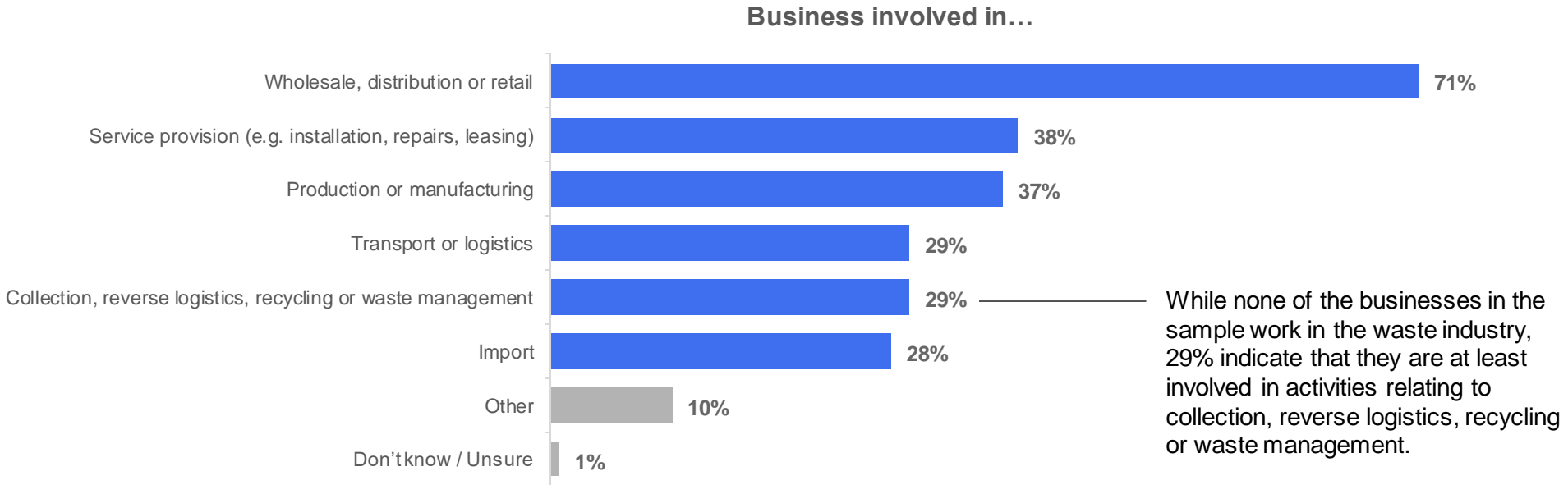
Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
New South Wales	38%	37%	38%	42%	40%	38%	43%	41%	38%	207
Victoria	38%	25%	23%	33%	30%	28%	29%	38%	30%	182
Queensland	14%	27%	27%	20%	21%	23%	21%	17%	21%	137
South Australia	7%	7%	7%	13%	8%	7%	7%	4%	7%	59
Western Australia	8%	10%	14%	11%	10%	10%	10%	3%	10%	70
Tasmania	3%	5%	2%	5%	3%	3%	4%	8%	4%	27
Northern Territory	1%	1%	2%	6%	2%	1%	2%	4%	2%	10
Australian Capital Territory	3%	4%	1%	5%	3%	3%	3%	0%	3%	14
Nationwide (all of Australia)	8%	5%	11%	17%	9%	11%	10%	4%	9%	53

Businesses that operate nationwide are more likely to have higher turnover

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
New South Wales	41%	57% ▲	37%	35%	38%	33%	40%	40%	45%	35%	38%	207
Victoria	21%	34%	38%	40%	28%	21%	27%	27%	27%	36%	30%	182
Queensland	23%	18%	5% ▼	22%	28%	33% ▲	20%	22%	22%	28%	21%	137
South Australia	7%	6%	6%	7%	14%	6%	5%	7%	6%	18% ▲	7%	59
Western Australia	12%	3%	6%	10%	24% ▲	9%	10%	3% ▼	12%	19%	10%	70
Tasmania	0%	1%	2%	5%	11% ▲	4%	2%	4%	3%	9%	4%	27
Northern Territory	2%	0%	1%	0%	5%	2%	1%	0%	2%	3%	2%	10
Australian Capital Territory	3%	2%	1%	1%	6%	3%	2%	2%	1%	7%	3%	14
Nationwide (all of Australia)	8%	4%	7%	5%	16%	13%	2% ▼	10%	9%	21% ▲	9%	53

Most businesses surveyed are involved in wholesale, distribution or retail

Many businesses indicated that they are involved in a range of activities across the product stewardship lifecycle. It is clear from these findings that many businesses are vertically integrated to an extent, with activities that range from production through to end-of-life.



Businesses surveyed that are engaging in post-consumption product stewardship actions have a higher representation among service provision and collection, reverse logistics, recycling or waste management

Businesses operating within production or manufacturing are more likely to have engaged with one product stewardship initiative.

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Wholesale, distribution or retail	65%	74%	78%	62%	70%	74% ▲	73%	70%	71%	389
Service provision (e.g. installation, repairs, leasing)	35%	42%	42%	31%	39%	42% ▲	45% ▲	17%	38%	242
Production or manufacturing	33%	47% ▲	32%	38%	38%	39%	37%	35%	37%	265
Transport or logistics	21% ▼	33%	34%	36%	30%	34% ▲	33%	20%	29%	179
Collection, reverse logistics, recycling or waste management	30%	29%	28%	31%	30%	33% ▲	38% ▲	11%	29%	172
Import	27%	30%	27%	28%	29%	33% ▲	31%	14%	28%	180
Other	13%	8%	6%	12%	10%	6% ▼	7%	16%	10%	54
Don't know / Unsure	1%	1%	1%	0%	1%	0%	0%	0%	1%	3

Businesses surveyed with higher turnover are more likely to be involved in import, transport or logistics, in addition to wholesale and retail trade

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Wholesale, distribution or retail	52% ▼	25% ▼	68%	59% ▼	92% ▲	96% ▲	61% ▼	67%	73%	81%	71%	389
Service provision (e.g. installation, repairs, leasing)	79% ▲	59% ▲	26% ▼	35%	27%	29%	46%	38%	37%	38%	38%	242
Production or manufacturing	19% ▼	29%	25% ▼	98% ▲	37%	22% ▼	38%	40%	37%	37%	37%	265
Transport or logistics	34%	17% ▼	14% ▼	28%	49% ▲	36%	23%	20% ▼	32%	53% ▲	29%	179
Collection, reverse logistics, recycling or waste management	25%	30%	29%	28%	30%	31%	28%	24%	24%	39%	29%	172
Import	30%	11% ▼	11% ▼	43% ▲	44% ▲	30%	20%	30%	29%	42% ▲	28%	180
Other	7%	28% ▲	24% ▲	1% ▼	1% ▼	1% ▼	9%	16%	9%	5%	10%	54
Don't know / Unsure	0%	1%	2% ▲	0%	0%	0%	1%	2%	0%	0%	1%	3

Food & beverage and building products are the most common classes of primary product that the businesses surveyed provide

Food & beverages and building products & materials are the most common products provided by participants. These are relatively broad product classes, and they are closely aligned with the sectors they are relevant to. Hence, they are the most common product classes represented.

Primary product businesses provide deal with based on industry type	%	n
Food and beverages	29%	112
Building products and materials	15%	107
Automotive products & materials	9%	60
Groceries and Fuel	4%	16
Electrical and electronic products	4%	25
Industrial equipment and machinery	4%	30
Packaging	3%	20
Horticultural & landscaping products and materials	2%	13
Interior finishes and hardware products	2%	17
Healthcare and medical equipment and products	2%	11
Agricultural and veterinary chemicals and chemical containers	2%	11
Infrastructure construction products and materials	2%	21
Clothing textiles	2%	10
Tyres & Rubber products	2%	9
Oil	1%	7
Furniture	1%	7
Paint & paint containers	1%	6
Chemicals	1%	6
Agricultural equipment and machinery	1%	4
Newspapers and magazines, printed material	1%	5
Other	1%	7
None of these	11%	69

“Everything that’s involved in building houses like concrete, steel, bricks, frames, plasterboard and paint.”

“We sell metal products like exhaust, we don’t do any packaging ourselves but receive things in cardboard and plastic.”

“Steels, metals, machine parts and metal fabricating predominantly for the mining and energy industries/cardboard, plastics soft, wooden pallets.”

“Plastic wrap for clothing and the shoes come in cardboard boxes. From time to time tech products such as watches and scales come bubble wrapped inside a cardboard box.”

“Window furnishings, security products blinds, awnings. We wrap these things in rugs and transport them ourselves. We also use plastic tubing.”

Note: Businesses dealing with these primary products span across industry sectors (as defined by ANZSIC code). See page 26 for more details.



Businesses that do not engage with initiatives tend to provide food and beverage products. Those who engage with product stewardship actions related to the consumption life stage are less likely to provide food and beverages.

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Food and beverages	43% ▲	19%	25%	16%	30%	24% ▼	26%	19%	29%	112
Building products and materials	16%	13%	13%	19%	14%	16%	15%	11%	15%	107
Automotive products & materials	6%	9%	12%	13%	9%	11%	11%	8%	9%	60
Groceries and Fuel	6%	4%	3%	3%	4%	3%	5%	6%	4%	16
Electrical and electronic products	3%	6%	4%	3%	4%	4%	4%	7%	4%	25
Industrial equipment and machinery	3%	4%	4%	6%	3%	4%	4%	5%	4%	30
Packaging	3%	2%	2%	5%	2%	3%	2%	5%	3%	20
Horticultural & landscaping products and materials	1%	2%	4%	4%	2%	2%	2%	0%	2%	13
Interior finishes and hardware products	2%	2%	3%	1%	2%	3%	2%	0%	2%	17
Healthcare and medical equipment and products	2%	4%	1%	0%	2%	3%	2%	0%	2%	11
Agricultural and veterinary chemicals and chemical containers	1%	2%	4%	2%	2%	3%	3%	4%	2%	11
Infrastructure construction products and materials	1%	1%	2%	3%	2%	2%	2%	2%	2%	21
Clothing textiles	1%	1%	1%	5%	2%	2%	2%	4%	2%	10
Tyres & Rubber products	0%	3%	1%	4%	1%	2%	2%	0%	2%	9
Oil	0%	0%	2%	2%	1%	1%	1%	8% ▲	1%	7
Furniture	1%	1%	1%	1%	1%	1%	1%	0%	1%	7
Paint & paint containers	0%	0%	3%	2%	1%	1%	1%	0%	1%	6
Chemicals	1%	1%	1%	1%	1%	1%	1%	0%	1%	6
Agricultural equipment and machinery	1%	0%	1%	0%	0%	0%	0%	2%	1%	4
Newspapers and magazines, printed material	0%	0%	1%	0%	1%	1%	0%	0%	1%	5
Other (please specify)	1%	1%	0%	3%	1%	1%	1%	0%	1%	7
None of these	6%	19% ▲	11%	8%	11%	11%	10%	11%	11%	69

The primary product that businesses provide is directly related, and thus high correlated, to their industry. Businesses with lower turnover are more likely to provide automotive products.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Food and beverages	0% ▼	0% ▼	99% ▲	8% ▼	12% ▼	14% ▼	25%	29%	26%	21%	29%	112
Building products and materials	3% ▼	81% ▲	0% ▼	12%	5%	10%	14%	18%	17%	17%	15%	107
Automotive products & materials	53% ▲	0% ▼	0% ▼	9%	4%	5%	18% ▲	8%	7%	5%	9%	60
Groceries and Fuel	2%	0%	1%	0%	0%	15% ▲	2%	0%	8%	8%	4%	16
Electrical and electronic products	9%	2%	0%	4%	6%	4%	4%	8%	2%	2%	4%	25
Industrial equipment and machinery	3%	0%	0%	15% ▲	4%	2%	3%	4%	6%	3%	4%	30
Packaging	0%	0%	0%	6% ▲	9% ▲	1%	1%	1%	1%	6%	3%	20
Horticultural & landscaping products and materials	0%	0%	0%	0%	9% ▲	4%	5%	2%	2%	0%	2%	13
Interior finishes and hardware products	0%	5%	0%	4%	3%	3%	3%	2%	2%	2%	2%	17
Healthcare and medical equipment and products	2%	0%	0%	1%	1%	6% ▲	0%	4%	2%	1%	2%	11
Agricultural and veterinary chemicals and chemical containers	0%	0%	0%	1%	5%	5%	1%	1%	3%	5% ▲	2%	11
Infrastructure construction products and materials	0%	12% ▲	0%	3%	0%	0%	0%	2%	3%	4%	2%	21
Clothing textiles	1%	0%	0%	1%	3%	4%	1%	0%	1%	5%	2%	10
Tyres & Rubber products	5%	0%	0%	1%	0%	3%	2%	2%	1%	1%	2%	9
Oil	0%	0%	0%	1%	5% ▲	1%	0%	0%	1%	5%	1%	7
Furniture	0%	0%	0%	4%	1%	1%	1%	0%	1%	0%	1%	7
Paint & paint containers	2%	1%	0%	1%	1%	2%	0%	0%	2%	0%	1%	6
Chemicals	3%	0%	0%	1%	2%	1%	1%	1%	1%	0%	1%	6
Agricultural equipment and machinery	2%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	4
Newspapers and magazines, printed material	0%	0%	0%	3% ▲	0%	0%	0%	1%	0%	0%	1%	5
Other (please specify)	0%	0%	0%	2%	3%	1%	1%	0%	2%	1%	1%	7
None of these	11%	0% ▼	0% ▼	17%	23% ▲	13%	11%	14%	7%	9%	11%	69

The majority of the businesses surveyed say they provide or deal with packaging

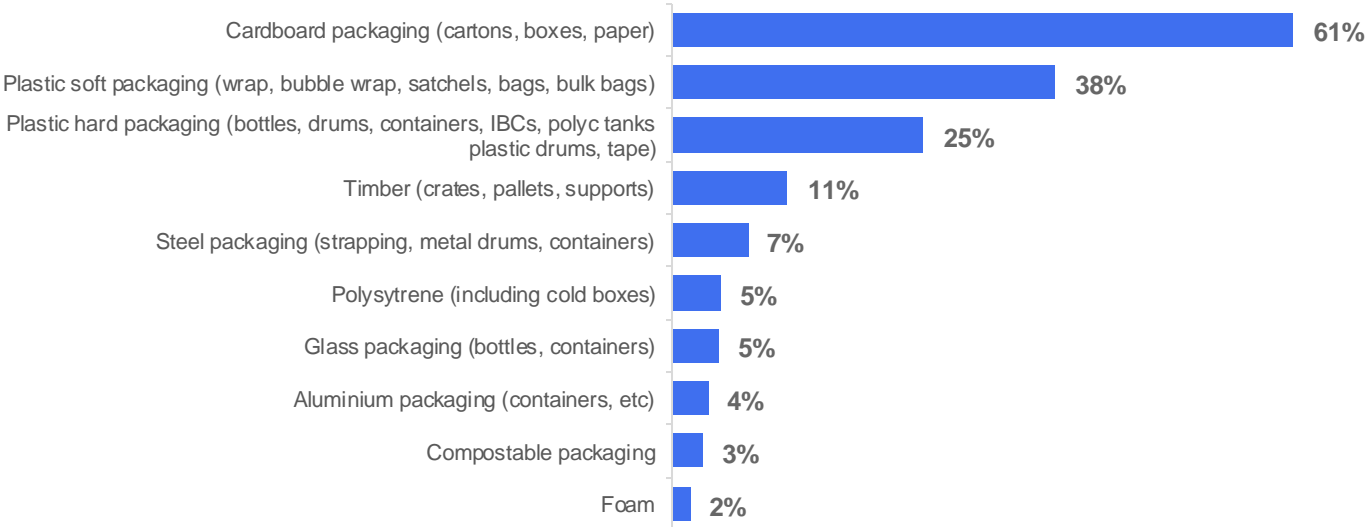
Cardboard packaging (cartons, boxes, paper) is most mentioned by businesses. Two thirds of the businesses surveyed indicate they provide or deal with it in some way (61%).

Plastic soft packaging (38%) and plastic hard packaging (25%) are the next highest mentions. Foam (2%), compostable packaging (3%) and aluminium packaging (4%) are least mentioned.

***It should be noted that this question was asked in an open-ended format, so packaging types mentioned by participants represent all the packaging they deal with.**



Types of packaging that businesses provide or deal with...



There are no major differences in the packaging types that businesses surveyed provide or deal with when looking across levels of engagement in product stewardship initiatives and actions

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Cardboard packaging (cartons, boxes, paper)	65%	60%	62%	49%	62%	62%	61%	50%	61%	329
Plastic soft packaging (wrap, bubble wrap, satchels, bags, bulk bags)	35%	42%	38%	36%	38%	38%	39%	31%	38%	214
Plastic hard packaging (bottles, drums, containers, IBCs, polyc tanks plastic drums, tape)	27%	23%	25%	20%	25%	25%	26%	15%	25%	122
Timber (crates, pallets, supports)	9%	10%	14%	14%	11%	12%	13%	9%	11%	86
Steel packaging (strapping, metal drums, containers)	6%	8%	11%	4%	7%	7%	7%	3%	7%	49
Polystyrene (including cold boxes)	2%	5%	10%	2%	5%	5%	6%	0%	5%	23
Glass packaging (bottles, containers)	4%	4%	8%	1%	5%	5%	6%	0%	5%	19
Aluminium packaging (containers, etc)	1%	5%	6%	1%	4%	3%	5%	0%	4%	14
Compostable packaging	4%	1%	4%	3%	3%	3%	2%	0%	3%	13
Foam	0%	5%	1%	1%	2%	2%	2%	0%	2%	11

Accommodation and food services are more likely to provide or deal with a wider variety of packaging types. Construction and manufacturing are less likely to handle cardboard packaging, and more likely to handle timber.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Cardboard packaging (cartons, boxes, paper)	58%	46% ▼	84% ▲	47% ▼	50%	64%	64%	60%	69%	45%	61%	329
Plastic soft packaging (wrap, bubble wrap, satchels, bags, bulk bags)	30%	29%	39%	38%	34%	45%	31%	37%	38%	37%	38%	214
Plastic hard packaging (bottles, drums, containers, IBCs, polyc tanks plastic drums, tape)	7% ▼	14%	42% ▲	10% ▼	30%	28%	17%	24%	34%	22%	25%	122
Timber (crates, pallets, supports)	17%	23% ▲	3%	22% ▲	13%	4%	14%	10%	17%	9%	11%	86
Steel packaging (strapping, metal drums, containers)	7%	10%	7%	8%	11%	5%	6%	7%	6%	8%	7%	49
Polystyrene (including cold boxes)	5%	4%	5%	1%	4%	8%	7%	2%	4%	3%	5%	23
Glass packaging (bottles, containers)	0%	0%	12% ▲	1%	2%	6%	0%	8%	11% ▲	5%	5%	19
Aluminium packaging (containers, etc)	0%	0%	10% ▲	1%	2%	3%	0%	2%	8%	7%	4%	14
Compostable packaging	1%	0%	9% ▲	1%	2%	2%	4%	0%	2%	0%	3%	13
Foam	0%	3%	0%	2%	2%	3%	3%	1%	1%	0%	2%	11

PRODUCT LIFECYCLE FRAMEWORK

4

THE PRODUCT LIFECYCLE STAGES

Product lifecycle stages refer to the key points of time within a product's life – production, consumption and post-consumption. Product stewardship initiatives and actions to improve the environmental impact of a product more broadly can be mapped back to the product lifecycle stages. Mapping these actions back to the product lifecycle allows us to identify, among other things, which stages are currently addressed with existing initiatives and where there are gaps.

This framework has been used as a reference point throughout the report to map business attitudes and behaviours, including:

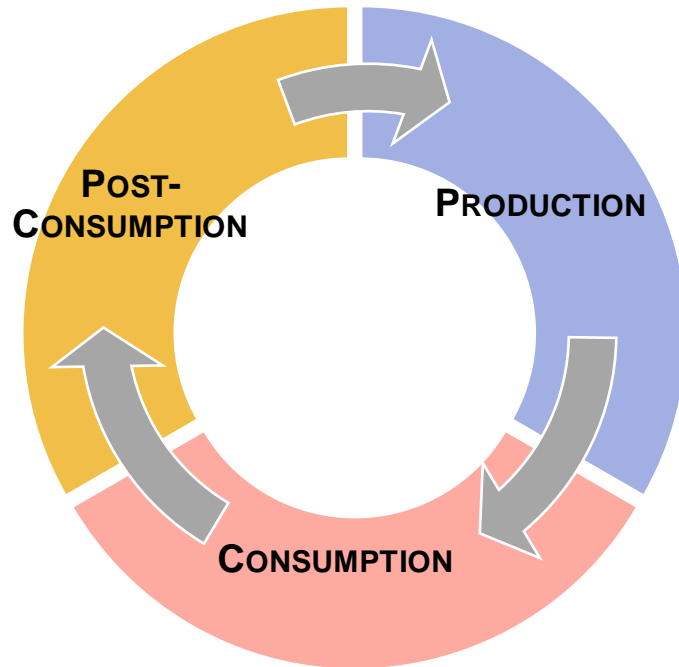
- Businesses' self-reported engagement in product stewardship activities
- Businesses' likelihood to have a formal stewardship or sustainability program in place

Product lifecycle stage	Activities of each lifecycle stage	Actions
<i>Production</i>	Materials, design, manufacturing	<ul style="list-style-type: none"> • Responsible supply chain practices • Better material choices and/or design (including packaging) • Better product design • Efficient resource use including emissions management, reduction and/or use of renewable energy
<i>Consumption</i>	Retail, use and reuse	<ul style="list-style-type: none"> • Information promoting better product use • Innovative business models, circular business models • Promoting high quality products • Product trade-in and/or repair services
<i>Post-consumption</i>	Logistics and collection	<ul style="list-style-type: none"> • Providing take-back services, improving access and convenience • Better logistics solutions • Material recovery (recycling and reprocessing) • New end-markets
	End of life	

LIFECYCLE FRAMEWORK : Production stage (Businesses)

The businesses selected for inclusion in this survey are most focused on Production-related activities when it comes to product stewardship and circular economy. Fewer are focused on the Consumption stage, although those in the retail industry tend to be more focused on it.

Although they are less actively engaged in Post-Consumption, a significant number do consider the end-of-life of their product and material recovery.



Life cycle stages are overlaid by colour throughout the report content using this legend. There is a hyperlink embedded within the legend to return to this page for reference if required.

Life cycle stages legend	Production (Materials, Design, Manufacturing)
	Consumption (Use, Reuse, Retail)
	Post-Consumption (End of life)

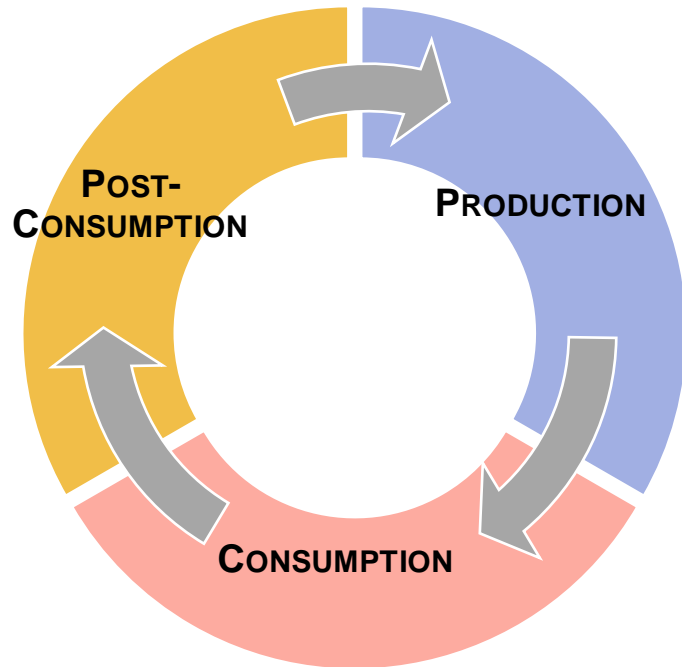
The Production stage of the product lifecycle is the **primary focal point** of product stewardship for most businesses.

- **44% of business** say they [understand sustainable product design](#) somewhat or very well, compared to just:
 - 17% for circular economy
 - 19% for product stewardship
 - 17% for extended produce responsibility
- **90% of businesses** undertake product stewardship activities [related primarily to the Production stage](#) of the lifecycle – **especially**:
 - [improving material choices](#) (e.g. use of recycled content, reducing hazardous materials) (72%) and
 - [engaging in responsible supply chain practices](#) (69%).
 - **Manufacturing businesses** are more likely to be **improving product design and packaging design** (e.g. design for durability, design for recycling) (60% compared to 41% for all businesses)
- However, there is **room to increase the number of businesses focusing on the Production stage**. Currently, there is only moderate agreement from businesses that [seek clean and efficient resource use](#) (55%) and [improve product design and packaging design](#) (41%).
- Businesses that are **highly engaged with product stewardship initiatives** (4 or more) are [more likely to also engage in responsible supply chain practices](#) (83%).
- Accommodation and Food Services are significantly [more likely to be focused on improving their input material choices](#) (90%).

LIFECYCLE FRAMEWORK : Consumption stage (Businesses)

The businesses selected for inclusion in this survey are most focused on Production-related activities when it comes to product stewardship and circular economy. Fewer are focused on the Consumption stage, although those in the retail industry tend to be more focused on it.

Although they are less actively engaged in Post-Consumption, a significant number do consider the end-of-life of their product and material recovery.



Life cycle stages are overlaid by colour throughout the report content using this legend. There is a hyperlink embedded within the legend to return to this page for reference if required.

Life cycle stages legend	Production (Materials, Design, Manufacturing)
	Consumption (Use, Reuse, Retail)
	Post-Consumption (End of life)

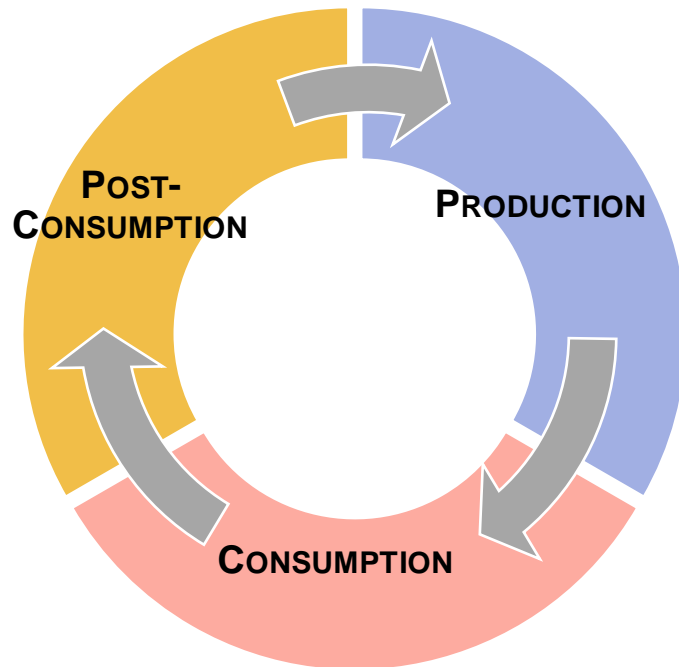
Businesses, especially in the Retail trade, are also active in product stewardship activities that relate to Consumption.

- **75% of businesses** report engaging in product stewardship activities that relate to the Consumption stage, **especially** providing:
 - [consumer information that promotes better product usage \(58%\)](#) and
 - [promoting higher quality and reusable products \(49%\)](#).
 - Retail trade businesses are significantly more likely to provide: [consumer information promoting better product usage \(75%\)](#) and [higher quality/reusable products \(63%\)](#).
- Encouraging or establishing [leasing and sharing models \(12%\)](#) and [offering product trade-ins or repair services \(35%\)](#) is less common.

LIFECYCLE FRAMEWORK : Post-Consumption stage (Businesses)

The businesses selected for inclusion in this survey are most focused on Production-related activities when it comes to product stewardship and circular economy. Fewer are focused on the Consumption stage, although those in the retail industry tend to more focused on it.

Although they are less actively engaged in Post-Consumption, a significant number do consider the end-of-life of their product and material recovery.



Life cycle stages are overlaid by colour throughout the report content using this legend. There is a hyperlink embedded within the legend to return to this page for reference if required.

Life cycle stages legend	Production (Materials, Design, Manufacturing)
	Consumption (Use, Reuse, Retail)
	Post-Consumption (End of life)

Fewer businesses focus on the Post-Consumption aspects of product stewardship.

- **60% of businesses** undertake product stewardship activities that [relate to the Post-consumption stage](#)
 - This is mainly in [providing material recovery for products](#) (53%).
 - **Repair and maintenance businesses** are more likely than others to provide [material recovery for products](#) (73%).
 - There is less much lower involvement in [providing new-end markets](#) (22%), although it is more prevalent among businesses with [higher turnover](#) (39%).
- There is scope to increase engagement with external product stewardship initiatives
 - In contrast to the Consumer and Local Government audiences, there is **less engagement by businesses in external product stewardship initiatives** ([64% have engaged with at least one external initiative](#)).
- Businesses that are **highly engaged with product stewardship initiatives** (4 or more) are significantly more likely to have a **formal stewardship or sustainability program in place** ([26% have a formal program compared to 20% total](#)).

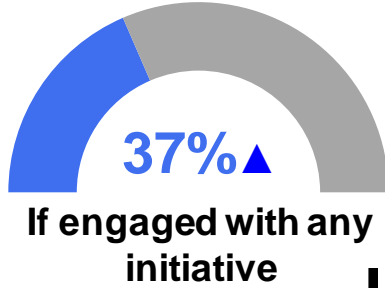
PRODUCT STEWARDSHIP AWARENESS AND BEHAVIOURS

5

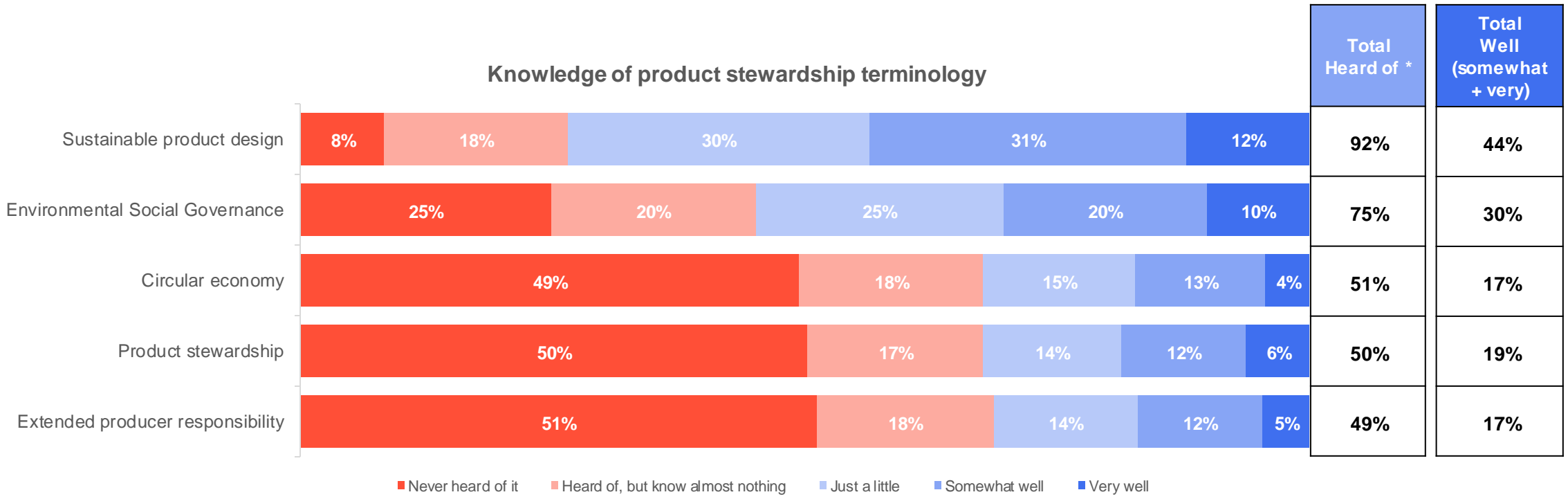
Businesses surveyed have mixed levels of understanding of product stewardship

Approximately half of the businesses surveyed are aware of these concepts, in addition to extended producer responsibility, and up to one in five are somewhat well informed.

Businesses that engage with product stewardship initiatives are significantly more likely to indicate that they know ESG somewhat/very well.



Knowledge of product stewardship terminology



Q1. Now I'm going to read out a list of terms and I'd like you to tell me how well you feel you understand each one... (Never heard of it, Heard of, but know almost nothing, Just a little, Somewhat well, Very well) (All participants, Base n=592) Total Heard of* = Heard of, but know almost nothing + Just a little + Somewhat well + Very well.

▲▼ significantly higher or lower than total at 95% confidence level and above



Businesses surveyed that are more engaged in product stewardship actions, especially in production and consumption actions, are more informed

Among businesses surveyed that are not engaging in product stewardship actions, only about one in ten are somewhat or very well informed of product stewardship.

Column % Total Well	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Sustainable product design	37%	47%	42%	61% ▲	46% ▲	49% ▲	48%	14%	44%	269
Environmental Social Governance	19% ▼	28%	37%	53% ▲	34% ▲	34% ▲	37% ▲	0% ▼	30%	190
Circular economy	11%	20%	16%	32% ▲	19% ▲	21% ▲	19%	0%	17%	109
Product stewardship	12% ▼	21%	19%	35% ▲	20%	22% ▲	20%	10%	19%	118
Extended producer responsibility	10% ▼	19%	18%	32% ▲	19% ▲	21% ▲	21% ▲	0%	17%	109

Businesses surveyed with higher turnover are significantly more informed on both product stewardship and environmental social governance

Although no statistically significant differences exist between industry types, Construction, Wholesale trade and Retail trade are slightly more well-informed regarding product stewardship. Manufacturing are more consciously aware of concepts of sustainable product design, environmental social governance and circular economy than product stewardship.

Column % Total Well	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Sustainable product design	39%	57%	37%	50%	42%	42%	32%	41%	53%	60%	44%	269
Environmental Social Governance	32%	33%	24%	32%	40%	27%	21%	30%	39%	51% ▲	30%	190
Circular economy	10%	17%	11%	25%	18%	21%	13%	17%	22%	25%	17%	109
Product stewardship	13%	24%	7%	17%	29%	24%	10%	18%	17%	48% ▲	19%	118
Extended producer responsibility	14%	22%	9%	18%	22%	20%	13%	12%	21%	29%	17%	109

Q1. Now I'm going to read out a list of terms and I'd like you to tell me how well you feel you understand each one... (Never heard of it, Heard of, but know almost nothing, Just a little, Somewhat well, Very well) (All participants, Base n=592)

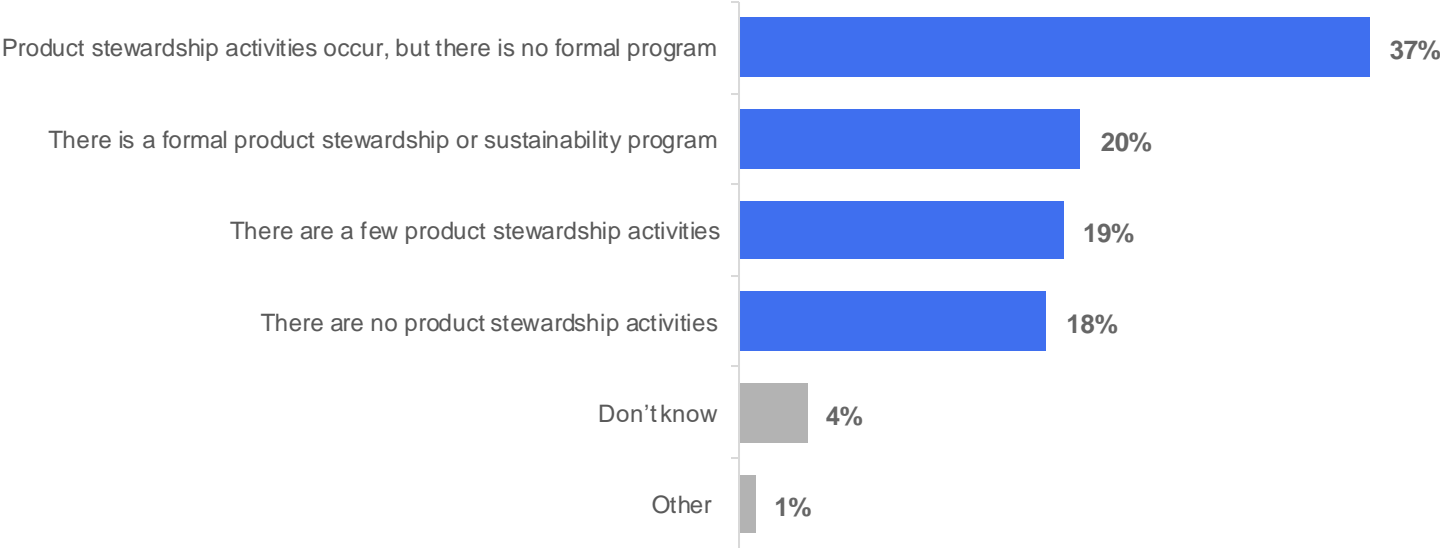
▲ ▼ significantly higher or lower than total at 95% confidence level and above



Three quarters of businesses undertake product stewardship activities, with one in five having a formal stewardship or sustainability program

However, 18% of businesses have no engagement at all in product stewardship (in either a formal or informal capacity).

Product stewardship activities organised in business



~77%
Total
 Any product stewardship activities

▲ ▼ significantly higher or lower than total at 95% confidence level and above

Lifecycle stages	Production (Materials, Design, Manufacturing)
	Consumption (Use, Reuse, Retail)
	Post-Consumption (End of life)



Formal stewardship or sustainability programs are significantly more likely to be in place if a business is undertaking PS Post-consumption actions or if they are engaging with a greater number of PS initiatives

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
TOTAL Any product stewardship activities	67% ▼	80%	82%	90% ▲	79% ▲	82% ▲	85% ▲	50% ▼	77%	452
Product stewardship activities occur, but there is no formal program	34%	43%	37%	35%	38%	39%	39%	16%	37%	229
There is a formal product stewardship or sustainability program	14%	17%	25%	34% ▲	22%	23%	26% ▲	15%	20%	113
There are a few product stewardship activities	18%	20%	20%	20%	19%	19%	20%	18%	19%	110
There are no product stewardship activities	24% ▲	16%	16%	9%	16% ▼	13% ▼	11% ▼	46% ▲	18%	115
Don't know	7% ▲	4%	2%	1%	4%	4%	4%	4%	4%	20
Other	2%	1%	1%	0%	1%	1%	1%	0%	1%	5

There are no major differences in the organisation of product stewardship activities by industry or turnover

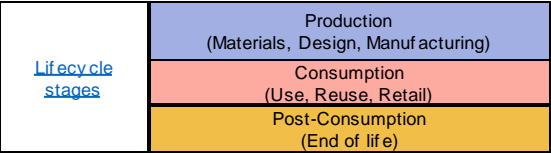
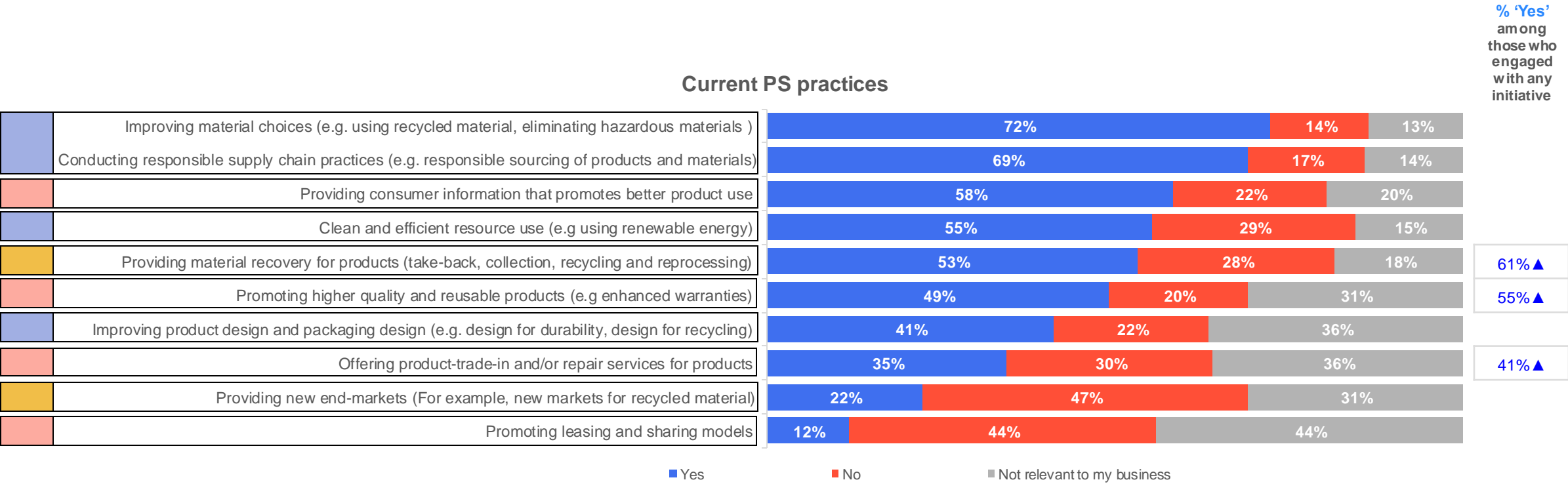
However, businesses surveyed with higher turnovers tend to be more likely to be undertaking product stewardship activities, both overall and in formal programs.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
TOTAL Any product stewardship activities	71%	76%	74%	73%	78%	83%	75%	69%	81%	86%	77%	452
Product stewardship activities occur, but there is no formal program	38%	39%	29%	40%	35%	43%	45%	40%	36%	34%	37%	229
There is a formal product stewardship or sustainability program	22%	19%	25%	13%	18%	21%	19%	15%	23%	31%	20%	113
There are a few product stewardship activities	11%	18%	20%	20%	25%	19%	12%	15%	22%	20%	19%	110
There are no product stewardship activities	18%	22%	12%	25%	21%	16%	20%	25%	18%	9%	18%	115
Don't know	10%	1%	10% ▲	2%	0%	1%	4%	4%	0%	4%	4%	20
Other	1%	1%	3%	0%	1%	0%	1%	2%	1%	1%	1%	5

Most businesses surveyed are actively seek to improve material choices and engage in responsible supply chain practices

Provision of consumer information, clean and efficient resource use and providing end-of-life options are implemented by half of the businesses sampled. There is very little action in identifying and providing alternative end-markets or promoting leasing/sharing models.

Businesses surveyed that are already engaging with product stewardship initiatives are significantly more likely to provide material recovery options, consider longevity of products and offering trade in or repair services.

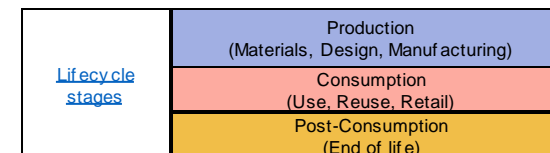


▲ ▼ significantly higher or lower than total at 95% confidence level and above



Businesses surveyed who are engaging with 4 or more specific product stewardship initiatives are also doing a range of actions across the product lifecycle

Column % Yes	Initiative engagement level				Product stewardship lifecycle actions (Note this life cycle classification is based upon Q4 and so results are highly correlated)				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Improving material choices (e.g. using recycled material, eliminating hazardous materials)	69%	70%	76%	80%	81% ▲	75% ▲	79% ▲	0% ▼	72%	418
Conducting responsible supply chain practices (e.g. responsible sourcing of products and materials)	66%	69%	67%	83% ▲	77% ▲	74% ▲	76% ▲	0% ▼	69%	413
Providing consumer information that promotes better product use	55%	51%	64%	71%	61% ▲	78% ▲	66% ▲	0% ▼	58%	335
Clean and efficient resource use (e.g using renewable energy)	47% ▼	54%	63%	65%	62% ▲	60% ▲	63% ▲	0% ▼	55%	329
Providing material recovery for products (take-back, collection, recycling and reprocessing)	40% ▼	43% ▼	69% ▲	79% ▲	56% ▲	59% ▲	89% ▲	0% ▼	53%	309
Promoting higher quality and reusable products (e.g enhanced warranties)	39% ▼	51%	53%	67% ▲	52% ▲	66% ▲	61% ▲	0% ▼	49%	292
Improving product design and packaging design (e.g. design for durability, design for recycling)	44%	39%	37%	47%	46% ▲	47% ▲	47% ▲	0% ▼	41%	246
Offering product-trade-in and/or repair services for products	24% ▼	34%	45% ▲	42%	35%	46% ▲	44% ▲	0% ▼	35%	209
Providing new end-markets (For example, new markets for recycled material)	19%	21%	22%	36% ▲	24% ▲	28% ▲	37% ▲	0% ▼	22%	138
Promoting leasing and sharing models	10%	13%	13%	14%	13%	16% ▲	16% ▲	0%	12%	69



▲ ▼ significantly higher or lower than total at 95% confidence level and above



Different industries focus on different aspects of what they can do across the lifecycle. Businesses with higher turnover are most active in considering new end-markets.

Column % Yes	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0- \$2,000,000	\$2,000,001- \$5,000,000	\$5,000,001- \$20,000,000	More than \$20,000,000		
Improving material choices (e.g. using recycled material, eliminating hazardous materials)	70%	77%	90% ▲	67%	65%	63%	75%	71%	72%	75%	72%	418
Conducting responsible supply chain practices (e.g. responsible sourcing of products and materials)	67%	68%	76%	76%	67%	61%	62%	64%	79%	78%	69%	413
Providing consumer information that promotes better product use	54%	46%	53%	53%	61%	72% ▲	53%	57%	57%	62%	58%	335
Clean and efficient resource use (e.g using renewable energy)	57%	56%	56%	56%	57%	52%	54%	50%	64%	65%	55%	329
Providing material recovery for products (take-back, collection, recycling and reprocessing)	73% ▲	56%	50%	46%	37% ▼	59%	60%	40% ▼	54%	69%	53%	309
Promoting higher quality and reusable products (e.g enhanced warranties)	52%	59%	33% ▼	48%	41%	63% ▲	46%	43%	53%	56%	49%	292
Improving product design and packaging design (e.g. design for durability, design for recycling)	25%	27%	51%	60% ▲	39%	36%	36%	37%	37%	48%	41%	246
Offering product-trade-in and/or repair services for products	66% ▲	29%	16% ▼	39%	19% ▼	46%	37%	25%	34%	39%	35%	209
Providing new end-markets (For example, new markets for recycled material)	20%	30%	18%	25%	23%	22%	16%	14%	26%	39% ▲	22%	138
Promoting leasing and sharing models	15%	11%	12%	12%	9%	12%	8%	14%	12%	11%	12%	69

Lifecycle stages	Production (Materials, Design, Manufacturing)
	Consumption (Use, Reuse, Retail)
	Post-Consumption (End of life)

▲ ▼ significantly higher or lower than total at 95% confidence level and above



INITIATIVE AWARENESS AND ENGAGEMENT

6

Almost two thirds of businesses surveyed engage with external product stewardship initiatives

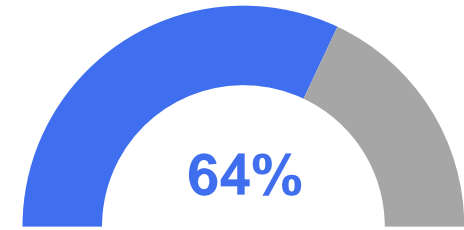
Businesses were prompted with a list of 11 product stewardship initiatives and had the opportunity to spontaneously mention others (in contrast to a prompted list of 26 in the surveys for consumer and Local Government audiences). This reduced list was necessary due to the time impacts within a telephone interviewing format (CATI). The approach may contribute to a lower average number of initiatives engaged in, so direct comparisons across surveys should be treated with caution.

Initiatives that businesses most commonly engaged with are:

- Cartridges 4 Planet Ark
- Container deposit schemes
- B-Cycle

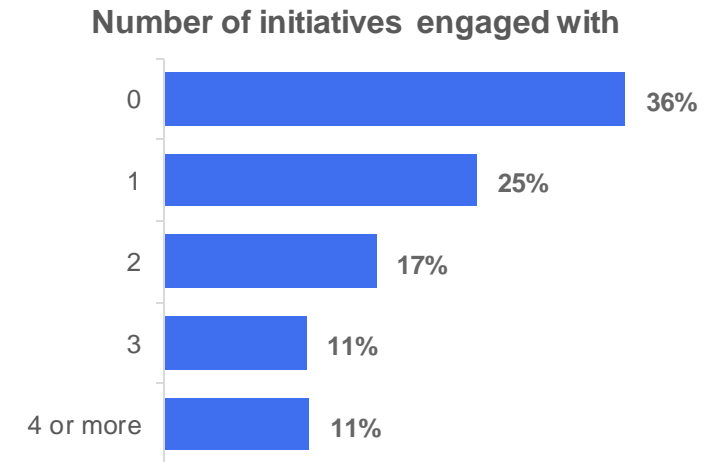
In addition to those included in the prompted list there is also engagement or interest in engagement with other initiatives such as:

- APCO soft plastic recycling
- AUSCOL
- Bin Trim program
- Closed Loop
- Green Star
- Husky Cup reusable cup system
- OzHarvest
- Sustainable Wine Growing Australia
- Sustainable Green Print



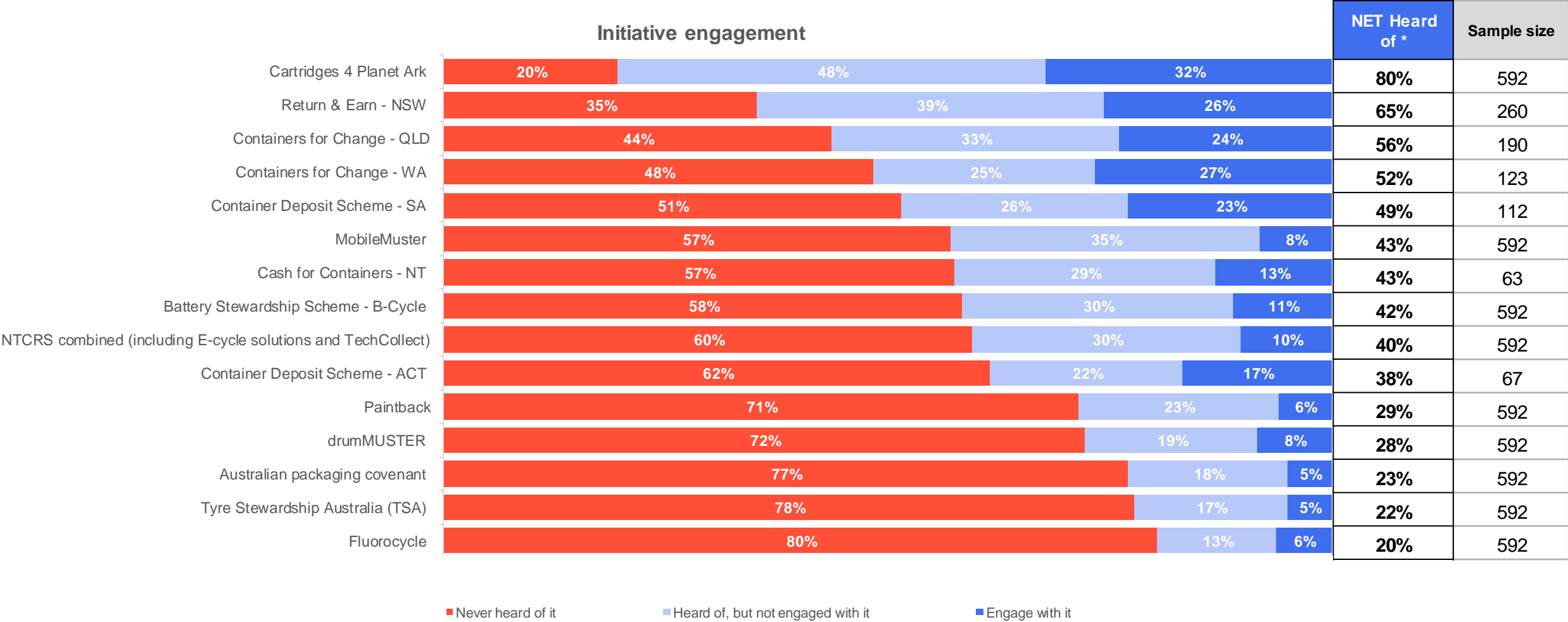
64%
of businesses have engaged with a product stewardship initiative

On average, businesses engage with 1.5 initiatives



Businesses are very aware of Cartridges 4 Planet Ark and somewhat conscious of container deposit schemes

One third of businesses currently use Cartridges 4 Planet Ark followed by engagement with various container deposit schemes (CDS). Beyond this, there is relatively low business engagement with the list of product stewardship initiatives prompted within the survey. The next most engaged with initiative is B-Cycle (11%).



Q5. Product stewardship collective initiatives provide external solutions to businesses to improve material and product reuse and end-of-life processes. I'll now read a list of initiatives available. For each, please tell me whether your business has (Never heard of it, Heard of, but not engaged with it, Engage with it) (All participants, Base n=592) NET Heard of* = Heard of, but not engaged with it + Engage with it



Both Cartridges 4 Planet Ark and container deposit schemes are easy entry points for businesses to engage with product stewardship initiatives

Column % Engage with it	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Cartridges 4 Planet Ark	0% ▼	24%	61% ▲	81% ▲	33%	35%	38% ▲	21%	32%	202
Containers for Change - WA	0% ▼	20%	36%	62% ▲	27%	29%	32%	43%	27%	33
Return & Earn - NSW	0% ▼	18%	49% ▲	51% ▲	27%	26%	32% ▲	9%	26%	63
Containers for Change - QLD	0% ▼	26%	32%	43%	25%	26%	25%	27%	24%	46
Container Deposit Scheme - SA	0% ▼	15%	24%	63% ▲	25%	23%	27%	0%	23%	29
Container Deposit Scheme - ACT	0%	19%	17%	39%	14%	20%	19%	0%	17%	10
Cash for Containers - NT	0%	8%	13%	32%	13%	10%	13%	50%	13%	8
Battery Stewardship Scheme - B-Cycle	0% ▼	4% ▼	15%	54% ▲	12%	13%	15% ▲	3%	11%	78
NTCRS combined (including E-cycle solutions and TechCollect)	0% ▼	5%	15%	44% ▲	10%	11%	12%	11%	10%	67
DrumMUSTER	0% ▼	6%	12%	31% ▲	8%	10%	10%	8%	8%	49
MobileMuster	0% ▼	2% ▼	11%	40% ▲	9%	10%	10%	0%	8%	52
Fluorocycle	0% ▼	1% ▼	8%	32% ▲	7%	8%	10% ▲	0%	6%	42
Paintback	0% ▼	2% ▼	9%	28% ▲	7%	6%	9% ▲	4%	6%	38
Tyre Stewardship Australia (TSA)	0% ▼	4%	3%	29% ▲	5%	6%	7% ▲	4%	5%	35
Australian packaging covenant	0% ▼	3%	7%	19% ▲	5%	6%	5%	4%	5%	32

Repair & Maintenance, Construction and Wholesale trade appear slightly more likely to engage with Cartridges 4 Planet Ark compared to other industries

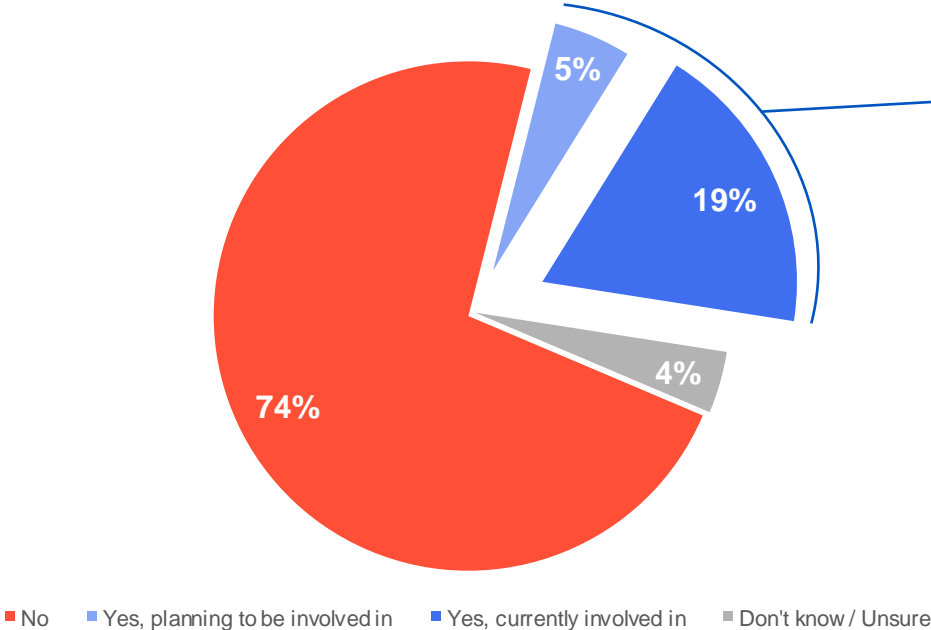
Column % Engage with it	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Cartridges 4 Planet Ark	44%	42%	21%	29%	41%	29%	36%	27%	31%	41%	32%	202
Containers for Change - WA	37%	14%	27%	34%	17%	30%	52%	4%	39%	33%	27%	33
Return & Earn - NSW	39%	24%	32%	28%	18%	19%	28%	26%	32%	19%	26%	63
Containers for Change - QLD	40%	20%	10%	24%	16%	27%	38%	24%	27%	13%	24%	46
Container Deposit Scheme - SA	20%	22%	23%	27%	19%	26%	19%	4%	43%	31%	23%	29
Container Deposit Scheme - ACT	28%	20%	14%	0%	14%	20%	38%	0%	14%	30%	17%	10
Cash for Containers - NT	23%	0%	14%	11%	10%	14%	42%	0%	21%	15%	13%	8
Battery Stewardship Scheme – B-Cycle	19%	18%	3%	12%	14%	10%	13%	7%	15%	17%	11%	78
NTCRS combined (including E-cycle solutions and TechCollect)	12%	12%	6%	12%	12%	10%	8%	8%	13%	16%	10%	67
drumMUSTER	4%	6%	1%	7%	14%	15%	9%	4%	10%	15%	8%	49
MobileMuster	6%	13%	4%	8%	11%	9%	12%	3%	13%	4%	8%	52
Fluorocycle	10%	11%	2%	5%	7%	6%	6%	4%	8%	17%	6%	42
Paintback	6%	9%	4%	8%	4%	6%	9%	7%	7%	1%	6%	38
Tyre Stewardship Australia (TSA)	13%	7%	0%	4%	4%	6%	5%	4%	7%	6%	5%	35
Australian packaging covenant	5%	2%	1%	8%	7%	6%	3%	2%	6%	14%	5%	32

A range of product stewardship and other sustainability initiatives were mentioned beyond those that were prompted, including avenues for recycling various materials and initiatives specific to the food and beverage industry

One in five business surveyed outlined other product stewardship activities and initiatives in which they currently participate (beyond the prompted list of stewardship initiatives). The majority of these activities are not related to named and specific initiatives.

Only a small number of businesses surveyed are currently planning to be involved in certain initiatives at this point in time.

Product stewardship activities or initiatives currently involved in or planned



- Other initiatives currently involved in (named initiatives only):
- APCO soft plastic recycling
 - AUSCOL
 - Green Star
 - Officeworks
 - OzHarvest
 - Second Bite
 - Sustainable Wine Growing Australia
 - Sustainable Green Print
 - SIMMS Metal Recycling
 - Triple R
- Other initiatives currently planning to be involved in (named initiatives only):
- Bin Trim program
 - Closed Loop
 - Geelong Circular Living Challenge
 - Husky Cup reusable cup system



There is minimal planned intent to engaging with product stewardship initiatives by businesses not already engaging with them

Only 2% of businesses surveyed who are currently not engaging with any of the prompted product stewardship initiatives indicate they are planning to be involved.

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption in PS actions	Not engaging in PS actions		
Total Yes	2% ▼	25%	40% ▲	35% ▲	23%	25% ▲	26% ▲	13%	22%	135
Yes, currently involved in	0% ▼	23%	36% ▲	34% ▲	20%	22% ▲	23% ▲	13%	19%	119
Yes, planning to be involved in	2%	4%	9% ▲	4%	5%	6%	5%	0%	5%	26
No	90% ▲	73%	59% ▼	62% ▼	73%	71% ▼	70% ▼	87%	74%	440
Don't know / Unsure	8% ▲	2%	1% ▼	3%	4%	4%	4%	0%	4%	17



Businesses surveyed with high turnover are most likely to be currently planning engagement with other product stewardship initiatives

Accommodation and Food Services, Manufacturing and Retail trade all appear slightly more likely to be planning involvement in other initiatives. Accommodation and Food Services are planning to engage with initiatives that work to reduce environmental impact (e.g. Net zero, sourcing recycled materials, etc.); Manufacturing is planning to be involved with initiatives around recycling (e.g. cardboard, paper, oils, batteries etc), generating their own energy (e.g. install solar panels) and working to reduce environmental impact (e.g. Net zero, sourcing recycled materials, etc.); Retail trade are planning to be involved in these and more, showing a wide range of interests.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0- \$2,000,000	\$2,000,001- \$5,000,000	\$5,000,001- \$20,000,000	More than \$20,000,000		
NET Yes	18%	27%	17%	29%	17%	24%	22%	23%	24%	32%	22%	135
Yes, currently involved in	18%	26%	15%	24%	14%	21%	20%	21%	23%	22%	19%	119
Yes, planning to be involved in	0%	1%	6%	7%	4%	6%	3%	3%	5%	15% ▲	5%	26
No	79%	72%	73%	71%	78%	74%	77%	76%	76%	64%	74%	440
Don't know / Unsure	3%	1%	11% ▲	0%	4%	2%	1%	1%	0%	3%	4%	17

DRIVERS

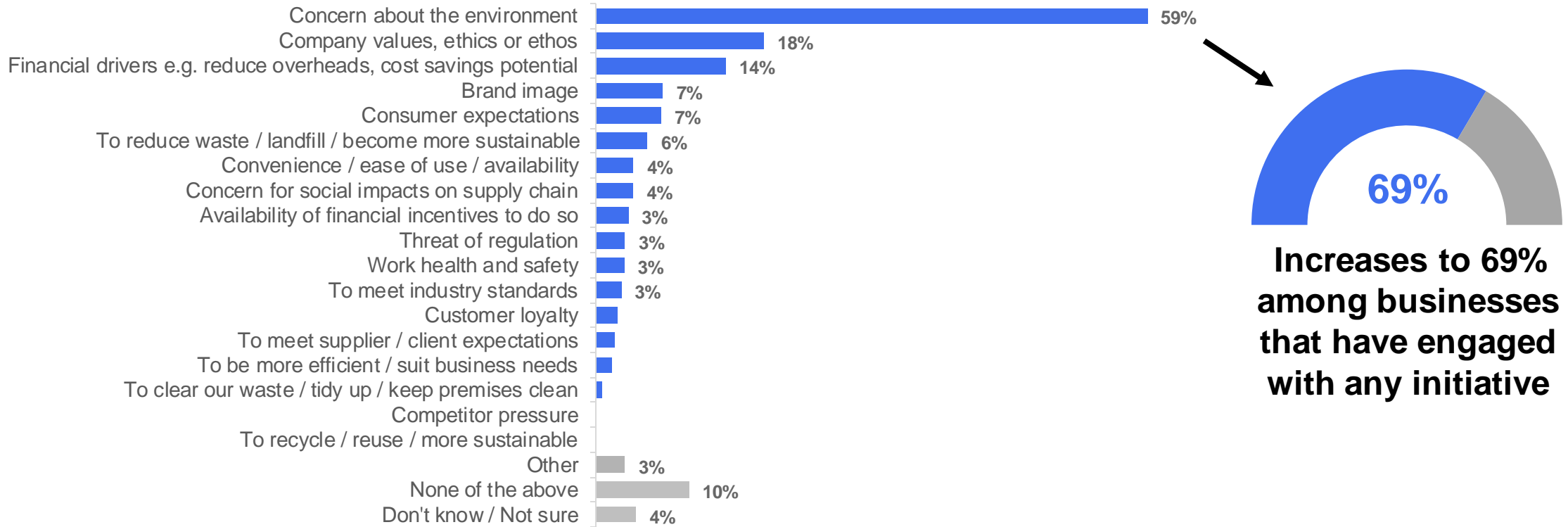
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Concern about the environment is the most common driver for businesses' involvement in product stewardship initiatives

Comparatively, company values and financial drivers are much less-common drivers of involvement, although they may be secondary benefits or considerations.

Businesses surveyed that have already engaged with an initiative are more likely to do so to address environmental concerns.

Main reasons for being involved in product stewardship initiatives



For businesses surveyed that have any level of engagement, one in four become involved due to alignment with company values and ethos

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Concern about the environment	40% ▼	66%	69%	75%	61%	62%	63%	38%	59%	337
Company values, ethics or ethos	9% ▼	20%	25%	23%	19%	20%	19%	8%	18%	110
Financial drivers e.g. reduce overheads, cost savings potential	13%	16%	12%	16%	14%	14%	15%	15%	14%	85
Brand image	6%	7%	8%	8%	8%	8%	8%	9%	7%	38
Consumer expectations	9%	7%	5%	7%	8%	7%	6%	0%	7%	41
To reduce waste / landfill / become more sustainable	3%	7%	8%	4%	6%	6%	6%	7%	6%	36
Convenience / ease of use / availability	4%	4%	4%	4%	4%	4%	4%	6%	4%	21
Concern for social impacts on supply chain	2%	4%	6%	5%	4%	5%	5%	0%	4%	23
Dont know / Not sure	8%	3%	2%	0%	5%	4%	4%	4%	4%	19
None of the above	22% ▲	2% ▼	6%	0%	9%	8%	8%	25%	10%	58

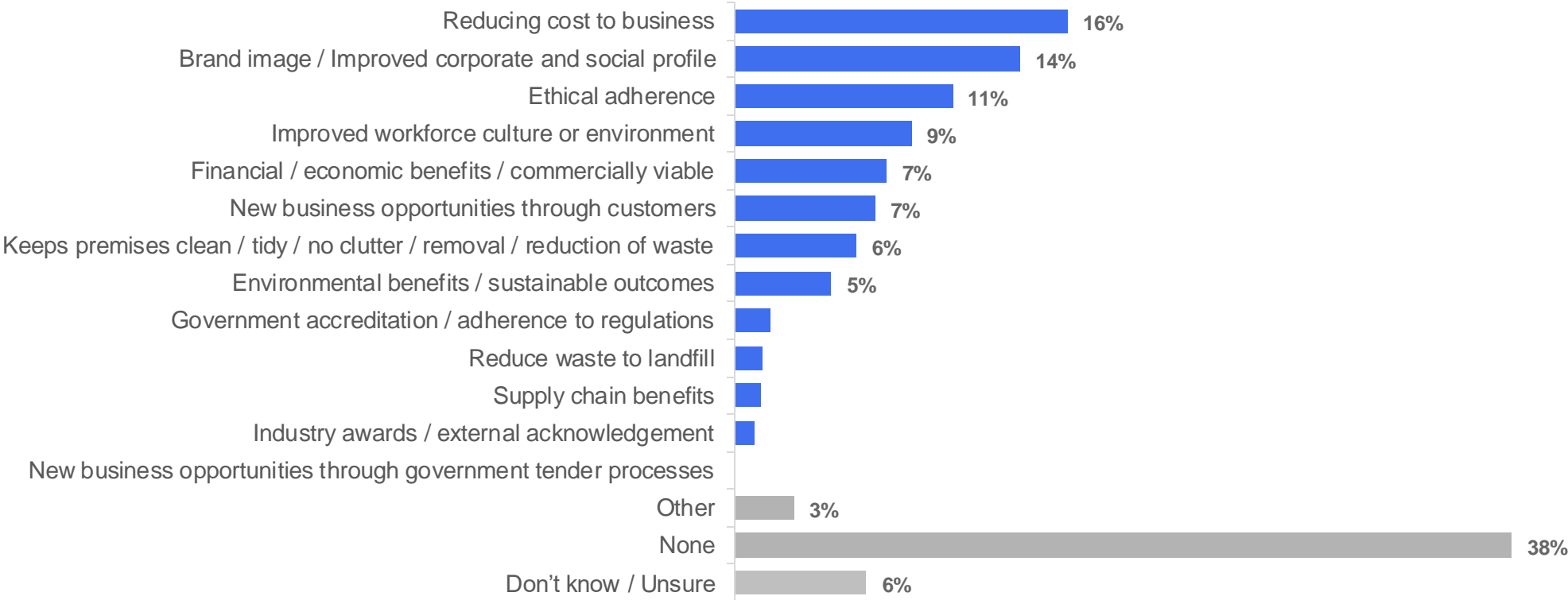
Manufacturing and businesses with lower turnover appear slightly more motivated by potential financial benefits of PS initiatives

Column %	Industry						Annual turnover				Total	Sample size
	Repair and maintenance	Construction	Accommodation and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Concern about the environment	58%	49%	57%	63%	57%	64%	63%	65%	53%	49%	59%	337
Company values, ethics or ethos	25%	19%	10%	19%	20%	20%	15%	13%	28%	27%	18%	110
Financial drivers e.g. reduce overheads, cost savings potential	15%	15%	12%	20%	12%	13%	14%	21%	12%	10%	14%	85
Brand image	3%	5%	7%	3%	12%	10%	3%	9%	8%	7%	7%	38
Consumer expectations	3%	10%	10%	7%	8%	5%	1%	8%	8%	13%	7%	41
To reduce waste / landfill / become more sustainable	5%	10%	8%	7%	2%	3%	5%	5%	8%	6%	6%	36
Convenience / ease of use / availability	5%	4%	5%	4%	0%	5%	5%	1%	5%	6%	4%	21
Concern for social impacts on supply chain	5%	3%	4%	4%	4%	4%	7%	3%	1%	7%	4%	23
Dont know / Not sure	3%	0%	10%	1%	4%	3%	6%	3%	1%	4%	4%	19
None of the above	12%	8%	11%	12%	6%	10%	7%	10%	8%	7%	10%	58

After starting engagement with PS initiatives, almost 40% of businesses surveyed do not consider they receive any direct benefits from their involvement

Among businesses surveyed who are engaging, fewer than one in five realise a cost saving through their participation. Other benefits relate to improved corporate/brand image, being ethically responsible and workforce or cultural benefits.

Benefits from engaging with a product stewardship initiative



Businesses surveyed that only engage with a single product stewardship initiative are most likely to perceive no benefits of involvement

Among businesses surveyed who are engaging, a real reduction in costs is noted once they have a high level of engagement (4 or more initiatives engaged with) and those who are involved with post-consumption stewardship actions.

Column %	Initiative engagement level			Product stewardship lifecycle actions				Total	Sample size
	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Total Any benefit	50% ▼	66%	74%	64% ▲	67% ▲	69% ▲	28%	62%	241
Reducing cost to business	10%	16%	30% ▲	17%	18%	21% ▲	7%	16%	67
Brand image / Improved corporate and social profile	7%	19%	17%	15%	14%	17%	9%	14%	48
Ethical adherence	9%	10%	16%	11%	11%	12%	9%	11%	42
Improved workforce culture or environment	7%	12%	6%	9%	10% ▲	9%	0%	9%	29
Financial / economic benefits / commercially viable	5%	6%	13%	7%	7%	7%	12%	7%	34
New business opportunities through customers	8%	6%	6%	7%	8%	7%	0%	7%	27
Keeps premises clean / tidy / no clutter / removal / reduction of waste	3%	7%	11%	6%	7%	8%	0%	6%	23
Environmental benefits / sustainable outcomes	5%	4%	4%	5%	6%	6%	0%	5%	20
Other	2%	3%	5%	3%	3%	4%	0%	3%	12
Don't know / Unsure	6%	7%	3%	7%	7%	6%	0%	6%	26
None	50% ▲	34%	26%	36% ▼	33% ▼	31% ▼	72%	38%	159

Accommodation and Food Services, Wholesale trade and Retail trade industries appear slightly more likely to realise benefits to their business from engaging with product stewardship initiatives

Larger businesses surveyed with over \$5M in annual turnover are more likely to realise benefits – mostly a cost benefit and improvements to their brand image / corporate / social profile.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0- \$2,000,000	\$2,000,001- \$5,000,000	\$5,000,001- \$20,000,000	More than \$20,000,000		
NET Any benefit	54%	58%	70%	56%	66%	65%	56%	56%	66%	65%	62%	241
Reducing cost to business	21%	19%	19%	20%	11%	13%	14%	13%	20%	17%	16%	67
Brand image / Improved corporate and social profile	16%	5%	28%	6%	18%	12%	12%	11%	15%	18%	14%	48
Ethical adherence	7%	7%	13%	9%	16%	11%	12%	7%	13%	7%	11%	42
Improved workforce culture or environment	2%	7%	10%	6%	5%	16%	10%	12%	4%	5%	9%	29
Financial / economic benefits / commercially viable	11%	9%	7%	12%	8%	3%	10%	13%	6%	3%	7%	34
New business opportunities through customers	9%	4%	2%	7%	7%	10%	6%	11%	6%	5%	7%	27
Keeps premises clean / tidy / no clutter / removal / reduction of waste	4%	4%	8%	9%	1%	7%	7%	3%	8%	6%	6%	23
Environmental benefits / sustainable outcomes	7%	7%	3%	2%	7%	4%	2%	3%	8%	3%	5%	20
Other	2%	11% ▲	0%	1%	0%	4%	2%	1%	6%	6%	3%	12
Don't know / Unsure	6%	5%	6%	6%	12%	6%	3%	1%	9%	9%	6%	26
None	46%	42%	30%	44%	34%	35%	44%	44%	34%	35%	38%	159

Businesses surveyed who engage in product stewardship initiatives don't tend to experience negative outcomes from being involved

However, one in ten indicate that anticipated cost savings have not been realised or they were exposed to significant ongoing costs. Upfront costs are a negative impact for less than one in 20.

Negative impacts from engaging with a product stewardship initiative



One in ten businesses surveyed with low or medium engagement raised ‘cost savings not being realized / ongoing costs’ as a negative impact. This is a potential barrier to uptake of additional initiatives.

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
NET Any negative impact	38%	18%	21%	15%	20%	19%	22%	0%	19%	73
Cost savings not realised / ongoing costs	0%	9%	11%	7%	9%	10%	9%	0%	9%	34
Significant upfront costs	0%	4%	4%	2%	4%	3%	3%	0%	4%	15
Greater resource requirements / more administration	0%	2%	2%	0%	2%	1%	3%	0%	2%	7
Increased procedures/ difficulties with process	0%	1%	2%	1%	2%	1%	2%	0%	2%	5
Increased end cost to customers	0%	1%	2%	1%	1%	1%	2%	0%	1%	4
Other	38%	9%	9%	7%	10%	9%	12% ▲	0%	9%	36
Don't know / Unsure	0%	3%	4%	1%	4%	4%	3%	0%	3%	11
None	62%	78%	75%	84%	77%	77%	75%	100%	78%	316

Retail trade and Repair & Maintenance businesses and smaller businesses appear more likely to feel that cost savings have not been realised or there has been an ongoing cost.

Accommodation and Food Services also appear more likely to have also experienced increased procedures or difficulties with the process.

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
NET Any negative impact	18%	15%	30%	17%	11%	20%	22%	15%	18%	16%	19%	73
Cost savings not realised / ongoing costs	6%	3%	9%	8%	9%	14%	15%	9%	7%	5%	9%	34
Significant upfront costs	3%	5%	5%	4%	4%	2%	3%	5%	5%	3%	4%	15
Greater resource requirements / more administration	3%	0%	4%	3%	0%	1%	1%	1%	3%	3%	2%	7
Increased procedures / difficulties with process	3%	0%	7%	1%	0%	0%	3%	1%	2%	2%	2%	5
Increased end cost to customers	3%	0%	3%	0%	2%	0%	2%	0%	2%	0%	1%	4
Other	11%	9%	18%	9%	5%	6%	11%	4%	9%	6%	9%	36
Don't know / Unsure	2%	3%	5%	0%	3%	5%	0%	4%	2%	4%	3%	11
None	80%	81%	65%	83%	86%	74%	78%	81%	79%	80%	78%	316

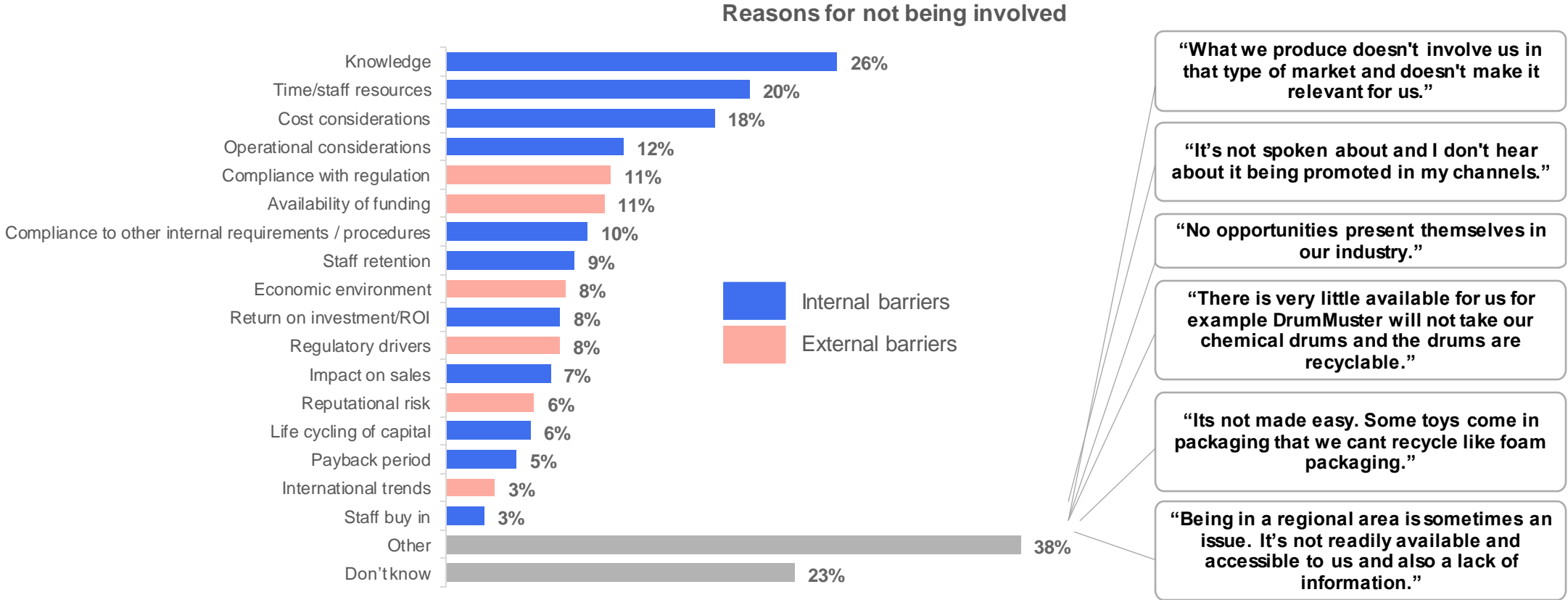
BARRIERS

8

Lack of knowledge, resourcing concerns and cost considerations are all key internal barriers to becoming involved in product stewardship initiatives

Internal concerns tend to outweigh external factors – however, external factors such as regulations, funding and the general economic environment are all being considered to some degree.

Among the large number of businesses surveyed who provided another reason for not being involved, many indicated that product stewardship was not relevant to their business.



Internal barriers: Lack of knowledge is a key internal barrier even for businesses already actively engaging in product stewardship

Column % Internal constraints	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Knowledge	22%	27%	34%	28%	26%	26%	29%	23%	26%	137
Time/staff resources	18%	21%	23%	26%	20%	20%	23%	15%	20%	102
Cost considerations	17%	20%	19%	15%	18%	18%	18%	9%	18%	97
Operational considerations	11%	12%	13%	15%	12%	13%	13%	11%	12%	63
Compliance to other internal requirements / procedures	11%	6%	12%	8%	10%	10%	9%	3%	10%	47
Staff retention	9%	6%	12%	6%	9%	8%	9%	5%	9%	42
Return on investment/ROI	11%	6%	4%	3%	8%	6%	7%	3%	8%	40
Impact on sales	10%	6%	5%	2%	7%	5%	7%	9%	7%	38
Life cycling of capital	8%	5%	2%	7%	6%	5%	5%	0%	6%	25
Payback period	6%	5%	2%	3%	5%	4%	5%	0%	5%	25
Staff buy in	3%	2%	1%	3%	3%	3%	2%	0%	3%	15

Internal barriers: Wholesalers are more likely to flag internal financial concerns as a barrier to engaging in product stewardship

Businesses surveyed that have higher turnover are significantly more concerned about time and staff resourcing costs.

Column % Internal constraints	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Knowledge	29%	32%	22%	26%	33%	23%	27%	27%	23%	39%	26%	137
Time/staff resources	26%	15%	13%	20%	29%	22%	21%	24%	13%	42% ▲	20%	102
Cost considerations	17%	14%	13%	19%	36% ▲	14%	19%	25%	12%	33%	18%	97
Operational considerations	14%	8%	8%	18%	17%	9%	11%	15%	8%	24%	12%	63
Compliance to other internal requirements / procedures	6%	8%	11%	11%	14%	7%	13%	11%	7%	16%	10%	47
Staff retention	8%	5%	6%	7%	16%	10%	12%	11%	2% ▼	19%	9%	42
Return on investment/ROI	5%	5%	9%	7%	19% ▲	3%	9%	17% ▲	3%	8%	8%	40
Impact on sales	9%	5%	6%	8%	14%	4%	10%	5%	3%	14%	7%	38
Life cycling of capital	5%	1%	8%	3%	8%	6%	8%	9%	2%	11%	6%	25
Payback period	6%	2%	3%	2%	14% ▲	3%	5%	9%	2%	10%	5%	25
Staff buy in	1%	0%	1%	4%	8% ▲	2%	1%	5%	2%	5%	3%	15

External barriers: Compliance with regulations is a minor external barrier, even for those already engaging with product stewardship

Column % External considerations	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Compliance with regulation	13%	10%	10%	11%	11%	10%	10%	9%	11%	57
Availability of funding	12%	9%	13%	6%	11%	10%	10%	6%	11%	53
Economic environment	7%	6%	12%	8%	8%	7%	9%	6%	8%	43
Regulatory drivers	9%	5%	8%	9%	8%	7%	6%	6%	8%	39
Reputational risk	9%	3%	5%	4%	6%	6%	5%	6%	6%	29
International trends	4%	2%	2%	4%	4%	4%	4%	3%	3%	16
Other	39%	42%	33%	38%	38%	39%	35%	39%	38%	199
Don't know	28%	17%	22%	25%	23%	24%	24%	32%	23%	101

External barriers: Wholesalers are generally more concerned about external factors compared to other industry types

Wholesale traders are particularly concerned about compliance with regulation, availability of funding and the economic environment.

Column % External considerations	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Compliance with regulation	11%	8%	8%	11%	19%	12%	13%	18%	4% ▼	21%	11%	57
Availability of funding	6%	4%	11%	11%	20%	10%	13%	16%	5%	16%	11%	53
Economic environment	3%	7%	7%	9%	18% ▲	5%	12%	12%	3%	13%	8%	43
Regulatory drivers	2%	6%	8%	8%	14%	6%	7%	14%	3%	13%	8%	39
Reputational risk	5%	3%	8%	4%	12%	4%	7%	10%	2%	9%	6%	29
International trends	2%	0%	5%	3%	7%	2%	4%	4%	1%	9%	3%	16
Other	45%	49%	27%	43%	34%	42%	45%	37%	49%	18% ▼	38%	199
Don't know	16%	9% ▼	41% ▲	15%	22%	22%	16%	23%	18%	19%	23%	101

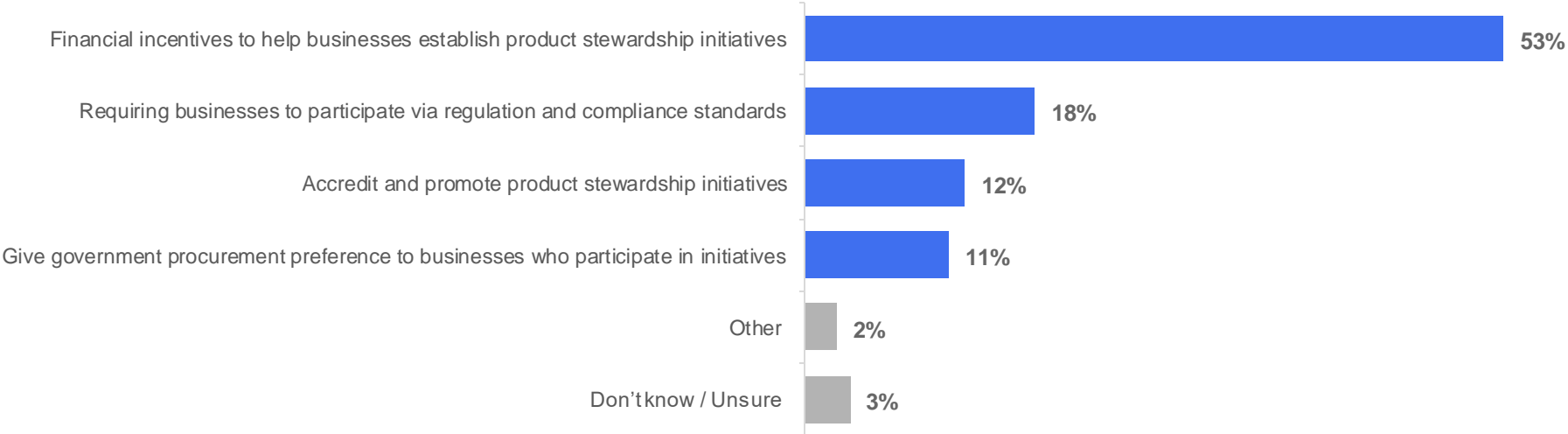
FUTURE OPPORTUNITIES

9

Businesses consider that financial incentives to help them establish product stewardship initiatives will be most effective in increasing involvement

Businesses surveyed indicated that they prefer financial incentives over regulation and compliance approaches to increase their involvement in initiatives. There is also little consideration that altering governments procurement practices would be most effective.

Perception of where Government policies could increase involvement



Even businesses that are already engaging with product stewardship initiatives perceive that provisions of financial incentives will be the most effective approach to increasing involvement

Column %	Initiative engagement level				Product stewardship lifecycle actions				Total	Sample size
	None	Low (1)	Medium (2-3)	High (4-14)	Production	Consumption	Post-consumption	Not engaging in PS actions		
Financial incentives to help businesses establish product stewardship initiatives	57%	52%	52%	47%	54%	54%	54%	40%	53%	320
Requiring businesses to participate via regulation and compliance standards	18%	18%	18%	14%	18%	17%	16%	14%	18%	100
Accredit and promote product stewardship initiatives	8%	12%	15%	18%	12%	12%	13%	28%	12%	72
Give government procurement preference to businesses who participate in initiatives	11%	10%	9%	16%	11%	10%	10%	10%	11%	64
Other	1%	3%	3%	4%	2%	2%	3%	0%	2%	17
Don't know / Unsure	4%	4%	3%	0%	3%	4%	4%	7%	3%	19

Accommodation and Food Services and businesses with higher turnover appear to place emphasis on regulation and compliance, rather than being highly focused on financial incentives

Column %	Industry						Annual turnover				Total	Sample size
	Repair & maintenance	Construction	Accomm and Food Services	Manufacturing	Wholesale Trade	Retail Trade	\$0-\$2,000,000	\$2,000,001-\$5,000,000	\$5,000,001-\$20,000,000	More than \$20,000,000		
Financial incentives to help businesses establish product stewardship initiatives	52%	59%	54%	55%	59%	47%	63%	56%	48%	47%	53%	320
Requiring businesses to participate via regulation and compliance standards	10%	13%	25%	17%	15%	18%	13%	13%	19%	21%	18%	100
Accredit and promote product stewardship initiatives	15%	11%	7%	11%	14%	15%	9%	12%	13%	15%	12%	72
Give government procurement preference to businesses who participate in initiatives	12%	13%	8%	11%	9%	13%	8%	13%	15%	12%	11%	64
Other	4%	2%	1%	4%	1%	3%	1%	3%	4%	1%	2%	17
Don't know / Unsure	7%	2%	4%	1%	2%	5%	6%	2%	2%	4%	3%	19

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