CommBank Manufacturing Insights

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Contents

State of play: Two decades of change in manufacturing	3
Foreword	4
Dialling up technology and sustainability investment	5
Resilient and poised for growth	6
A turning point for performance	7
Resilience shines through	8
Growth focus for the coming year	9
Digital transformation accelerates	10
Heightened digital focus set to continue	11
Making the most of new technology investment	12
The sustainable manufacturing imperative	13
Leadership in sustainable manufacturing	14
Tracking well against sustainability targets	15
Much work more to be done	16
The hurdles to overcome before realising the benefits	17
Conclusion	18
Manufacturers' metrics	19
Learn more	22



The state of play: Two decades of change in manufacturing

Over the past two decades, the attention on manufacturers' non-financial metrics has increased, with environmental, social and corporate governance (ESG) considerations gaining greater prominence.

For instance, in the early 2000s, listed manufacturers began receiving an influx of surveys about their greenhouse gas emissions. Large investors were trying to look into the future by understanding the policies, actions, and strategies that companies were implementing to cut their emissions.

Since then, growing numbers of manufacturers of all sizes have made sustainability a pillar of their business strategy. They are doing so because it makes good business sense. For many companies, the consequences of failing to do so – including losing their social licence to operate – are too great.

At the same time, there have been tremendous advances in technology. Automation, robotics, and artificial intelligence, to name a few, are transforming the manufacturing industry. Informed by advanced data analytics, new technologies and processes enable greater productivity and efficiencies.

The research suggests that both sustainable manufacturing and technology appear to be crucial to resilience. Examining the related drivers, strategies and outlook reveals what industry leaders are focused on next.



Foreword

Welcome to the inaugural edition of CommBank Manufacturing Insights, which examines the key trends reshaping the manufacturing sector as we emerge from the events of the past two years. This is part of our commitment to sharing the latest insights to help manufacturers navigate the growth opportunities and challenges that lie ahead.

The report itself tells a positive story about how well manufacturers are responding to disruption, the strategies they are using to keep pace and the confidence many have in the future.

Despite the mixed impact of the pandemic on financial performance, manufacturers kept investing and are now focused on growth. They face ongoing cost pressures, supply chain issues and labour shortages, but these are where investment is being directed.

We saw digital transformation accelerate due to the pandemic, and 74% of manufacturers will be lifting their technology investments again this year. This is designed to lift productivity, revenue, and profit. However, harnessing technology to get closer to suppliers, employees and customers is also front-of-mind given related pressures.

Sustainability is also high on the agenda and increasingly entrenched in long-term business strategy. As one manufacturer says, *"it is a growing expectation of investors, regulators, employees and customers."* While they genuinely want to make a positive impact, manufacturers are also balancing this with efficiency dividends and financial benefits.

Nevertheless, employee wellbeing and fostering a supportive culture are the most common initiatives. Technology by itself is not enough. It is telling that during the pandemic, the manufacturers that adapted best were encouraging staff to offer ideas for improvement and offering new technologies to enhance collaboration. This report was developed as a guide for manufacturers looking to a brighter future, and pursuing new ways to adapt and grow. Alongside the industry expertise of our bankers, we hope this can help manufacturers plan more confidently and evolve their busines.



Jerry Macey

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About CommBank Manufacturing Insights

CommBank Manufacturing Insights is an exclusive, wide-ranging analysis of Australian manufacturers. This edition examines how manufacturers are emerging from the pandemic, their progress towards digital transformation, and adoption of sustainability initiatives. It is based on an online quantitative survey conducted by ACA Research on behalf of the Commonwealth Bank. The survey was conducted in January 2022 and was completed by 300 key influencers or decision-makers from Australia's manufacturing industry, including 89% in metropolitan areas and 11% in regional Australia. Of the sample, 29% have current annual business revenue of \$5 million to \$20 million, 33% have turnover of \$20 million, and 37% have turnover exceeding \$200 million. The main products manufactured are: technology and clean energy (26%); non-metallic products (e.g. glass, ceramics, plaster, textiles, etc) (15%); food & beverage (13%); metallics & fabricated products & furniture (12%); automotive, machinery, transport, defence & space (12%); petroleum, chemicals, plastics and pharmaceuticals (11%) and medical & healthcare (10%). Of the respondents, 38% are based in New South Wales/ACT, 33% in Victoria/Tasmania, 15% in Queensland, 8% in Western Australia and 6% in South Australia/Northern Territory.

Dialling up technology and sustainability investment

The inaugural edition of CommBank Manufacturing Insights examines how the manufacturing sector performed during the pandemic and looks at its approach to business over the coming 12 months. The pandemic accelerated digital transformation strategies, and manufactures intend to step up technology investment even further over the next year. Meanwhile, growing numbers of manufacturing companies view sustainable manufacturing as a key pillar of their business strategy. Despite this widespread adoption of sustainability, numerous untapped opportunities remain to increase sustainability across manufacturing organisations. The companies that are most successful expect to gain a competitive edge, closer engagement with stakeholders, and to boost their top and bottom lines.



Resilient and poised for growth

Investing in people, processes and supply chain efficiencies

Australia's manufacturing sector adapted well to the disruption of the pandemic. This provides the sector with a strong foundation for growth as the economic recovery gains momentum.



A turning point for performance

Our Manufacturing Insights research finds that the pandemic's impact on the sector has been uneven and is influencing manufacturers' expectations about the coming year.

For example, we asked manufacturers about their expectations for revenue, profit, employee numbers and capital expenditure in the next 12 months. Optimism about growth in these four areas is much higher among the 41% of manufacturers that experienced falling revenue. Despite this divergent outlook, manufacturers on average are more confident about future revenues and profit, hiring and investment compared with their experience during the pandemic.

Overall, 58% of manufacturers now believe revenues will rise, and 53% expect higher profit than realised in the past two years. The proportion of firms experiencing a decline is consequently shrinking. This shift in the performance outlook aligns with the finding that most manufacturers have a brighter outlook for economic conditions and are positioning their businesses to capitalise.

The one area that has not significantly changed is operating costs. After 56% of manufacturers reported rising costs since the pandemic began, a similar majority (57%) are bracing for that to continue.

In response to the opportunities and challenges, moderately more manufacturers also expect to lift capital expenditure and investment into priority areas such as technology, sustainability and efficiency. These will be examined later in this report.

Brighter outlook for most performance indicators

Comparing financial and operational performance metrics during the pandemic with the outlook for the year ahead^{*} *Only those responding increase and decrease shown in the chart, with the remainder answering 'about the same'



Decrease Increase

Resilience shines through

Notwithstanding the mixed impact of the past two years' events, 84% of the manufacturers believe they adapted well or extremely well to pandemicinduced opportunities and challenges. This was the case for 98% of the largest organisations, namely those with turnover exceeding \$200 million, followed by 80% of smaller manufacturers with \$5 million to \$20 million turnover and 73% of those with \$20 million to \$200 million in annual turnover.

To shore up their business and exploit growth opportunities, manufacturers invested in an average of 5.1 initiatives. The most common were employee engagement, strengthening relationships with suppliers and partners to bolster supply chains, and investing in manufacturing or processing equipment and technologies to support growth. As we will learn shortly, these investments align with the biggest challenges that manufacturers face.

Drawing on their financial strength, larger organisations invested in a wider range of initiatives – six on average. They also stand out for investing in environmental, social, and corporate governance (ESG) and systems and processes to collect and use data more effectively.

However, it was the organisations that adapted extremely well to the pandemic that invested most heavily to realise growth opportunities. Of note is their focus on encouraging employees to offer ideas for operational improvements, along with new business technologies to enhance efficiency, productivity, or collaboration. Arguably, these are other ways to engage employees while at the same time lifting productivity and efficiencies.

Manufacturers that adapted extremely well were also most likely to have adopted their business strategies to remain competitive and implemented new sales and marketing approaches. This and the factors above may help explain why confidence in the sector is building.

"The vast majority of manufacturers have proved to be resilient despite many experiencing a drop in revenue or profit. That's a consequence of the astute investment strategies the sector has adopted to navigate headwinds and capture the opportunities presented by the pandemic."

Jerry Macey

Executive Manager Consumer and Diversified Industries Business Banking Commonwealth Bank of Australia

Investing to navigate challenges and opportunities

Initiatives that manufacturers are investing in to capture growth opportunities

Employee engagement including culture,	41%
purpose and flexible work	
Working with suppliers/partners to enhance supply chain efficiency	39%
New equipment/technologies to support growth	38%
Adapting/refreshing sales & marketing approaches	35%
Adapting systems and processes to drive greater efficiency, productivity and quality	35%
Adapting business strategy/model to maintain/increase competitiveness	34%
Reducing/restructuring operational costs and/or reduced debt	34%
Investing in environmental, social and corporate governance (ESG) initiatives	33%
Encouraging employees to offer ideas for organisational improvements	33%
New technologies to enhance efficiency, productivity and/or collaboration	33%
Systems and processes to more effectively collect, and utilise data	32%
Expanding product range and/or diversifying into new categories	31%
Using business intelligence and insight programs to enhance growth	25%
More effective ecommerce capabilities	24%
New export markets	22%
Acquiring and/or merging with another business	16%

Calibrating for growth

The majority of the manufacturers surveyed expect the domestic and global economies to strengthen over the coming 12 months, with the largest businesses by far the most optimistic. Against this constructive backdrop, 65% of manufacturers will concentrate on growth in the coming year, and 32% seek to maintain revenues.

The proportion of growth-focused organisations is highest among the largest manufacturers (76%), the group that most likely experienced falling revenue during the pandemic, followed by mid-sized (62%) and smaller (55%) businesses.

Regardless of size, manufacturers faced increasing supplier costs, supply chain issues, and rising costs associated with transport and distribution. Another critical factor to overcome is the labour shortages that currently impact so many parts of the economy. As we saw earlier, these were the areas where manufacturers prioritised investment over the last two years. Mid-sized organisations turning over between \$20 million and \$200 million are feeling these supply chain and staffing issues most acutely.

In contrast, the largest manufacturers are more alert to regulatory and legislative developments that may impact their growth aspirations. They are also more likely to cite challenges around keeping pace with new technologies and innovations, and flexing capacity to match demand.

Confidence in the year ahead



The barriers to growth

Manufacturers' key challenges to achieving business objectives in the next 12 months



Digital transformation accelerates

Technology flourishes across organisations

Investment in technology stepped up during the pandemic and is expected to continue at pace. Beyond the potential benefits of productivity, efficiency and profit, manufacturers are now looking to drive broader business outcomes.



Heightened technology focus set to continue

Australia's manufacturing sector was on a digital transformation journey well before the pandemic began. Emerging technologies to optimise processes and operational outcomes were becoming increasingly commonplace, particularly among advanced manufacturers.

Even so, 72% of manufacturers accelerated their digital transformation amid the pandemic, including 34% that accelerated their digitisation significantly. This percentage is much higher (around 60%) among the manufacturers that adapted extremely well, which tended to be the largest manufacturers. In contrast, only 9% of those manufacturers that did not adapt so well dramatically stepped up their digital transformation.

To support their digital transformation programs, 67% of manufacturers have lifted technology investment since the pandemic began, and 74% plan to boost their spend in the next 12 months. This widespread move to fast-track technology investment and the intended benefits suggests that it is seen as essential to remaining competitive and differentiated.

In line with the earlier findings about the initiatives implemented to take advantage of the pandemic's growth opportunities, the top areas for technology investment were process control to improve efficiencies, and supply chain and logistics to increase transparency. Other priority areas were leveraging data to be more efficient and effective, plus Human Resources Management (HRM) and employee engagement, as well as office productivity, collaboration, and internal communications.

As expected, the largest manufacturers prioritised a wider range of technology investments and are driving innovation across the industry. Meanwhile, midsized manufacturers focused on boosting efficiencies through prioritising process control, office productivity and systems integration.

Digital transformation supporting resilience



of the manufacturing sector have accelerated their digital transformation during the pandemic, of which

34% that have invested in significant acceleration

Technology budgets expected to rise

Change to technology investment during the pandemic and in the next 12 months



Priority areas for technology investment

Top 10 technologies and business processes prioritised during the pandemic



Making the most of new technology investment

Currently, the three most widely adopted new technologies among our sample of manufacturers are those relating to mobile, connectivity, the Internet of Things (28%), big data and advanced analytics (26%) and intelligent automation and Robotic Process Automation (24%). Their investment intentions over the next two to three years indicate these will be joined by artificial intelligence and machine learning, autonomous vehicles and machines, and 3D printing.

Their investments in technology are primarily intended to boost productivity and lift revenue and profit. However, manufacturers are also making these investments with other stakeholders in mind. They expect the technology will result in more effective supplier relationships, as well as improved employee and customer experience and engagement. These motivations for technology investment are one manifestation of the rise in sustainable manufacturing.

It is interesting to note that the largest manufacturers also expect their technology investment to bolster operational resilience, increase their ability to flex production, and improve energy efficiency.

However, with most manufacturers planning to increase technology budgets and adopt emerging digital solutions, they must overcome some headwinds. A lack of technology expertise, integration difficulties with existing systems, and a general lack of resources amid competing priorities are commonly cited challenges. Being further advanced in digital transformation, the largest manufacturers are more likely to be facing these challenges than small and mid-sized businesses.

Despite these challenges, manufacturers generally rate their technology capability at least comparable with their domestic and global competitors. That said, around one in four of small- and mid-sized manufacturers, and those in regional areas, acknowledge that their competitors offshore may have better capabilities.

Emerging technology adoption

Adoption of emerging technologies to enhance operating models and production processes over the next 2-3 years



Outcomes from emerging technologies

The top five achieved or expected business outcomes from investment in emerging technology initiatives

	Increased productivity	38%
\$	Increased revenue or profit	34%
\checkmark	More effective supplier relationships	29%
	Better employee experience or engagement	29%
	Better customer experience or engagement	28%

Sustainable manufacturing ascends

The ESG journey is well underway

Many forces are supporting the increasing adoption of sustainability initiatives among manufacturers, but the prospect of better outcomes for the world they operate in, the stakeholders they engage with, and business performance are central drivers.



Leadership in sustainable manufacturing

The notion that manufacturing operations can be energy and labour intensive are just two factors that bring environmental, social and governance issues to the fore.

Encouragingly, more than 70% of manufacturers believe that the sector is responding and adapting well to sustainability opportunities and challenges. The percentage is highest among large manufacturers (84%) and lowest among mid-sized businesses, where 41% do not think the sector is responding well.

Turning to their own focus on sustainable manufacturing, the sector can be segmented into three groups:



Leaders - 38% of manufacturers say sustainable manufacturing is important to their business strategy. They express the greatest concern about sustainability and are more likely to be large organisations.



Followers - a further 45% of businesses rate sustainable manufacturing as an important factor. Mid-sized organisations are more likely to fall into this category.



Laggards - the remaining 17% do not regard sustainability as an imperative and tend to be small and mid-sized businesses and those based in regional locations.

The leaders and followers embrace sustainable manufacturing largely due to market and consumer demand and a desire to fulfil their environmental and social duty. However, they also recognise the prospect of economic gains and greater business efficiencies.

In contrast, laggards have more pressing strategic priorities, are more likely to regard ESG initiatives as a public relations exercise while others assess sustainability issues as too difficult or costly. With a higher incidence of laggards among smaller manufacturers it follows that some are conscious of the cost involved to implement sustainability initiatives and where to invest their often limited resources.

Why sustainable manufacturing matters

The drivers behind the importance of sustainability manufacturing



Tracking well against sustainability targets

Manufacturers have implemented a broad array of sustainability initiatives, and plenty more are in the pipeline. Several initiatives have clear economic and efficiency benefits, while others extend beyond the organisation to encompass the supply chain, such as ethical procurement practices and using more sustainable materials in production.

However, it is manufacturers' workplace and people that are the most significant focus. More than 75% of manufacturers are improving workplace safety and supporting employees' well-being while also promoting an inclusive and diverse culture. The largest manufacturers are leading the way in extending the people-related initiatives to addressing and eliminating social issues within their organisation and across their supply chains. Note that reducing emissions and carbon footprint are not currently among manufacturers' top ten sustainability initiatives.

Overall, manufacturers' efforts to become more sustainable are tracking ahead of expectations and targets, bringing the potential for positive business outcomes closer. Of those that have already adopted sustainability initiatives, most manufacturers are progressing faster than expected across 14 of the 17 initiatives the research examined.

In particular, product redesign and innovation initiatives to optimise sustainability and address social issues across the organisation and supply chain are progressing much faster than planned. Of the manufacturers making a transition to low emission electric vehicles, investing in on-site renewable generation, or sourcing sustainable materials, more than 60% believe they are running ahead of plan.

Advancing sustainability initiatives

The sustainability initiatives manufacturers have or will adopt and the proportion who say the rate of progress is faster than expected

Increasing workplace health and safety, and employee wellbeing	55%		35%	<mark>55</mark> %
Fostering a work culture of inclusivity and diversity	53%		32%	<mark>54</mark> %
Reducing operational waste and responsible waste management	50%		39%	<mark>4</mark> 7%
Reducing or recycling packaging	49%		38%	<mark>49</mark> %
Reducing overall energy usage or increasing energy efficiency across the organisation	43%		6%	<mark>4</mark> 8%
Addressing and eliminating social issues across the organisation and supplier ecosystem	43%	33	%	<mark>55</mark> %
Reducing or recycling water	Reducing or recycling water 41% 44%		1%	58%
Increasing use of recycled materials in the production cycle	40%	39	%	<mark>52</mark> %
Implementing sustainable & ethical procurement practices across the supply chain	40%	44	%	<mark>55</mark> %
Product redesign and innovation to optimise sustainability	38%	449	%	<mark>56</mark> %
Reducing emissions or carbon footprint	38%	44	%	<mark>57</mark> %
Implementing technologies to accelerate sustainability improvements	35%	44%	,)	<mark>56</mark> %
Using fixed replacement cycles to ensure old or inefficient equipment is updated regularly	35%	42%		<mark>53</mark> %
Increasing the proportion of renewable energy consumed	34%	44%		<mark>55</mark> %
Investing in on-site renewable generation	32%	41%		<mark>63%</mark>
Sourcing more sustainable materials across the product portfolio	30%	42%		60%
Transitioning to low-emission or electric vehicles	20%	41%		65%
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Adopted

Plan to adopt

% faster than expected

More work to be done

The manufacturing sector recognises that its sustainability journey will not end when it reaches its current goals. Manufacturers, particularly the largest ones, have identified a host of other ways to make a positive impact and ensure their organisations are more sustainable.

They see their biggest opportunities in operations and manufacturing process, transport, shipping and logistics and supply chain partners. Employee practices, packaging, buildings and vehicles also offer possibilities for improved sustainability practices and outcomes.

As noted earlier, reducing emissions and carbon footprint are not among manufacturers' top ten sustainability initiatives. The research finds that 25% of manufacturers surveyed do not intend to set an emissions reduction target while 25% plan to but have not yet.

Of the 45% of manufacturers that have an emissions reduction target, 73% are aiming for net zero, while 90% expect to hit their emissions reduction targets by 2030.

Once again, large manufacturers are leading the charge: 79% have set a target, with 77% of them targeting net zero emissions. In contrast, 40% of small manufacturers and 32% of mid-sized ones do not intend to adopt targets for emissions reduction. It is interesting to see though, that among the 30% of small manufacturers with an emissions reduction target, 88% are aiming for net zero.

Sustainability opportunities

The biggest opportunities to increase sustainability for manufacturers

0	Operations and manufacturing process	63%
R	Transport, shipping and logistics	44%
	Supply chain partners	42%
	Employee practices	36%
	Packaging	35%
	Buildings	27%
	Vehicles	22%

Setting emissions targets

Manufacturers with a carbon emission reduction target in place

5%	3%	8%	<u>3%</u> 7%
28%	40%	32%	12%
50%	27%	38%	79%
17%	30%	22%	
Total	\$5m to \$20m	\$20m to \$200m	\$200m plus

Yes ■ No, but we plan to introduce one ■ No, and no plans to introduce ■ Don't know

The hurdles to overcome before realising the benefits

We learnt earlier that manufacturers expect some of their work towards sustainability will lift productivity and improve engagement with employers, suppliers and customers. This aligns with another finding that they are achieving, or hope to achieve, better competitiveness, more robust stakeholder engagement and improved financial outcomes.

The two single most important outcomes they seek are boosting revenue and profit and positively impacting the planet and society. This suggests that manufacturers understand why they have embarked on the sustainability journey.

Unfortunately, investing in sustainability is not always straightforward. Manufacturers often lack internal expertise (nominated by 44% of respondents) and encounter funding restraints (40%). Sometimes an overall strategy and governance framework is absent (40%), or the benefits of sustainability investments are unclear (26%). The largest organisations, the ones leading the push to sustainability, are the most aware of these challenges.

The most significant barrier nominated is a lack of financial government incentives, cited by 48%. While more than 80% of manufacturers know that government grants and support exist, only 39% have accessed them. Large manufacturers and those with emissions reduction targets are far more likely to have secured such incentives (65%), while small manufacturers tend to be the least likely to have accessed available grants (27%).

Balancing business outcomes with impact

Ranking the importance of the outcomes that sustainability can drive



Conclusion

Manufacturers have proved to be resilient and adaptable in the face of the pandemic. Rather than suspending investment, they continued to channel resources towards employee engagement, strengthening relationships with supply chain partners, and new manufacturing or processing equipment and technologies. This has positioned them well to overcome the current challenges around cost pressures, supply chain disruption and staff shortages, and to concentrate on growing their business.

These themes are also evident in their investments in technology as digital transformation accelerates. Notwithstanding a lack of technology expertise, funding restraints and systems integration difficulties, manufacturers' favoured areas for technology investment are process control, supply chain and logistics, data management, and human resources management (HRM) employee engagement systems.

Partly in response to market and customer demand, manufacturers are reshaping their organisations to be more sustainable. The current focus is workplace safety and culture, reducing waste, and using less energy, packaging and water. However, manufacturers have a long pipeline of activities to enhance their ESG credentials among stakeholders, accompanied by efficiencies and financial benefits. Some of these positive outcomes are already being realised as businesses progress towards their targets faster than expected.

Both digital transformation and sustainable manufacturing have become pillars of business strategy. Manufacturers understand what needs to be done and why and the substantial rewards for those that get it right.

Manufacturers' metrics

Benchmarking performance and perspectives

These data points from our survey outline the experience of manufacturers across different segments, helping you compare your company's strategies and performance with those of peers.

Revenue during the pandemic



Growth orientation among manufacturers



Signficantly increased Slightly increased About the same

Slightly decreased

Significantly decreased

Concentrate on growth Maintain current revenue Downsize Exit – close or sell the business

Accelerated digital transformation during the pandemic



Yes, significantly Yes, somewhat

Establishment of carbon emission reduction targets



Learn more about how we can support your manufacturing business

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