



## STABILISATION IN 2H2025, GRADUAL IMPROVEMENT EXPECTED IN 1H2026

Issue No. 1/2026

Released on March 17, 2026

### KEY RESULTS:

<b>BUSINESS ACTIVITY – 2H2025</b>	<ul style="list-style-type: none"><li>• Manufacturing activity stabilised following the sharp slowdown in 1H2025</li><li>• Production and capacity utilisation rebounded modestly, signalling improving operating conditions</li><li>• Local and export sales improved but remained below the neutral threshold, indicating continued demand weakness</li><li>• Production costs remained elevated despite moderating from earlier peaks</li><li>• Capital investment edged higher while employment remained broadly stable, reflecting cautious sentiment</li></ul>
<b>BUSINESS ACTIVITY – OUTLOOK 1H2026</b>	<ul style="list-style-type: none"><li>• Manufacturers expect operating conditions to improve gradually in 1H2026</li><li>• Production and capacity utilisation are projected to strengthen further as activity stabilises</li><li>• Domestic demand is expected to remain subdued while export markets stabilise modestly</li><li>• Cost pressures are likely to persist and continue weighing on profit margins</li><li>• Investment and employment are expected to improve slightly, although expansion plans remain cautious</li></ul>
<b>REVENUE AND PROFIT OUTLOOK – 1H2026</b>	<ul style="list-style-type: none"><li>• Revenue expectations remain moderately positive, with nearly half of firms anticipating higher sales</li><li>• Most firms expecting higher revenue anticipate modest gains, indicating gradual rather than strong expansion</li><li>• Profit outlook remains more mixed as elevated operating costs continue to constrain margins</li><li>• Diverging revenue and profit expectations underscore persistent cost pressures</li></ul>
<b>EXPECTED BUSINESS CONDITIONS – 1H2026 VS 2H2025</b>	<ul style="list-style-type: none"><li>• Firms anticipate gradual improvement in company-level conditions</li><li>• Industry outlook remains mixed, suggesting uneven recovery across sectors</li><li>• Global economic sentiment remains cautious, with more firms expecting deterioration than improvement</li><li>• Domestic economic conditions are expected to remain broadly stable but uncertain</li><li>• Technology deployment continues to advance as firms pursue productivity gains</li></ul>
<b>KEY BUSINESS CHALLENGES – 1H2026</b>	<ul style="list-style-type: none"><li>• Rising input costs remain the most widely cited constraint, followed by intensifying competition</li><li>• Weak demand and customer acquisition challenges highlight fragile market conditions</li><li>• Changes in global trade policies and geopolitical developments remain key external risks</li><li>• Labour availability and regulatory burdens continue to affect operational conditions</li><li>• Financial constraints and specialised labour shortages were cited less frequently but remain concerns for some firms</li></ul>
<b>KEY BUSINESS OPPORTUNITIES – 1H2026</b>	<ul style="list-style-type: none"><li>• Firms see the greatest opportunities in cost control and expanding product portfolios</li><li>• Export expansion remains a major growth avenue through both new and existing markets</li><li>• Stronger marketing capabilities and digital technologies are viewed as important drivers of growth</li><li>• Business model innovation and dynamic pricing strategies are emerging tools to enhance competitiveness</li><li>• Opportunities linked to sustainability, integration and niche market specialisation remain less widely cited</li></ul>

<b>KEY RESULTS:</b>	
<b>INDUSTRY 4.0 ADOPTION</b>	<ul style="list-style-type: none"> <li>Industry 4.0 adoption improves; 38% of respondents report implementation, up from 32% in 1H2025</li> <li>System integration, Internet of Things (IoT) and cloud computing are the most widely adopted technologies</li> <li>Artificial intelligence, big data analytics and cybersecurity adoption are growing but uneven</li> <li>Advanced technologies such as additive manufacturing, simulation and augmented reality remain niche</li> </ul>
<b>MANPOWER STRATEGIES – 2026</b>	<ul style="list-style-type: none"> <li>Upskilling and reskilling of existing employees (67% respondents) is the most widely adopted workforce strategy</li> <li>Firms are strengthening talent pipelines through interns and industrial trainees (36%) and recruitment of TVET graduates (24%)</li> <li>Automation and digitalisation (51%) are being adopted to reduce reliance on manpower and improve productivity</li> <li>Foreign workers remain important (34%), particularly where domestic labour supply is limited</li> <li>Firms highlighted the importance of government support for automation incentives, workforce training and clearer foreign worker policies</li> </ul>
<b>CIRCULAR ECONOMY</b>	<ul style="list-style-type: none"> <li>Awareness of the circular economy remains moderate, with 40% of respondents somewhat familiar but only 6% very familiar with the concept</li> <li>Adoption remains limited, with 16% of respondents implementing circular practices while 36% have yet to begin implementation</li> <li>Circular initiatives are largely focused on waste reduction and recycling, with fewer firms adopting product redesign or take-back programmes</li> <li>Awareness of Extended Producer Responsibility (EPR) regulations remains uneven, with 37% of respondents indicating they are not aware of the requirements</li> <li>Preparedness for EPR compliance remains limited, with most respondents reporting only moderate or limited readiness</li> <li>Unclear regulations and high implementation costs are the most frequently cited barriers to circular economy and EPR initiatives</li> <li>Most respondents (39%) expect moderate cost impacts from EPR implementation, although uncertainty remains high</li> <li>Views on EPR implementation remain mixed, with many firms still unsure about phased or sector-specific approaches</li> </ul>
<b>UNITED STATES RECIPROCAL TARIFFS - IMPACT ON MALAYSIAN EXPORTS</b>	<ul style="list-style-type: none"> <li>49% of respondents reported no material impact from US reciprocal tariffs since August 2025, suggesting that the full effects may take time to emerge</li> <li>25% of exporters are experiencing margin pressure and reduced orders from US buyers or intermediate customers</li> <li>Indirect supply chain effects are emerging, including reduced orders and requests for price reductions from downstream exporters</li> <li>Loss of price competitiveness against alternative sourcing locations is a key concern for affected respondents</li> <li>53% of respondents indicated that the overall impact of the tariffs remains unclear or still emerging</li> </ul>
<b>SST IMPACT ON EXPORTS</b>	<ul style="list-style-type: none"> <li>SST is affecting export competitiveness, with 36% of exporters reporting moderate margin compression and 16% reporting significant impact on securing export orders</li> <li>Service tax on logistics, freight and warehousing is the most common SST cost source, cited by 71% of exporters</li> <li>SST costs are also embedded through suppliers and input services, including supplier prices (51% of respondents), professional services (49%) and raw materials or components (47%)</li> <li>Indirect exports remain significant, with 18% reporting a substantial share of exports via intermediaries and 24% reporting limited indirect exports</li> <li>For indirect exporters, 42% absorb SST costs while 39% report that SST relief cannot be clearly obtained under current rules</li> <li>Exporters prioritise SST reforms, particularly exemptions for key input services (53%), clearer SST rules for indirect exports (42%) and targeted SST relief for export-related services (40%)</li> </ul>

**KEY RESULTS:**

<p><b>SMART TECHNOLOGY UPTAKE PROGRAMME (SMART TECH UP)</b></p>	<ul style="list-style-type: none"> <li>• Awareness of the Smart Tech Up programme remains limited, with only 25% of respondents indicating that they are familiar with the initiative</li> <li>• Programme uptake remains modest, with only 23% of respondents aware of the programme reporting that they have applied for Smart Tech Up</li> <li>• Eligibility constraints and application complexity are the most commonly cited barriers to participation</li> <li>• Respondents also highlighted technical capability gaps and financial constraints in meeting matching funding requirements</li> <li>• The findings suggest that stronger outreach and simplified procedures may be needed to improve programme uptake</li> </ul>
<p><b>EXTERNAL MARKET PRESSURES AND REGIONAL COMPETITIVENESS</b></p>	<ul style="list-style-type: none"> <li>• Stronger Ringgit has compressed profit margins for many respondents (50%) and reduced export price competitiveness (32%)</li> <li>• Firms are responding mainly by absorbing costs (44%) or adjusting export pricing (26%), while some are increasing currency risk management (18%)</li> <li>• Competition from Chinese products remains intense, with 46% reporting price or margin pressure and 42% indicating loss of domestic market share</li> <li>• Manufacturers are responding by improving operational efficiency (46%), differentiating products (45%) and adjusting pricing strategies (38%)</li> <li>• ASEAN economies are viewed both as competitors and supply chain partners, with firms increasing sourcing (28%) and expanding partnerships (24%) within the region</li> </ul>

Manufacturing activity stabilised in the second half of 2025 following the slowdown recorded earlier in the year. Operational indicators such as production and capacity utilisation improved modestly as firms adjusted to evolving business conditions. However, demand recovery remains uneven, with both domestic and export sales continuing to lag while cost pressures remain elevated. Looking ahead, manufacturers expect gradual improvement in operating conditions, although uncertainties surrounding demand and input costs may continue to temper expansion.

Indicators	<i>FMM BUSINESS CONDITIONS INDEX VALUES</i>							
	Current (Compared to 6 months ago)				Looking forward (Next 6 months)			
	1H2024	2H2024	1H2025	2H2025	2H2024	1H2025	2H2025	1H2026
Business conditions	93	98	77	<b>103</b>	106	101	89	<b>104</b>
Local sales	81	88	69	<b>94</b>	95	94	83	<b>95</b>
Export sales	85	92	77	<b>93</b>	100	97	84	<b>100</b>
Production volume	91	99	83	<b>102</b>	110	109	91	<b>106</b>
Capacity utilisation	93	96	80	<b>102</b>	108	106	90	<b>106</b>
Capital investment	107	108	102	<b>103</b>	116	116	108	<b>110</b>
Number of employees	98	98	97	<b>98</b>	105	106	99	<b>106</b>
Cost of production	155	144	158	<b>146</b>	162	167	163	<b>150</b>

**Stabilisation Emerges After Earlier Weakness**

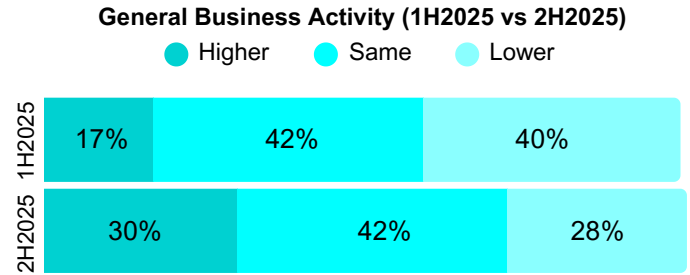
Manufacturing conditions improved modestly in the second half of 2025 following the slowdown recorded earlier in the year. Several operational indicators, including business activity, production and capacity utilisation, rebounded and moved slightly above the neutral threshold, suggesting that firms were gradually stabilising operations.

Despite these improvements, demand conditions remained uneven. Both local and export sales continued to stay below equilibrium levels, indicating that demand recovery remains fragile across many industries. At the same time, cost pressures remained elevated despite moderating slightly from earlier peaks, continuing to weigh on profit margins.

Taken together, the results suggest that the sector has entered a phase of stabilisation rather than a broad-based recovery, as firms maintain cautious operating strategies amid persistent cost pressures and uncertain demand conditions.

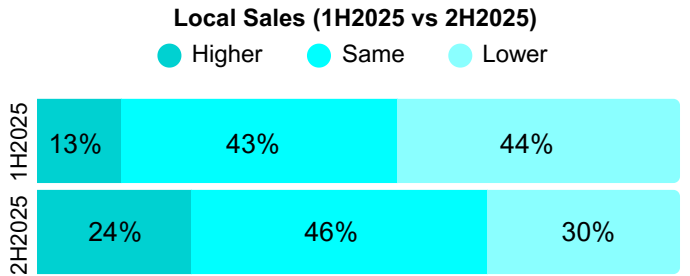
**Business Conditions Rebound as Stabilisation Emerges**

The general business activity index rebounded to 103 in 2H2025, recovering from the contractionary reading of 77 in 1H2025. About 30% of respondents reported higher business activity, while 42% recorded stable conditions and 28% experienced declines. The improvement points to manufacturers beginning to stabilise operations following the earlier slowdown, although the large share reporting stable conditions shows that expansion remains moderate.



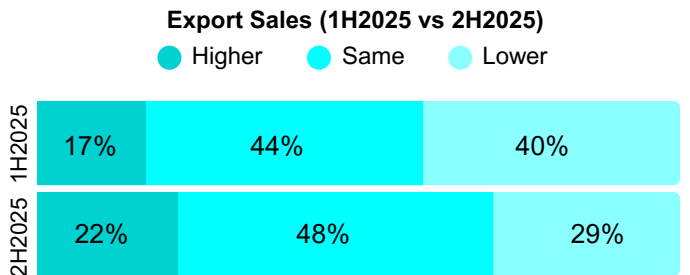
**Domestic Demand Remains Uneven Despite Modest Improvement**

Domestic demand conditions improved slightly but remained subdued overall. The local sales index rose to 94, compared with 69 in the previous survey, but remained below the neutral threshold. Approximately 24% of respondents reported higher local sales, while 46% recorded stable sales and 30% reported declines. These results show that domestic demand has stabilised somewhat but remains fragile across many segments of the manufacturing sector.



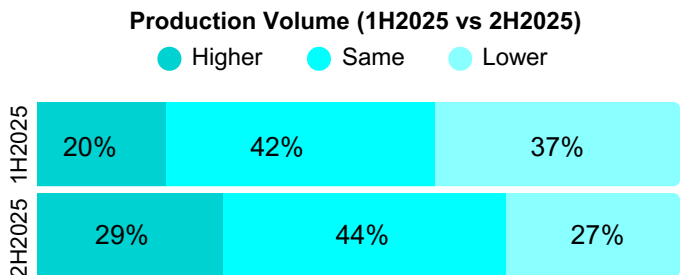
**Export Performance Stabilises Amid Global Uncertainty**

Export performance also showed modest improvement but continued to face external headwinds. The export sales index rose to 93, up from 77 previously. Around 22% of respondents reported higher export sales, while 48% recorded stable export performance and 29% experienced declines. These findings suggest that global demand conditions have stabilised somewhat, although uncertainties in international markets continue to weigh on export growth.



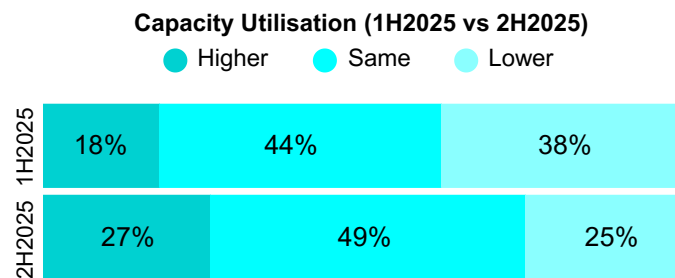
**Production Rebounds as Operating Conditions Stabilise**

Production activity strengthened in the second half of the year. The production volume index increased to 102, compared with 83 in the previous period. About 29% of respondents reported higher production, while 44% maintained similar output levels and 27% recorded declines. The improvement reflects manufacturers gradually increasing production in line with stabilising business conditions.



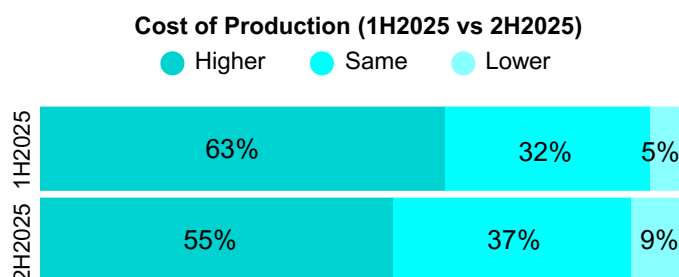
## Capacity Utilisation Strengthens with Rising Output

Capacity utilisation also improved alongside rising production activity. The capacity utilisation index rose to 102, up from 80 previously. Approximately 27% of respondents reported higher utilisation, while 49% recorded no change and 25% reported lower utilisation. This suggests that operating conditions have improved, although spare capacity remains evident in parts of the sector.



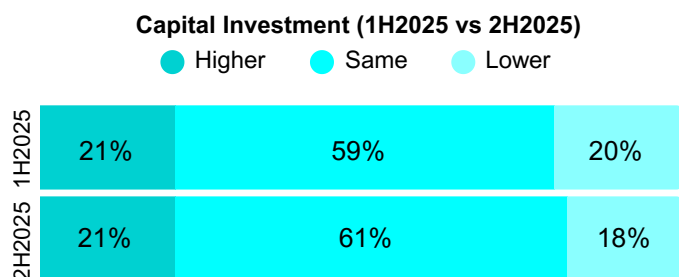
## Cost Pressures Remain Elevated Despite Slight Moderation

Cost pressures remain a key challenge for manufacturers. The production cost index stood at 146, easing slightly from 158 previously but remaining well above the neutral threshold. More than half of respondents (55%) reported higher production costs, while 37% recorded stable costs and 9% reported lower costs. These results highlight that input cost pressures remain elevated and continue to constrain profit margins.



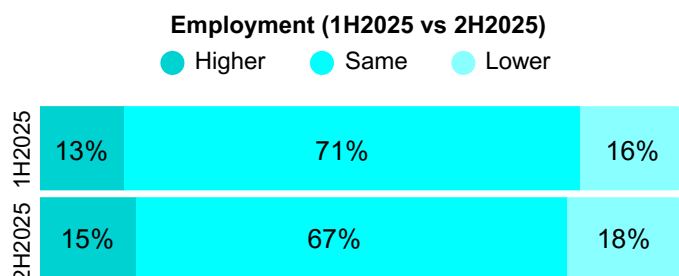
## Investment Holds Steady as Firms Prioritise Stability

Capital investment sentiment improved slightly in the second half of 2025. The capital investment index rose to 103. Around 21% of respondents increased investment spending, while 61% maintained current investment levels and 18% reduced investment. This suggests that firms are maintaining essential capital expenditure while remaining cautious about large-scale expansion.



## Employment Remains Stable as Firms Maintain Workforce Levels

Employment conditions remained broadly stable. The employment index stood at 98, close to the neutral threshold and up marginally from the prior period's 97. About 15% of respondents increased employment, while 67% maintained existing workforce levels and 18% reported workforce reductions. These results show that manufacturers are largely maintaining workforce stability while monitoring evolving demand conditions.



## OUTLOOK FOR 1H2026

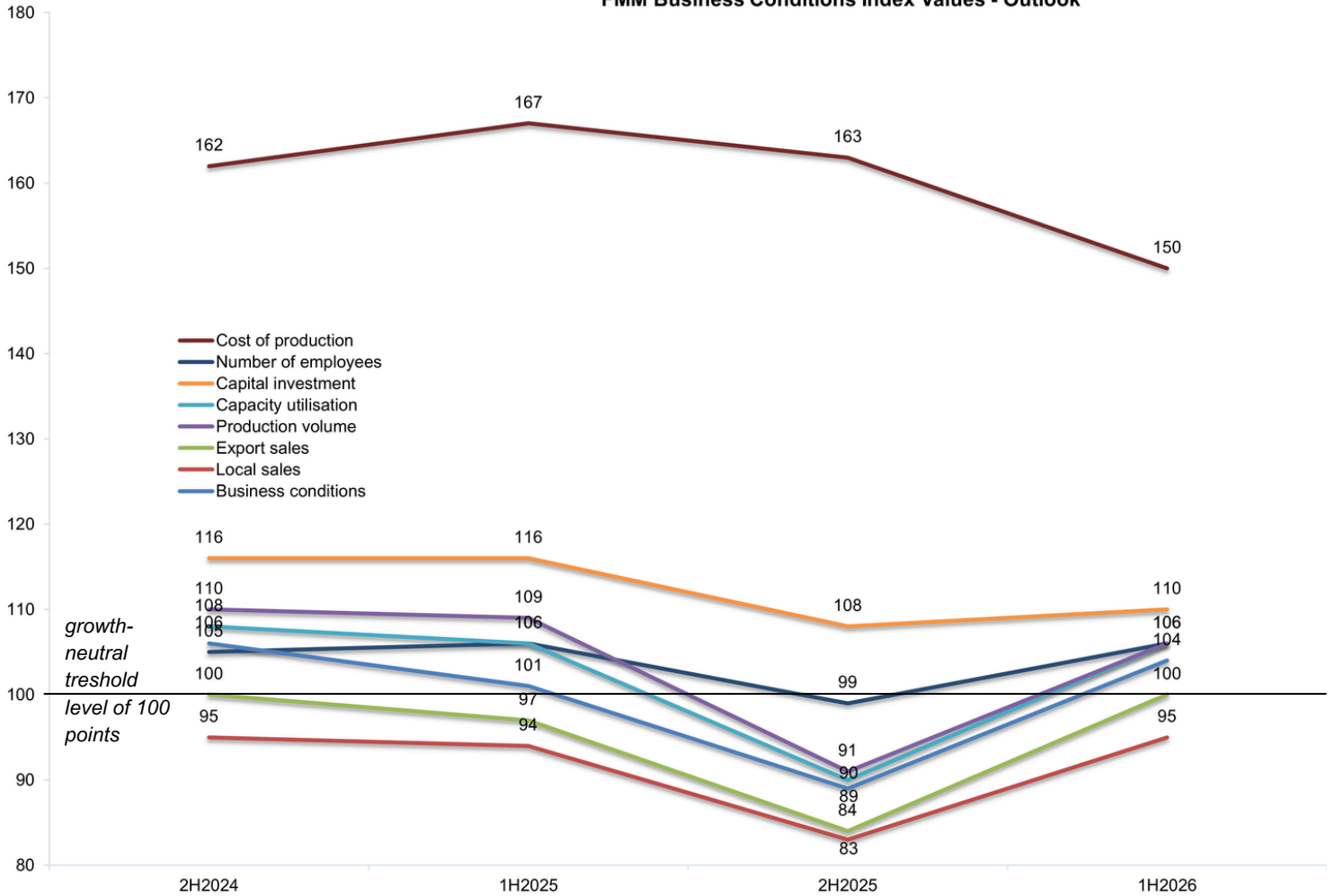
### Cautious Optimism as Recovery Gradually Builds

Manufacturers' expectations for the first half of 2026 point to gradual improvement in operating conditions. Forward-looking indicators for business activity, production and capacity utilisation are projected to move further above the neutral threshold, signalling moderate expansion.

Nevertheless, demand conditions remain uncertain. Domestic sales are expected to remain subdued, while export markets may stabilise modestly. At the same time, cost pressures are expected to remain elevated, continuing to affect profit margins and business expansion plans.

Overall, manufacturers appear cautiously optimistic about the near-term outlook while maintaining prudent operational strategies amid persistent uncertainties.

FMM Business Conditions Index Values - Outlook



**Manufacturers Expect Gradual Improvement in Business Conditions**

The business activity index is projected to reach around 104, indicating moderate expansion.

About 26% of respondents expect higher activity, while 51% anticipate stable conditions and 23% foresee declines. This suggests that firms expect operating conditions to improve gradually in the coming months.

**Sales Outlook: Demand Recovery Expected to Remain Uneven**

The local sales index is projected to remain around 95, indicating that domestic demand is expected to stay relatively subdued. Meanwhile, the export sales index is projected to reach around 100, suggesting broadly stable expectations for external demand conditions.

**Production and Utilisation Expected to Strengthen Further**

Manufacturers expect production activity to strengthen in the coming months. The production volume index is projected to reach around 106, while capacity utilisation is expected to improve to a similar level. These projections point to gradual improvements in operational activity.

**Cost Pressures Expected to Ease but Remain Elevated**

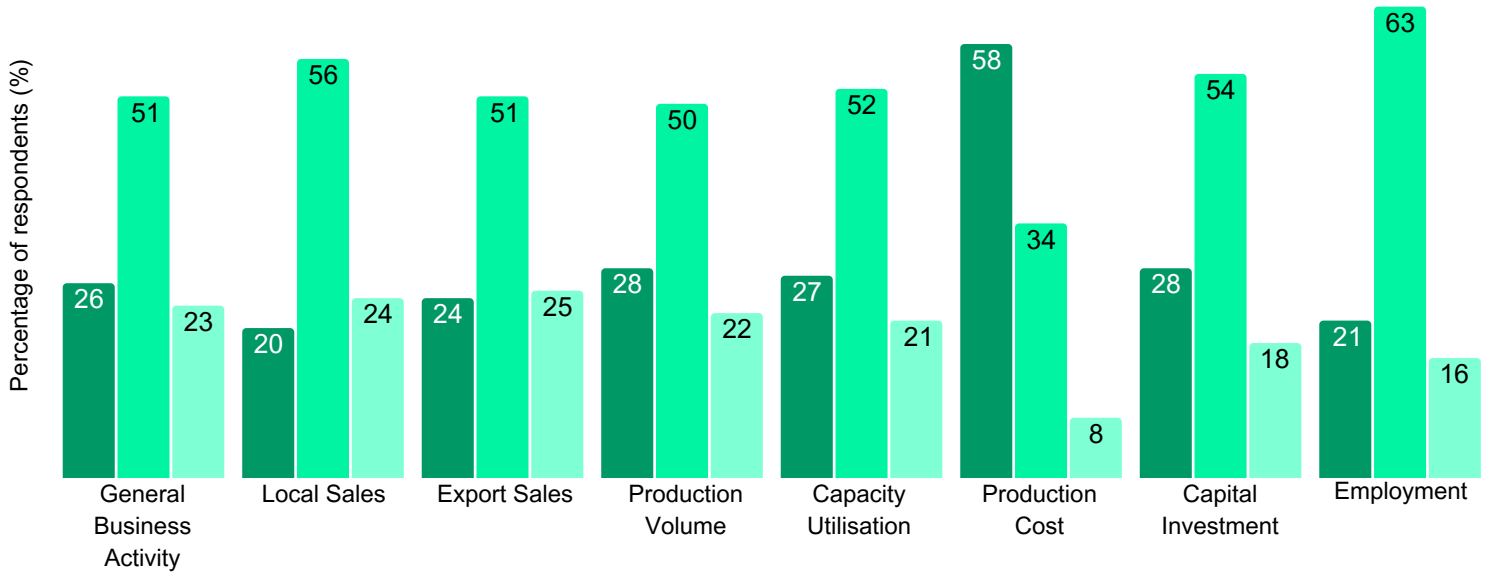
Cost pressures are expected to remain elevated. The production cost index is projected to remain around 150, indicating continued upward pressure on input costs. About 58% of respondents expect higher costs, while 34% anticipate stable cost conditions and 8% foresee declines.

**Investment and Hiring Expected to Improve Modestly**

Investment and hiring expectations show modest improvement. The capital investment index is projected to reach around 110, while the employment index is projected to reach around 106. These results suggest that firms are gradually resuming expansion plans, although investment and hiring decisions remain cautious.

### 1H2026 Outlook Performance

Higher Same Lower



## REVENUE AND PROFIT OUTLOOK - 1H2026

### Revenue Prospects Improve but Margin Pressures Persist

Manufacturers' expectations for the first half of 2026 point to moderate revenue growth alongside a more cautious profit outlook, reflecting persistent cost pressures and uneven demand conditions.

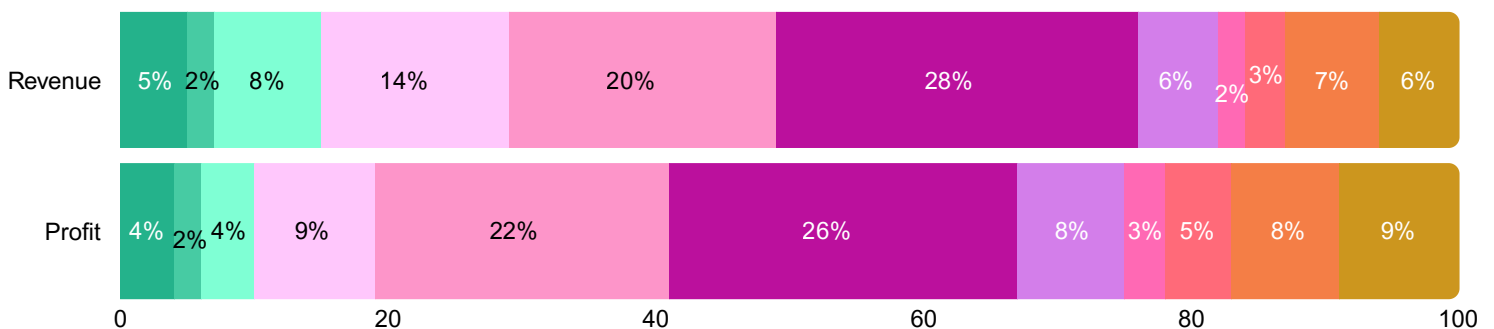
Survey responses suggest a generally positive revenue outlook, although expectations remain moderate rather than strong. About 48% of respondents expect revenues to increase compared with 2H2025, while 28% anticipate no change and 24% expect declines. These results suggest that although many firms foresee improved sales performance, a significant share remain cautious about the pace and sustainability of the recovery.

Among firms expecting growth, most anticipate incremental rather than strong expansion. Nearly 20% of respondents project revenue increases of 1-5%, while 14% expect growth of 6-10%, and only less than 7% project increases exceeding 20%.

Despite the overall positive outlook, downside risks remain evident. Around 25% of firms expect revenues to decline, including 7% anticipating reductions exceeding 25%, highlighting continued fragility in demand across certain industries.

### Expectations on Revenue and Profit Growth for 1H2026

● Increase by >25%   
 ● Increase by 21-25%   
 ● Increase by 11-20%   
 ● Increase by 6-10%  
● Increase by 1-5%   
 ● Remain the same   
 ● Decrease by >25%   
 ● Decrease by 21-25%  
● Decrease by 11-20%   
 ● Decrease by 6-10%   
 ● Decrease by 1-5%



Profit expectations are more subdued than revenue, underscoring the continued impact of cost pressures on manufacturers' margins. Approximately 41% of respondents expect profits to increase, while 26% foresee no change and 33% anticipate declines.

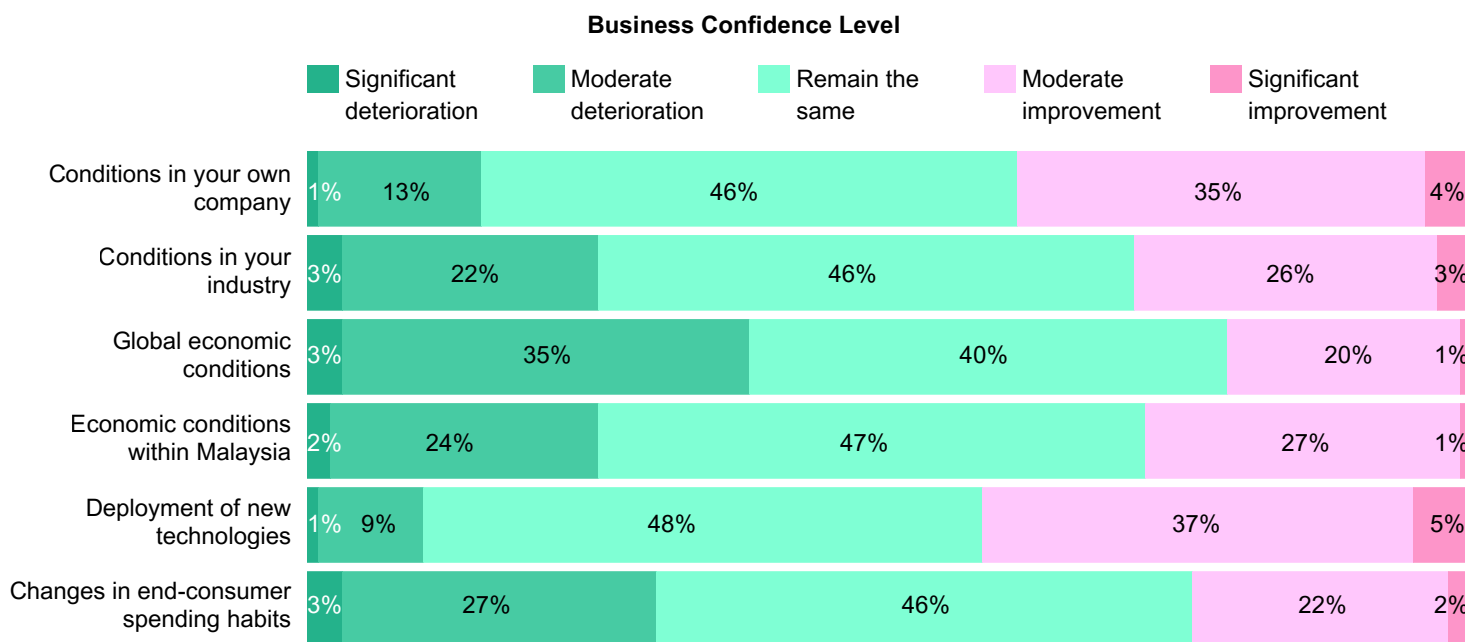
Consistent with the revenue outlook, most expected profit gains are modest. About 22% of firms anticipate profit increases of 1-5%, while comparatively fewer respondents expect larger gains. At the same time, nearly 8% of respondents project profit declines exceeding 25%, indicating that margin pressures remain significant for some businesses.

Overall, the findings suggest that while revenue prospects are improving, persistent cost pressures continue to constrain profitability, limiting the extent to which stronger sales translate into higher margins.

## BUSINESS CONFIDENCE OUTLOOK - 1H2026 VS 2H2025

### Firms Expect Modest Improvement but Remain Cautious on Broader Economic Conditions

Expectations regarding broader business conditions help to contextualise the mixed outlook observed for revenue and profitability. Survey responses across several dimensions of the business environment, including firm-level conditions, industry outlook, global and domestic economic prospects, consumer demand, and technology adoption, provide further insight into the mixed outlook.



**Conditions within firms** themselves are expected to improve modestly. 39% of respondents anticipate improvements in their own business conditions, compared with 14% projecting deterioration, while 46% expect conditions to remain unchanged. This distribution suggests that many respondents anticipate a gradual strengthening in their internal operations.

The **outlook for the manufacturing industry** as a whole, however, appears more mixed. 29% of respondents expect improvements, while 25% project deterioration and 46% expect little change, reflecting uneven recovery across manufacturing subsectors.

Sentiment regarding the **global economic environment** remains notably cautious. More than 38% of respondents expect global conditions to deteriorate, compared with about 21% expecting improvement, while 40% foresee stability. These views highlight continued uncertainty surrounding external demand and international economic developments.

Expectations for the **domestic economy** are somewhat more balanced. 28% of respondents anticipate improvements, while 26% expect deterioration and 47% foresee no significant change, suggesting that domestic economic conditions are likely to remain broadly stable over the period.

Meanwhile, **consumer demand prospects** remain relatively cautious. Nearly 30% of respondents expect consumer spending to weaken, compared with 24% anticipating improvements, while 46% expect no change, indicating lingering uncertainty regarding household demand.

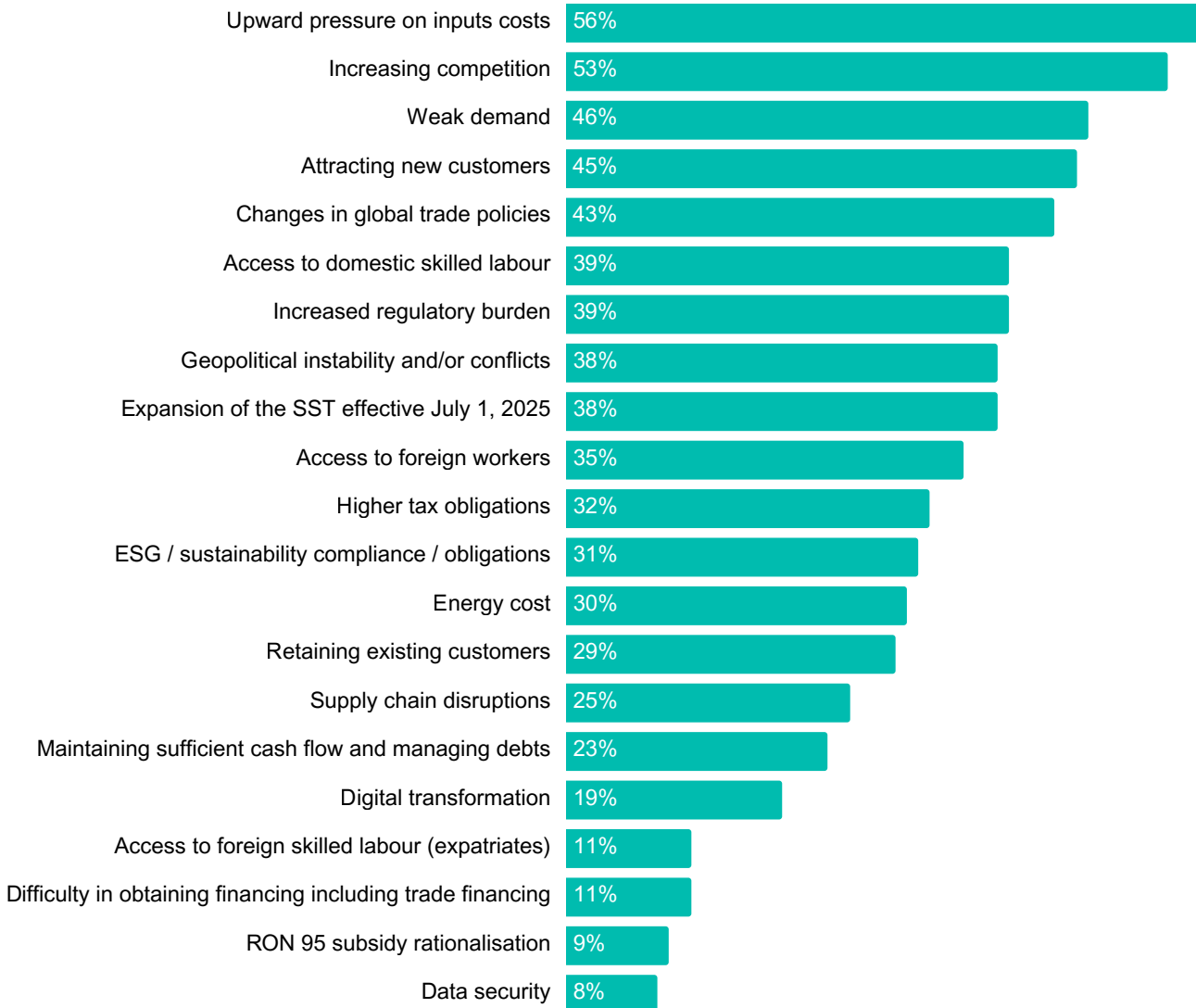
In contrast, expectations regarding **technology adoption** are comparatively optimistic. 42% of respondents expect improvements in the deployment of new technologies, while only 10% anticipate deterioration, reflecting continued investment in productivity-enhancing capabilities and digital transformation.

Collectively, the findings suggest that while firms expect modest improvements in their own operations, continued uncertainty surrounding global economic conditions and consumer demand may limit the pace of recovery in the manufacturing sector, reinforcing the cautious outlook for revenue growth and profitability in the first half of 2026.

## Cost Pressures, Competition and Weak Demand Remain Key Constraints

Manufacturers continue to face cost pressures, intensifying competition and uneven demand conditions as the main constraints to business operations and growth in the first half of 2026.

### Challenges to Business Operations and Growth



Among the most widely cited challenges are upward pressure on input costs (56%), increasing competition (53%), weak demand (46%), difficulties in attracting new customers (45%) and changes in global trade policies (43%). These responses highlight the combined impact of rising operating costs, heightened competition and uncertain external demand on business conditions.

At the other end of the spectrum, several issues were cited by relatively few respondents. Data security (8%) and RON95 subsidy rationalisation (9%) were among the least frequently mentioned concerns. Similarly, difficulty in obtaining financing (11%) and access to foreign skilled labour (11%) were identified by smaller proportions of respondents.

The responses indicate that while financial constraints and specialised labour shortages affect certain respondents, they are less widespread than cost-related, competitive and demand-driven challenges.

Other less frequently mentioned challenges include energy costs, geopolitical instability, supply chain disruptions, access to labour, regulatory burdens, ESG compliance, digital transformation and cash flow management, although these were mentioned less frequently than the primary constraints identified above.

On balance, the results indicate that rising costs, stronger competition and weak demand remain the dominant challenges facing manufacturers, reinforcing the broader survey narrative of stabilising business activity but uneven recovery. These constraints are likely to continue shaping firms' operating strategies and investment decisions in the coming period, as manufacturers balance gradual improvements in business activity with persistent cost pressures and uncertain demand conditions.

### Cost Efficiency, Product Expansion and Export Growth Drive Opportunities

Manufacturers view cost efficiency, product expansion and export market development as the main opportunities for business growth in the first half of 2026.

#### Business Opportunities in 1H2026



The strongest opportunities identified by respondents relate to cost control (61%) and expanding product portfolios (57%), highlighting firms' focus on improving operational efficiency while strengthening their product offerings. Opportunities linked to international market expansion also feature prominently, with 40% of respondents identifying exports to new countries and 38% seeing potential to increase exports in existing markets. In addition, 37% of respondents cited enhanced marketing efforts as a means of strengthening market presence and supporting growth.

Some respondents also see opportunities in technology adoption and business innovation. Around 26% of respondents highlighted leveraging digital technologies, cloud computing and artificial intelligence, while 23% identified dynamic pricing strategies to enhance margins. Meanwhile, 17% pointed to opportunities to reinvent business models, suggesting continued adaptation to evolving market conditions.

A number of potential growth avenues were identified by smaller proportions of respondents. These include opportunities related to net-zero initiatives (13%), vertical or horizontal integration (14%) and specialisation in niche product segments (11%), as well as value-chain opportunities associated with ESG targets (11%) and expanding headcount (11%).

Relatively few respondents highlighted opportunities linked to decarbonisation initiatives aimed at improving cost efficiency (7%) or reshoring and nearshoring of value chains (4%). A small proportion of firms (4%) also reported that they currently see no major opportunities.

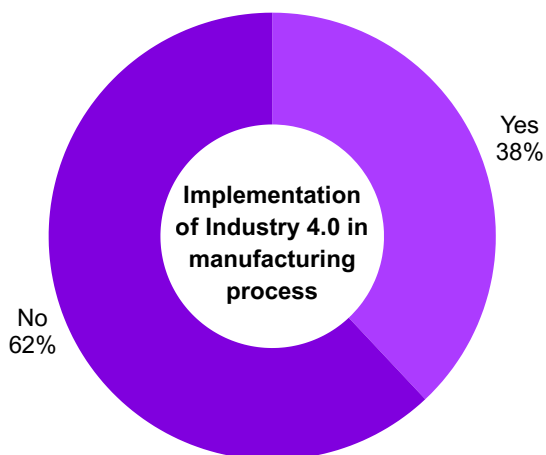
Other opportunities mentioned by individual respondents include improved access to funding, productivity improvements, new product development, price-based strategies to gain market share and tax incentives for ESG implementation, although these were cited only by a very small number of firms.

Taken together, the survey findings indicate that manufacturers are primarily focusing on improving operational efficiency, expanding product offerings and strengthening export market presence as key avenues for growth. These opportunities are likely to shape firms' strategic priorities and investment decisions as manufacturers seek to capture emerging market opportunities while continuing to navigate cost pressures and evolving competitive conditions.

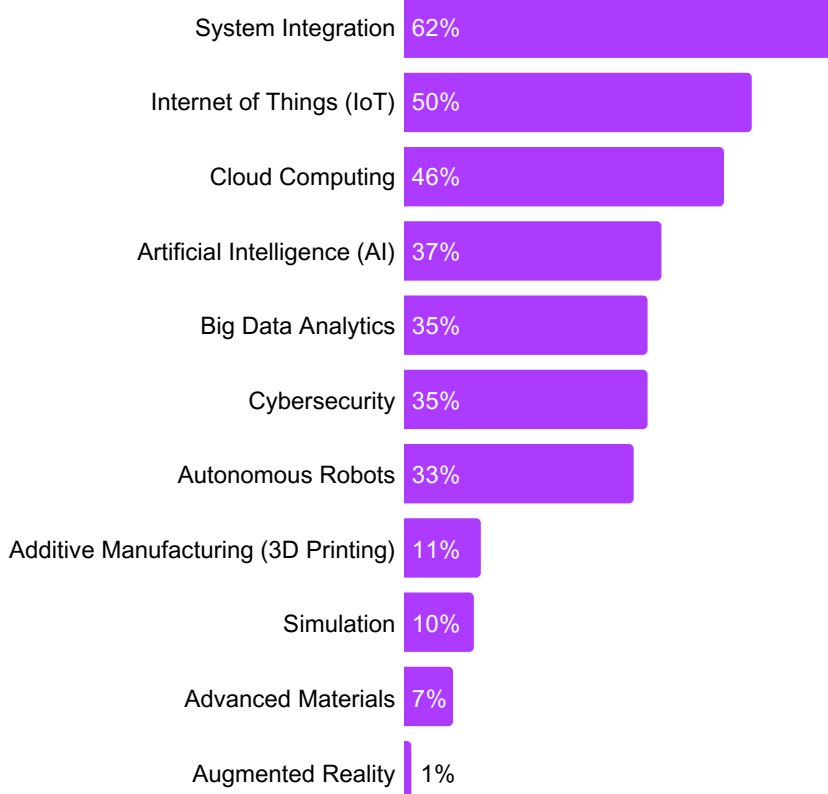
## INDUSTRY 4.0 ADOPTION IN MANUFACTURING

### Adoption Improves with Greater Focus on Integration and Digital Connectivity

Industry 4.0 adoption among respondents has continued to improve, with only 38% reporting that they have implemented Industry 4.0 technologies in their manufacturing processes, up from 32% in the previous survey (1H2025). This indicates that digital transformation is gradually gaining traction within the sector as more firms begin integrating advanced technologies into their operations. While a majority of respondents (62%) have yet to adopt such technologies, the increase in adoption reflects growing awareness and commitment among manufacturers to enhance integration, connectivity and operational efficiency through Industry 4.0 initiatives.



### Industry 4.0 Technology / Pillar Implemented in Manufacturing Process



Among firms that have adopted Industry 4.0 technologies, the results highlight a stronger emphasis on digital connectivity and system integration rather than advanced or frontier technologies. The most widely implemented technology is system integration (62%), followed by the Internet of Things (IoT) (50%) and cloud computing (46%). These technologies enable greater connectivity across production systems and support the digitalisation of manufacturing operations.

Data-driven technologies also feature prominently. Artificial intelligence (AI) is adopted by 37% of respondents, while big data analytics (35%) and cybersecurity solutions (35%) are also widely implemented, reflecting growing attention to data management, analytics capabilities and digital security.

In contrast, more advanced or specialised technologies remain less widely adopted. Autonomous robots are used by 33% of respondents, while additive manufacturing (3D printing) (11%) and simulation technologies (10%) remain relatively niche. Similarly, advanced materials (7%) and augmented reality (1%) were reported by only a small number of respondents.

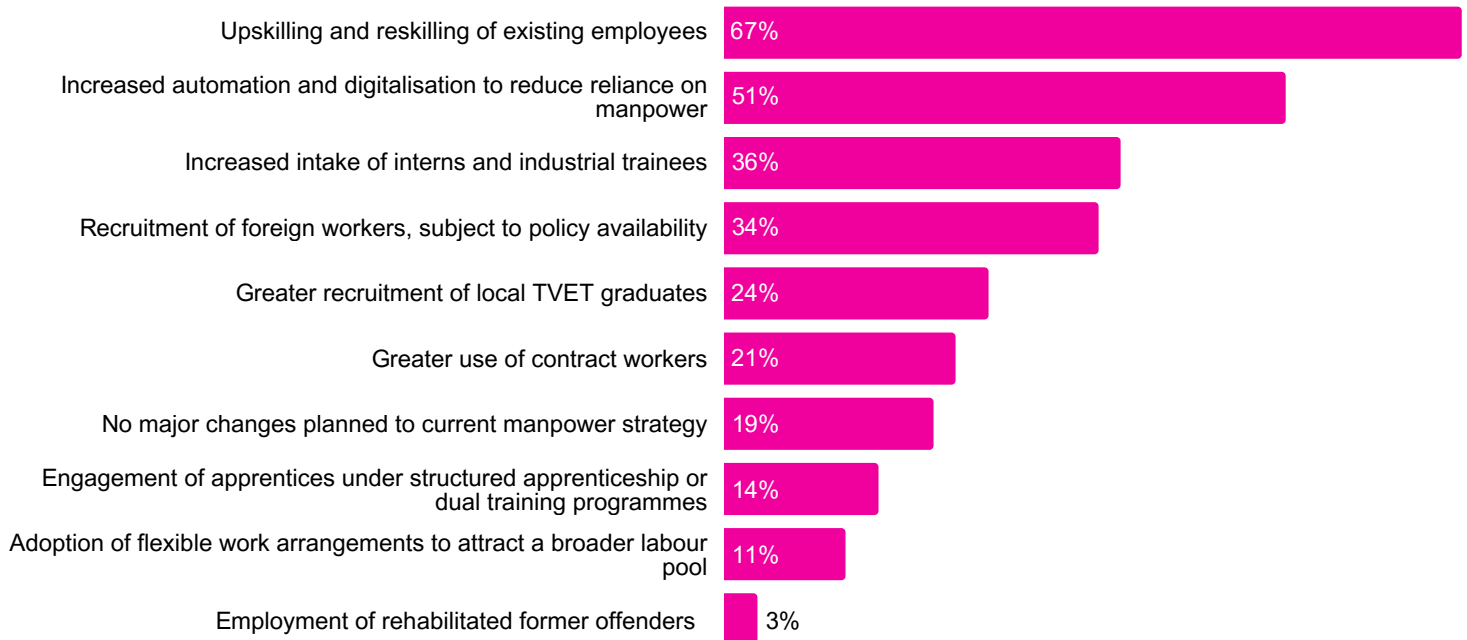
Overall, the findings indicate that manufacturers are prioritising foundational digital infrastructure and system integration as an initial step in their Industry 4.0 journey. Adoption of more advanced technologies is likely to increase gradually as firms continue strengthening their digital capabilities and operational readiness.

## MANPOWER STRATEGIES - 2026

### Upskilling, Automation and Talent Development Shape Workforce Strategies

Manufacturers are pursuing a combination of workforce development, technological adoption and talent pipeline initiatives to address manpower requirements in 2026. Broadly, firms' strategies centre on three key areas: upskilling existing employees, increasing automation to reduce labour dependence and strengthening talent pipelines through education and training partnerships. These efforts reflect manufacturers' attempts to enhance workforce capabilities while managing labour constraints and improving productivity.

## Likely Strategies to Address Manpower Needs in 2026



### **Skills Development as the Primary Workforce Strategy**

The most widely adopted approach is upskilling and reskilling of existing employees, cited by 67% of respondents, highlighting firms' focus on strengthening workforce capabilities. Continuous training enables employees to adapt to evolving production technologies and operational processes while helping companies maximise the value of their existing workforce.

In addition, 24% of respondents expect to recruit more local Technical and Vocational Education and Training (TVET) graduates, reflecting growing recognition of the importance of vocational and technical skills in supporting the manufacturing sector.

### **Strengthening Talent Pipelines through Internships and Industrial Training**

Manufacturers are also placing emphasis on increasing the intake of interns and industrial trainees, cited by 36% of respondents. This approach reflects efforts to build longer-term talent pipelines while providing students and young graduates with practical exposure to manufacturing environments.

Internship and industrial training programmes allow firms to identify and develop potential employees at an early stage, while helping trainees acquire hands-on technical skills and familiarity with industrial operations. The emphasis on such programmes also suggests stronger collaboration between companies and educational institutions, including universities, polytechnics and TVET providers.

### **Automation and Digitalisation to Reduce Labour Dependence**

More than half of respondents (51%) reported plans to increase automation and digitalisation to reduce reliance on manpower. This suggests that many firms view technological adoption as an important strategy to address labour shortages while enhancing operational efficiency and productivity. Automation initiatives may also complement workforce development efforts by enabling employees to focus on higher value-added tasks while routine processes become increasingly automated.

### **Continued Reliance on Foreign Workers**

Despite the growing emphasis on automation and local talent development, 34% of respondents plan to recruit foreign workers, subject to prevailing policy conditions. This underscores the continued importance of foreign labour for certain segments of the manufacturing sector, particularly in roles where domestic labour supply remains limited.

### **Flexible Workforce Arrangements**

Some respondents are also exploring alternative workforce arrangements to meet labour requirements. While 21% plan to increase the use of contract workers, 11% are adopting flexible work arrangements to broaden the available labour pool. At the same time, 19% of respondents do not expect major changes to their current manpower strategies, suggesting that a portion of manufacturers are maintaining existing workforce structures.

## Government Support for Workforce Strategies

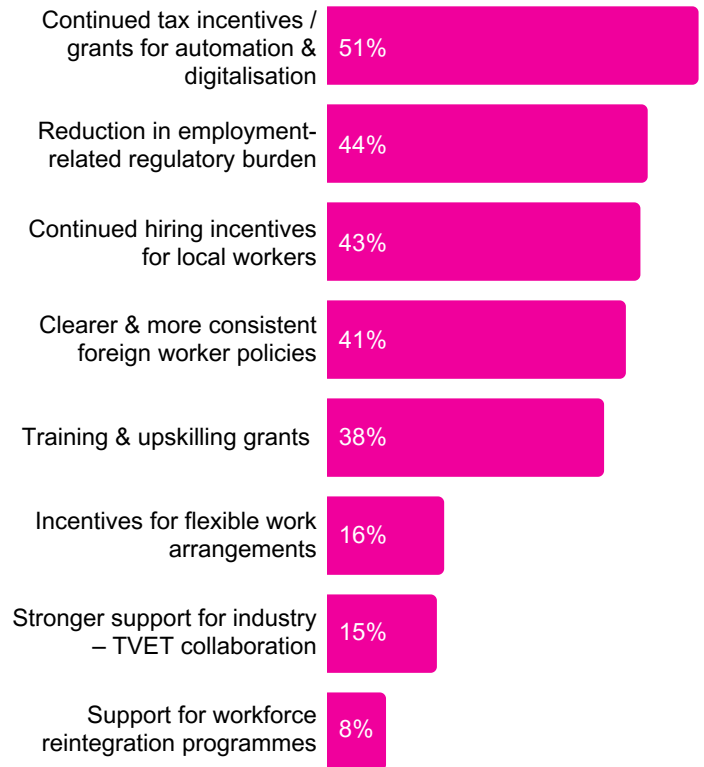
Respondents identified several forms of government support that would be important in enabling their manpower strategies in 2026. The most frequently cited measure is continued tax incentives or grants for automation and digitalisation, selected by 51% of respondents, highlighting the importance of technological adoption in addressing labour constraints.

This is followed by reducing employment-related regulatory burdens (44% of respondents), continued hiring incentives for local workers (43%), and clearer and more consistent foreign worker policies (41%). These responses highlight the importance respondents place on regulatory clarity and workforce incentives as key enablers of labour market adjustment.

Support for training and upskilling initiatives, including TVET and apprenticeship programmes (38%), was also widely identified as important. Other measures cited include industry-TVET collaboration to improve job readiness (15%), incentives for flexible work arrangements (16%) and workforce reintegration programmes (8%), although these were mentioned less frequently.

Overall, the findings suggest that manufacturers are pursuing a multi-pronged manpower strategy that combines workforce development, technological adoption and strengthened talent pipelines. Continued support through training initiatives, regulatory clarity and incentives for automation will remain important in enhancing workforce capabilities and sustaining productivity growth in the manufacturing sector.

### Key Government Support Needed for Manpower Strategies in 2026



## CIRCULAR ECONOMY AND EXTENDED PRODUCER RESPONSIBILITY (EPR)

### Awareness Rising but Adoption and EPR Preparedness Remain Limited

Awareness of circular economy practices among manufacturers remains relatively limited, with adoption still at an early stage. At the same time, preparedness for Extended Producer Responsibility (EPR) obligations remains uneven, reflecting uncertainty around regulatory frameworks and implementation costs.

#### Awareness of the Circular Economy

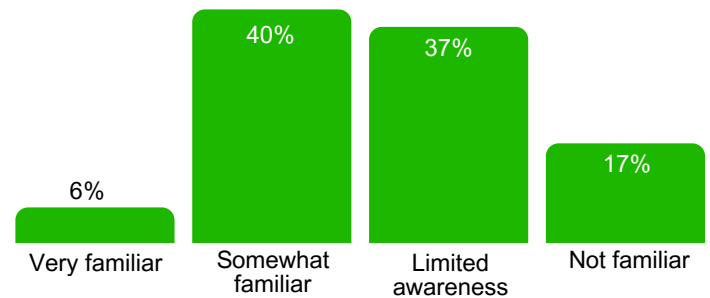
Familiarity with the concept of the circular economy varies widely among respondents. While 40% of respondents are somewhat familiar with the concept, only 6% said that they are very familiar. Meanwhile, 37% reported limited awareness and 17% are not familiar with the concept at all.

These results suggest that although the circular economy is gaining visibility within the manufacturing sector, deeper understanding of its principles and practical implications remains limited for many firms.

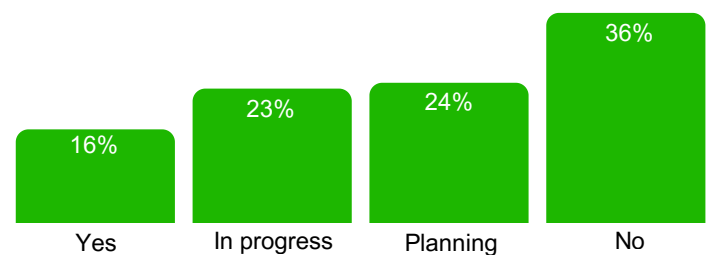
#### Implementation of Circular Economy Practices

Adoption of circular economy practices is still at an early stage. Only 16% of respondents have already implemented circular economy practices, while 23% indicated that implementation is currently in progress and 24% are planning to introduce such initiatives. However, 36% of respondents have yet to adopt any circular economy practices, reflecting the gradual pace of adoption.

#### Familiarity with the Circular Economy Concept



#### Current Implementation of Circular Economy Practices

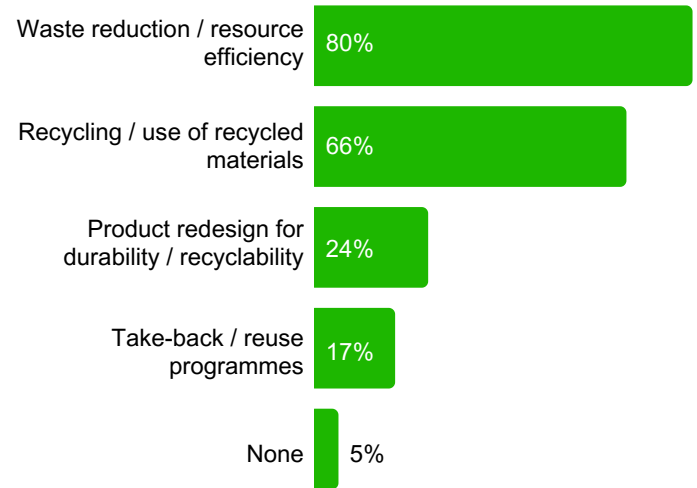


Among respondents who have adopted circular economy initiatives, the most common measures relate to waste reduction and resource efficiency (80%), followed by recycling or the use of recycled materials (66%). These practices typically represent the initial stages of circular economy adoption, focusing on improving operational efficiency and reducing material waste.

More advanced initiatives remain less common. 24% of respondents reported product redesign for durability or recyclability, while 17% have implemented take-back or reuse programmes. Only a small number of respondents highlighted additional initiatives such as renewable energy use, solar power adoption, improved waste disposal practices and water management systems.

These findings suggest that circular economy adoption in the manufacturing sector is currently concentrated in resource efficiency and recycling measures, with more complex circular business models still emerging.

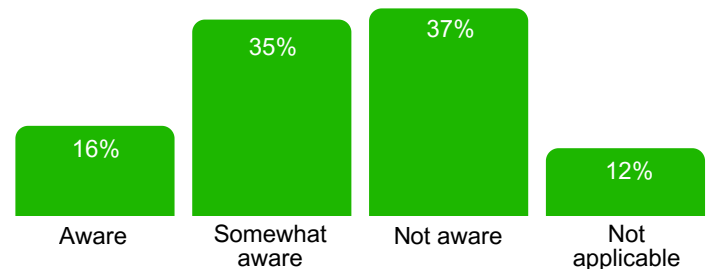
### Circular Economy Initiatives Adopted by Companies



### Awareness of EPR Regulations

Awareness of Extended Producer Responsibility (EPR) requirements and proposed regulations in Malaysia remains mixed. Only 16% of respondents are aware of EPR regulations, while 35% indicated that they are somewhat aware. In contrast, 37% of respondents are not aware of these requirements, suggesting that awareness of regulatory developments remains uneven across the sector.

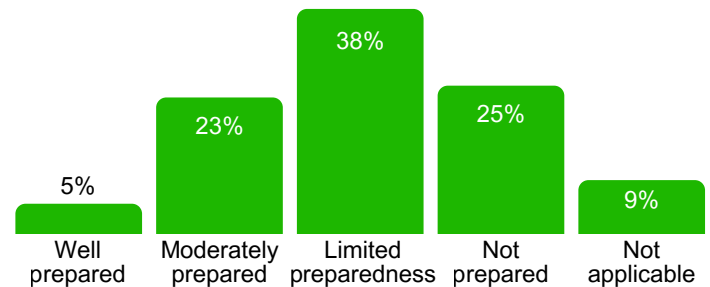
### Level of Awareness of EPR Obligations



### Preparedness for EPR Compliance

Among firms for which EPR requirements are applicable, preparedness levels remain relatively limited. Only 5% of respondents reported being well prepared, while 23% indicated moderate preparedness. In contrast, 38% described their preparedness as limited and 25% stated that they are currently not prepared. These findings show that many firms may require additional guidance, resources or transition time to meet potential EPR obligations.

### Level of Preparedness for EPR Obligations



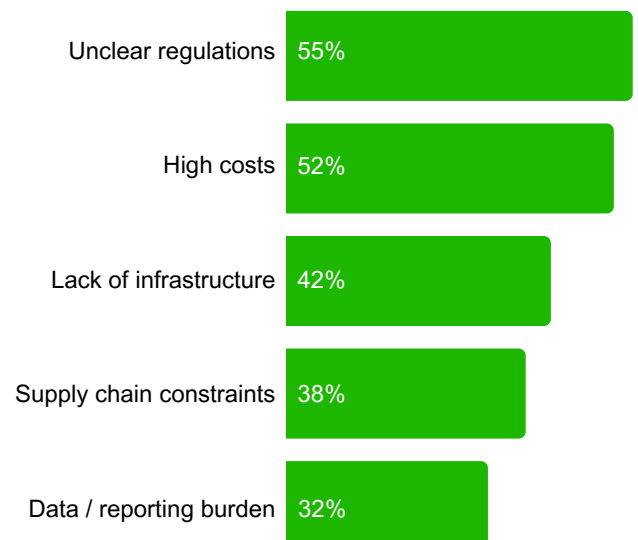
### Key Challenges in Implementing Circular Economy and EPR Initiatives

Manufacturers identified several barriers to implementing circular economy or EPR initiatives. The most frequently cited challenge is unclear regulations (55% of respondents), followed by high implementation costs (52%). These findings suggest that regulatory clarity and financial considerations remain key constraints.

Other challenges include lack of supporting infrastructure (42%), supply chain constraints (38%) and data and reporting burdens (32%), reflecting the operational complexities involved in transitioning toward more circular production systems.

A small number of respondents also highlighted additional concerns such as limited consumer awareness, product design limitations, manpower shortages, lack of incentives and limited access to relevant information, although these issues were raised only by a few firms.

### Key Challenges to Circular Economy and EPR Implementation



## Expected Cost Impact of EPR Implementation

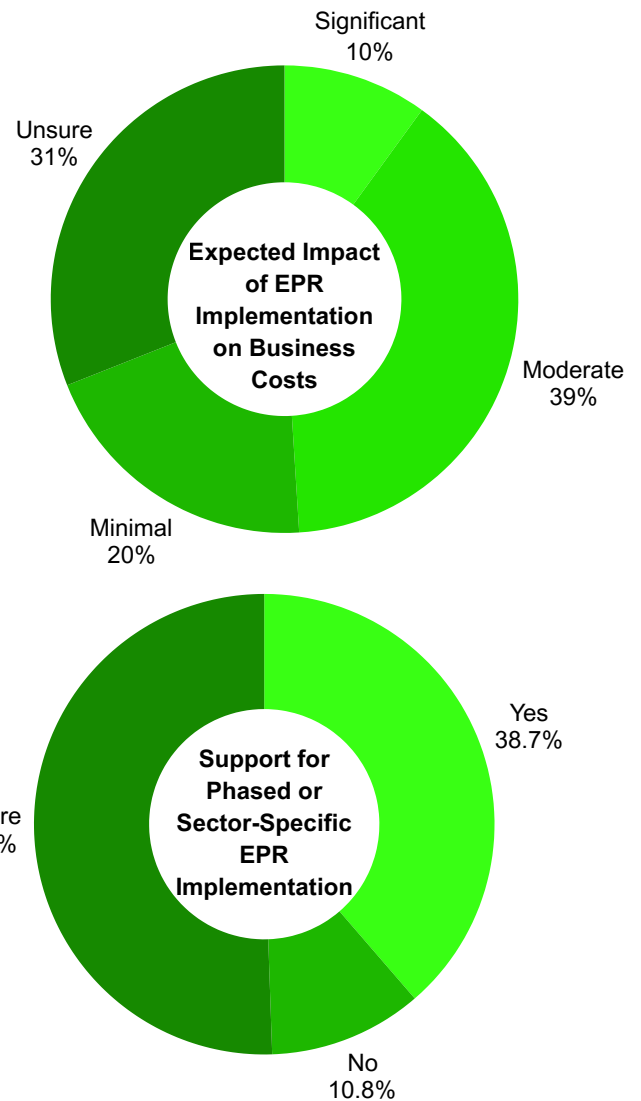
When asked about the potential cost implications of EPR implementation, 39% of respondents expect a moderate increase in business costs, while 10% anticipate significant cost impacts. Around 20% expect minimal cost increases, while 31% remain unsure about the potential financial implications, indicating continued uncertainty regarding regulatory implementation and compliance requirements.

## Support for Phased Implementation

Manufacturers expressed mixed views regarding the implementation approach for EPR regulations. While 39% of respondents support a phased or sector-specific implementation, only 11% opposed such an approach. However, about half of respondents (51%) are unsure, suggesting that many firms are still assessing the potential implications of EPR policies.

The survey findings suggest that while awareness and adoption of circular economy practices are gradually emerging within the manufacturing sector, implementation remains concentrated in basic resource efficiency and recycling initiatives. At the same time, limited regulatory clarity, high implementation costs and infrastructure constraints continue to pose significant challenges.

Strengthening policy clarity, industry guidance and supporting infrastructure will be important in enabling manufacturers to accelerate the transition toward circular economy practices and prepare for future EPR obligations.



## IMPACT OF UNITED STATES RECIPROCAL TARIFFS\* ON MALAYSIAN EXPORTS

\* **Note:** US reciprocal tariffs at the time of the survey are based on the 19% implemented since August 2025.

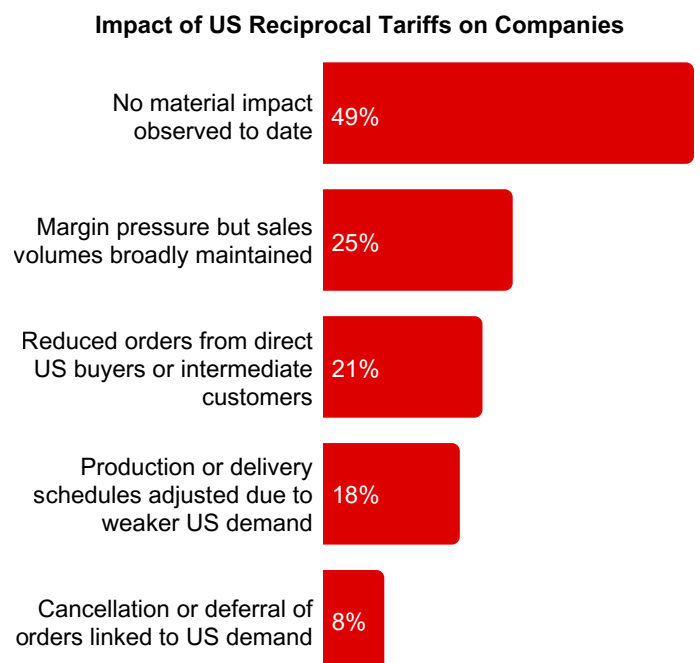
### Limited Immediate Impact but Emerging Competitiveness Pressures

The immediate impact of the United States reciprocal tariffs on Malaysian exporters has been mixed. While a number of firms reported pressure on margins and order volumes, nearly half of respondents indicated that the tariffs have not yet resulted in a material impact on their operations.

### Immediate Business Impact

Almost half of respondents (49%) reported that they have observed no material impact since the tariffs took effect in August 2025. This suggests that the full effects of the policy change may take time to transmit through export markets and supply chains.

Nevertheless, several firms have already begun experiencing operational pressures. 25% reported margin compression, although sales volumes have generally been maintained. In addition, 21% of respondents received reduced orders from direct US buyers or intermediate customers, reflecting softer demand linked to the tariff measures.



Some firms also reported adjustments to operational planning and production schedules. About 18% of respondents said that their production or delivery schedules have been modified due to weaker US demand, while 8% reported cancellations or deferrals of orders linked to US markets. While a small number of respondents highlighted additional effects such as pricing pressure from customers, higher raw material costs, currency fluctuations and logistical disruptions, a few others also reported isolated opportunities arising from shifts in global sourcing patterns.

### Supply Chain Impact for Non-direct Exporters

The survey also examined the impact on firms that do not export directly to the United States but are affected through supply chains. Among these respondents, 44% reported no observable indirect impact so far.

However, some firms have experienced spillover effects through downstream exporters. Around 22% reported reduced orders from customers that export to the United States, while 19% received requests for price reductions from downstream exporters seeking to offset tariff costs. In addition, 11% indicated inventory build-up due to slower off-take of products linked to US demand. Other isolated responses cited factors such as exchange rate fluctuations, higher input costs, dumping of foreign products in domestic markets and longer shipping times.

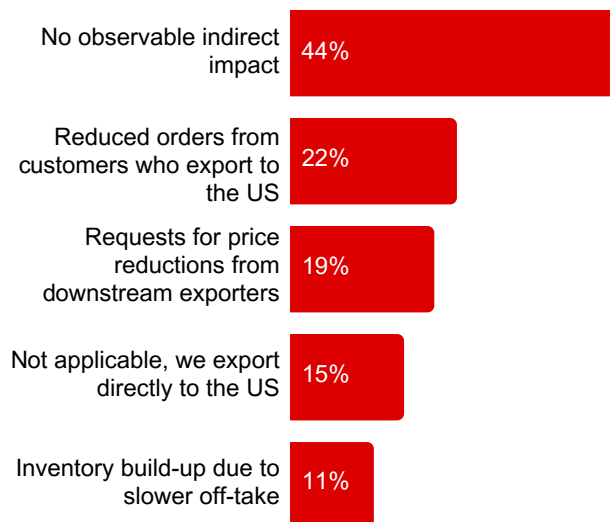
### Competitiveness Pressures

Among firms affected by the tariffs, loss of price competitiveness appears to be an important concern. 34% of respondents were of the view that the tariffs have reduced Malaysia's price competitiveness relative to other sourcing locations.

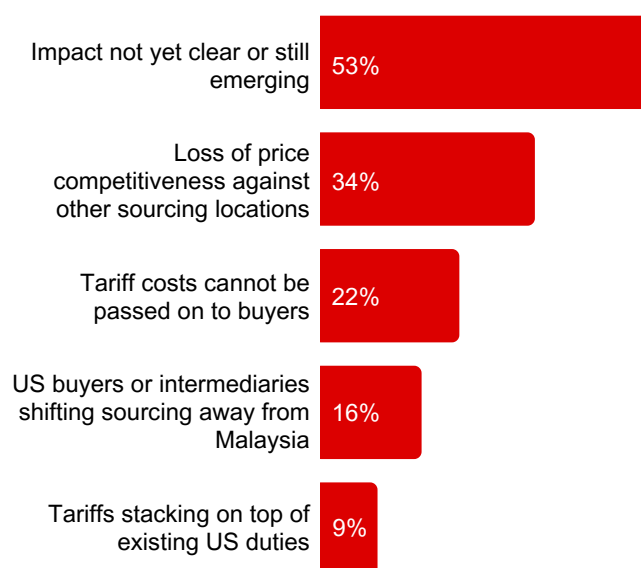
Another 22% believed that tariff costs cannot be fully passed on to buyers, placing pressure on profit margins. Meanwhile, 16% noted that US buyers or intermediaries have begun shifting sourcing away from Malaysia, suggesting potential adjustments in global supply chains. In addition, 9% of respondents highlighted the cumulative effect of tariffs stacking on top of existing US duties. At the same time, more than half of respondents (53%) reported that the full impact of the tariffs remains unclear or is still emerging, reflecting ongoing uncertainty regarding trade dynamics and supply chain adjustments.

Overall, the survey findings suggest that the immediate effects of US reciprocal tariffs on Malaysian exporters have so far been moderate, with many firms reporting limited direct impact. However, early signs of pressure are emerging through margin compression, reduced orders and supply chain spillovers. The survey also indicates that uncertainty remains high, with many firms still assessing how changes in global sourcing patterns and trade policies may affect their competitiveness in the US market over time. As global trade dynamics continue to evolve, these developments may increasingly influence Malaysian exporters' pricing strategies, supply chain decisions and competitive positioning in international markets.

### Indirect Impact of US Tariffs on Companies via the Supply Chain



### Main Reason for US Tariff Impact on Business



## SALES AND SERVICE TAX (SST) IMPACT ON EXPORT COMPETITIVENESS

### Embedded Supply Chain Costs Weigh on Export Competitiveness

The Sales and Service Tax (SST) continues to affect the cost structure of exporters, although the degree of impact varies across firms. While some exporters report limited effects that can be absorbed within existing margins, others indicate that SST-related costs are compressing margins and affecting their competitiveness in international markets.

## Impact on Export Competitiveness

The impact of SST on export competitiveness has been moderate for many firms, although a significant proportion report margin pressures. Over the past six months, 36% of respondents reported a moderate impact on export pricing, indicating that margins have been compressed in order to remain competitive in export markets. A further 16% indicated that SST has had a significant impact, affecting their ability to secure or retain export orders.

At the same time, 24% of respondents reported that the impact has been relatively minor and manageable within current margins, while 13% indicated that SST has had no observable impact on their export competitiveness. The issue was not applicable to 12% of respondents, as they do not export. While SST does not uniformly affect all exporters, a substantial proportion of firms report cost pressures linked to tax treatment within export supply chains, highlighting the role of embedded taxes in shaping export cost structures.

## Where SST Costs Arise in Export Supply Chains

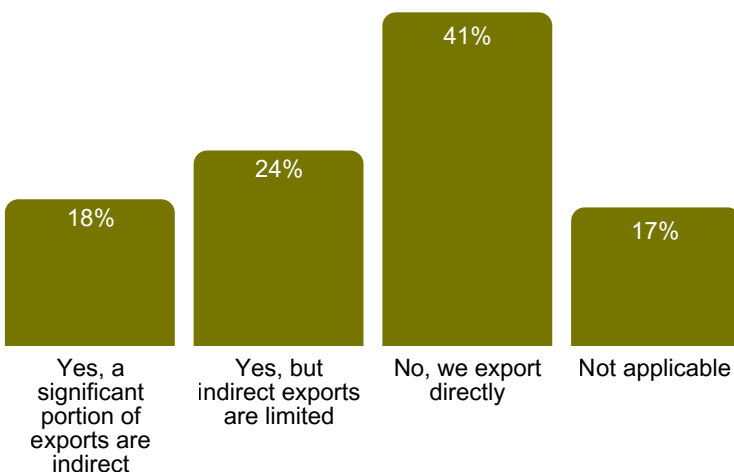
Among exporting firms, SST-related costs most commonly arise from service-related components of export operations. The most frequently cited source is service tax on logistics, freight, warehousing and port-related services, reported by 71% of respondents.

Other common sources include SST embedded in prices charged by local suppliers (51%) and service tax on rental, leasing, maintenance and professional services (49%). In addition, 47% of firms reported sales tax on raw materials or components used in export production. Only 11% said that SST costs are not significantly embedded in their export supply chains. This suggests that SST-related costs are frequently embedded indirectly through service inputs and supplier pricing rather than arising solely from direct production inputs.

## Indirect Exports and Intermediary Arrangements

Export structures vary across firms, with many companies relying on intermediaries such as traders or distributors. 41% of respondents export directly, while approximately 43% are involved in indirect exporting through intermediaries.

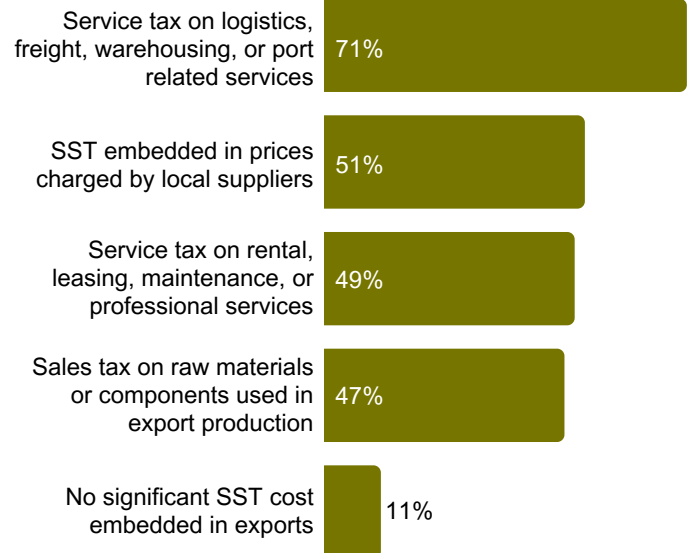
### Use of Intermediaries in Exporting Goods



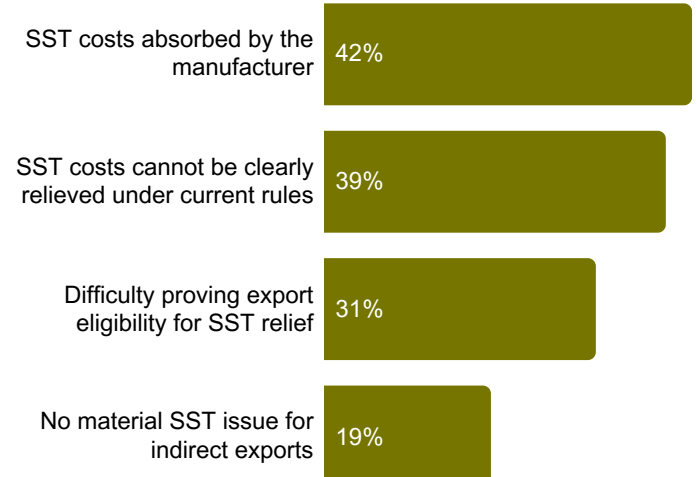
### Impact of SST on Export Competitiveness Over the Past 6 Months



### SST Costs in the Export Supply Chain



### Impact of SST on Indirect Exports via Intermediaries



Among firms that rely on intermediary export arrangements, several challenges related to SST treatment were identified. 42% reported that SST costs are absorbed by the manufacturer, while 39% indicated that SST costs cannot be clearly relieved under current rules. A further 31% reported difficulties in proving export eligibility for SST relief.

These findings suggest that indirect export arrangements may create additional administrative and cost challenges under the current SST framework.

### Measures to Reduce SST Cost Pressures on Exporters

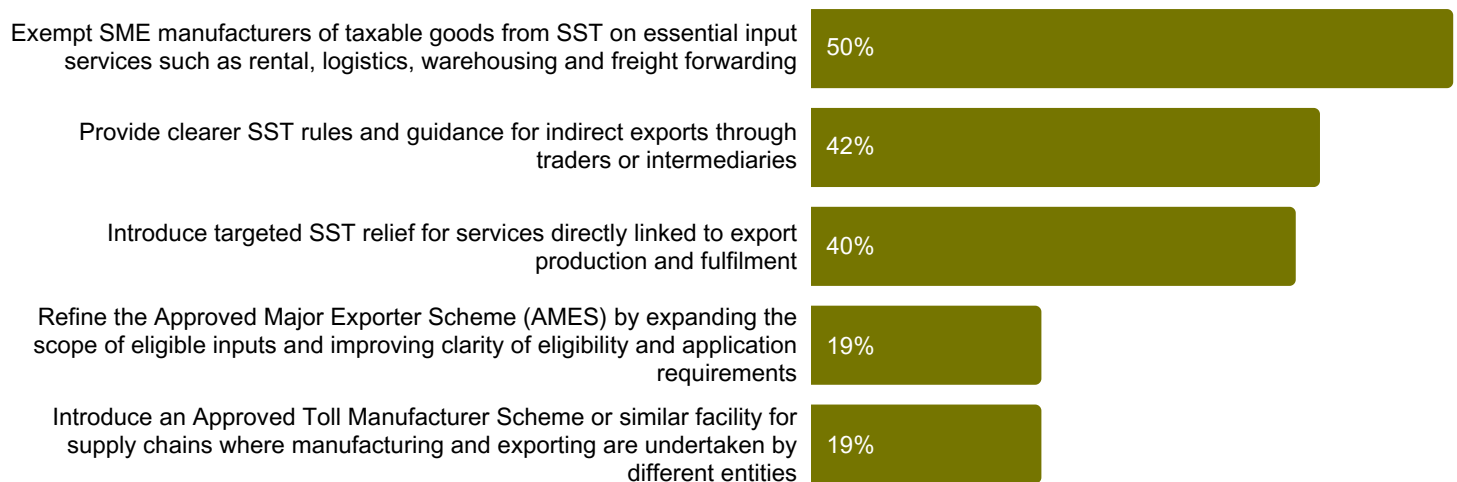
Respondents also identified several policy measures that could help reduce SST-related cost burdens on exporters. The most widely supported measure is exempting SME manufacturers from SST on essential input services such as rental, logistics, warehousing and freight forwarding, cited by 53% of respondents.

Other frequently suggested measures include providing clearer SST rules and guidance for indirect exports through intermediaries (42%) and introducing targeted SST relief for services directly linked to export production and fulfilment (40%). A smaller share of respondents suggested refinements to existing schemes such as the Approved Major Exporter Scheme (AMES), including expanding the scope of eligible inputs and improving clarity of eligibility requirements (19%).

A similar proportion supported introducing an Approved Toll Manufacturer Scheme for supply chains where manufacturing and exporting activities are undertaken by different entities. Additional suggestions raised by individual respondents include the reimplementation of the GST and exemptions for SMEs, although these were mentioned only by a small number of firms.

Taken together, the survey findings suggest that SST-related costs are affecting exporters primarily through service inputs and supplier pricing within export supply chains. These embedded costs may place additional pressure on export margins, particularly in an environment where firms are already facing rising operating costs and heightened global competition.

#### Measures to Reduce SST-Related Cost Burdens on Exporters

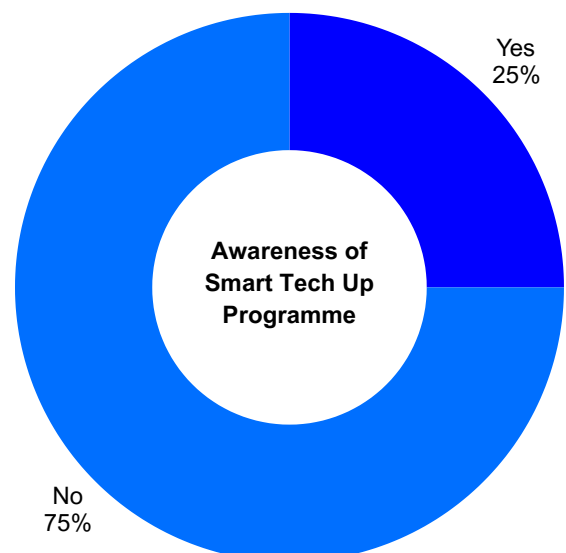


## SMART TECHNOLOGY UPTAKE PROGRAMME (SMART TECH UP)

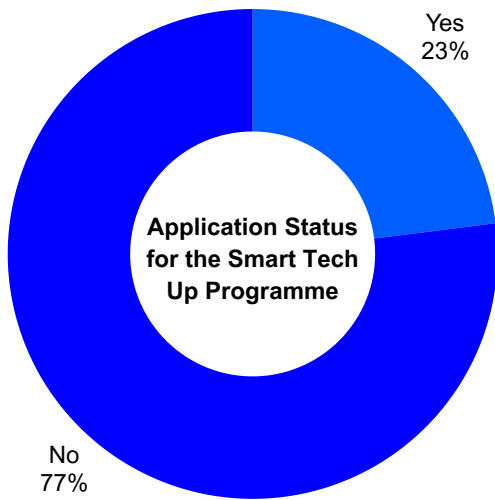
### Limited Awareness and Programme Uptake Among Manufacturers

Awareness of the government's Smart Technology Uptake Programme (Smart Tech Up), currently managed by SIRIM, remains limited among manufacturing firms. Only 25% of respondents reported being aware of the programme, while the majority (75%) were not familiar with it.

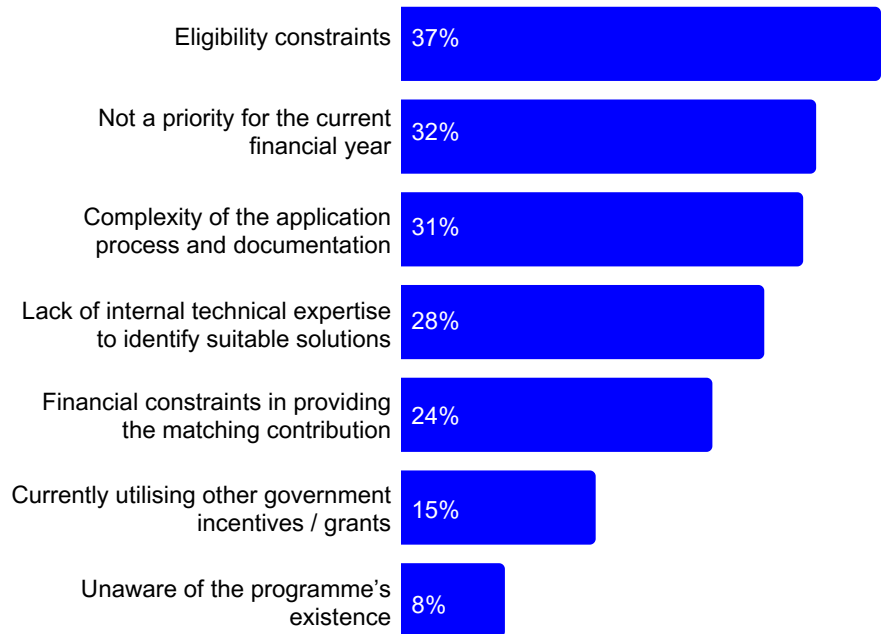
Among firms aware of the programme, participation also remains modest, with only 23% having applied for Smart Tech Up. Survey responses suggest that uptake is constrained by several factors, including eligibility requirements (37%), the complexity of the application process and documentation (31%), lack of internal technical expertise (28%) and financial constraints related to matching contributions (24%). Some respondents also indicated that the programme was not a priority for the current financial year or that they were already utilising other government incentives.



The overall findings suggest that while Smart Tech Up has the potential to support technology adoption and digital transformation among manufacturers, both awareness and participation remain relatively limited. Strengthening outreach efforts, simplifying application procedures and addressing eligibility or financial barriers may help enhance programme uptake among manufacturing firms.



#### Reasons for Not Applying to the Smart Tech Up Programme



## EXTERNAL MARKET PRESSURES AND REGIONAL COMPETITIVENESS

### Stronger Ringgit, Rising Chinese Competition and Shifting ASEAN Supply Chains

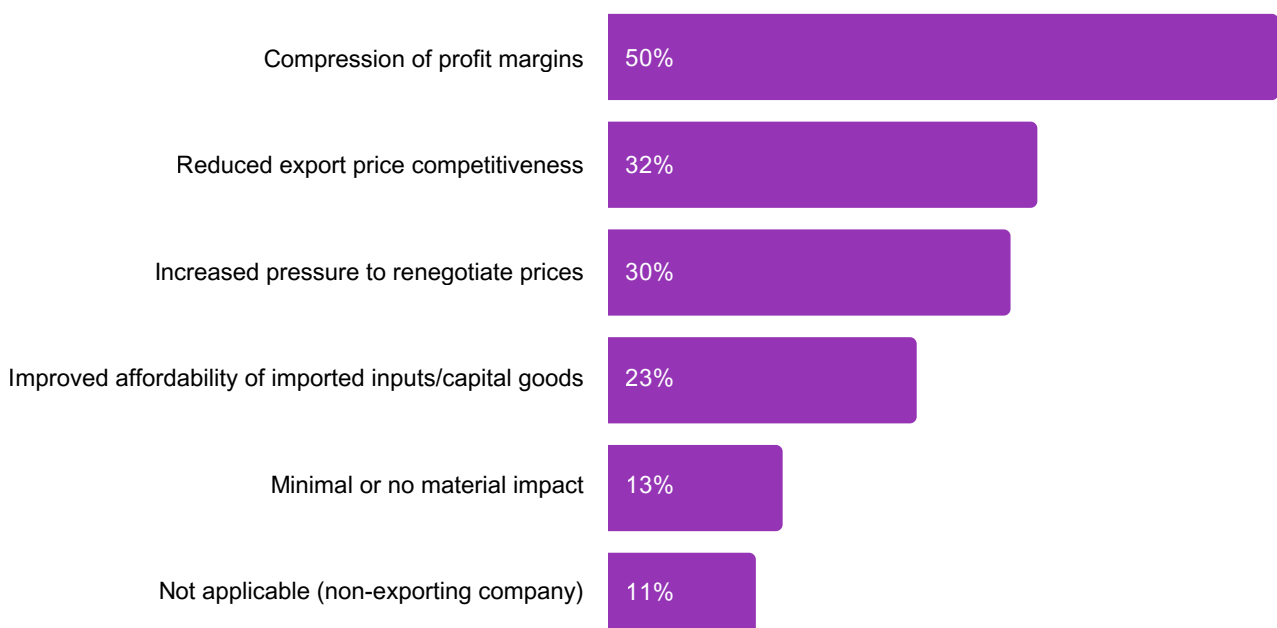
Manufacturers continue to face a range of external market pressures, including exchange rate movements, intensifying competition from Chinese products, and evolving regional supply chain dynamics within ASEAN.

#### Impact of Ringgit Strengthening

The strengthening of the Ringgit over the past 12 months has placed pressure on export competitiveness and profit margins for many manufacturers. Half of respondents (50%) reported compression of profit margins, while 32% experienced reduced export price competitiveness. About 30% also cited increased pressure to renegotiate prices with overseas customers.

At the same time, some respondents benefited from the stronger currency. 23% experienced improved affordability of imported inputs or capital goods, while 13% reported minimal or no material impact. The issue was not applicable to 11% of respondents as they do not export.

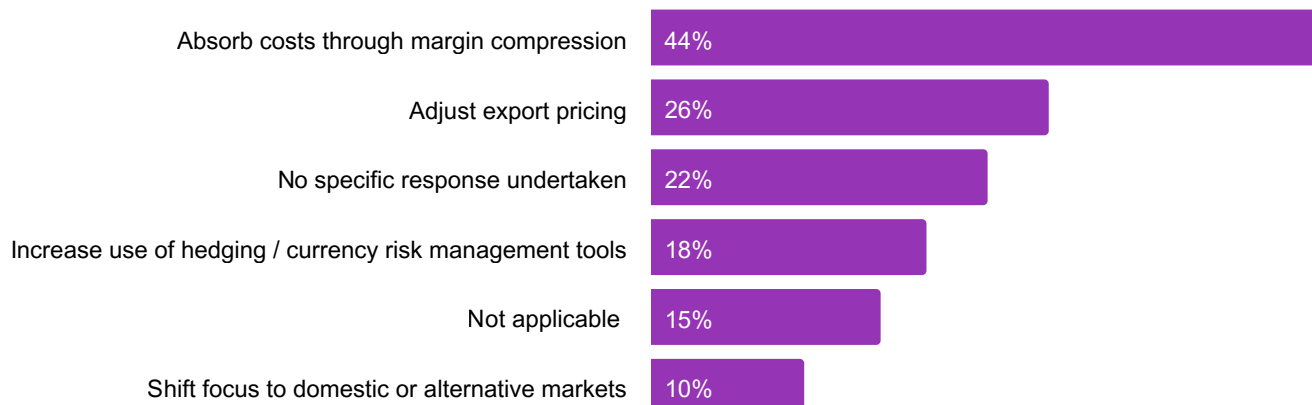
#### Impact of Ringgit Strengthening on Company Competitiveness



## Firms' Responses to Exchange Rate Pressures

Manufacturers have adopted several strategies to respond to the stronger Ringgit. The most common response has been absorbing costs through margin compression (44%). 26% adjusted export pricing, while 18% increased the use of hedging or currency risk management tools. Only 10% reported shifting their focus to domestic or alternative markets, while 22% have not undertaken any specific response.

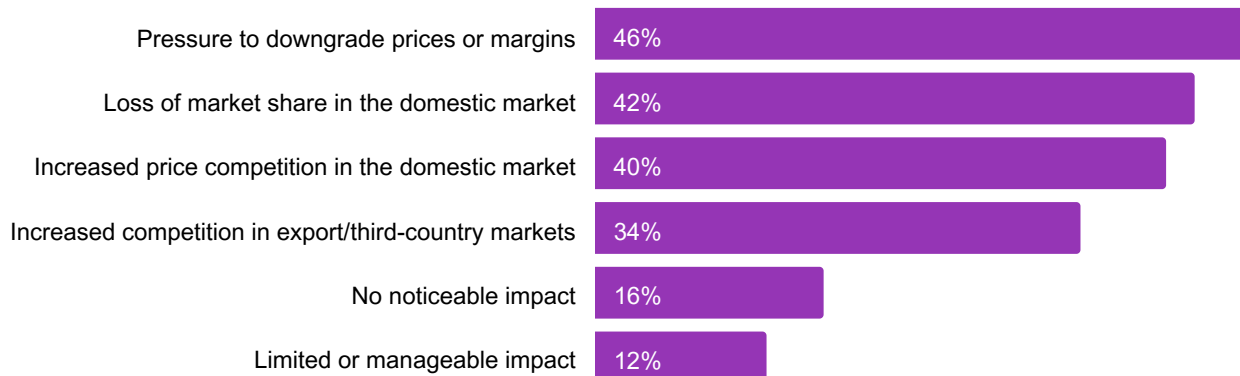
### Responses to Ringgit Strengthening



## Competition from Chinese Products

Competition from Chinese products continues to exert significant pressure on manufacturers across both domestic and export markets. 46% of respondents reported pressure to reduce prices or margins, while 42% reported a loss of domestic market share. In addition, 40% cited intensified price competition in the domestic market and 34% reported increased competition in export or third-country markets. However, some respondents reported more limited effects. 12% believed that the impact was manageable, while 16% reported no noticeable impact.

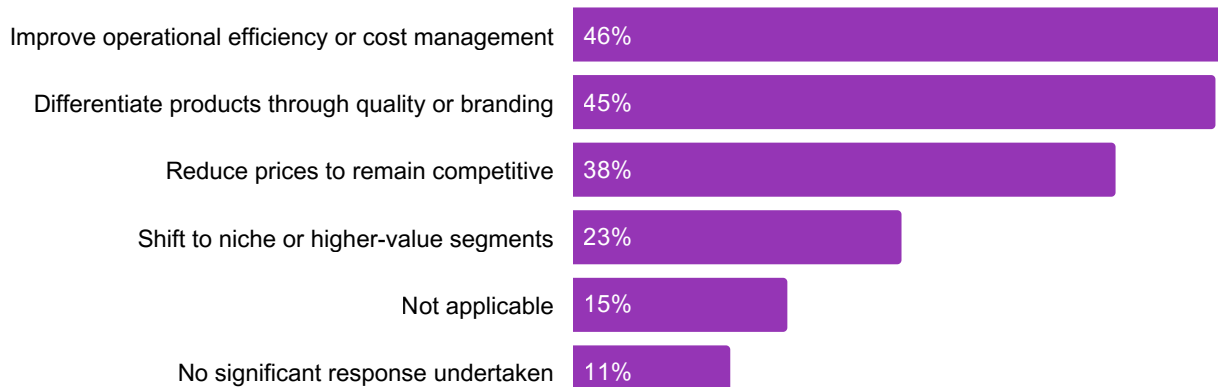
### Impact of Chinese Product Competition on Market Position



## Firms' Responses to Chinese Competition

In response to intensifying competition, many firms are focusing on improving efficiency and differentiating their products. The most commonly cited response was improving operational efficiency or cost management (46%), followed closely by product differentiation through quality improvements or branding (45%). In addition, 38% of respondents reported reducing prices to remain competitive, while 23% are shifting towards niche or higher-value market segments. Only 11% have not undertaken any significant response.

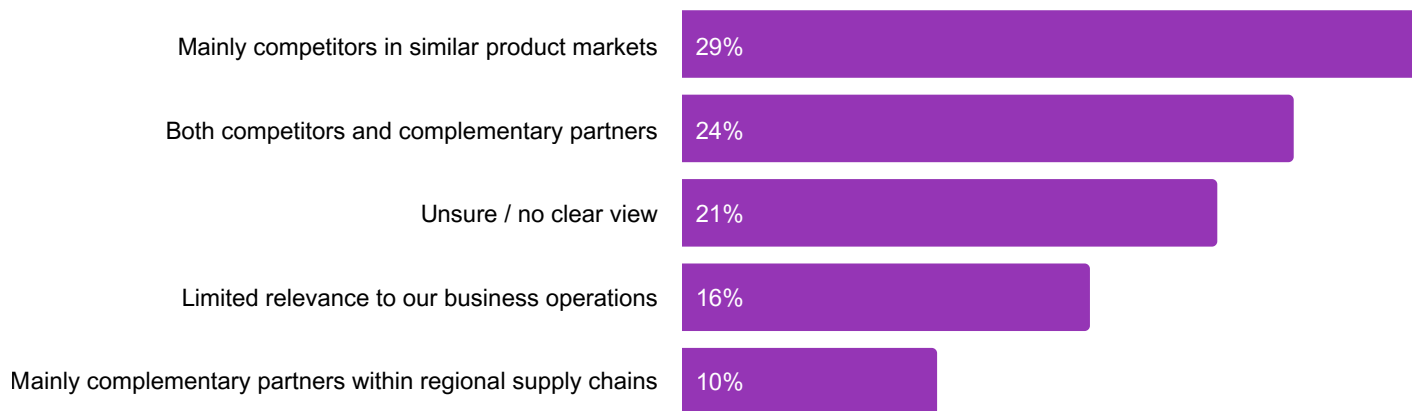
### Primary Response to Competition from Chinese Products



## ASEAN Supply Chain Positioning

Manufacturers' views of ASEAN economies suggest a mix of competitive and complementary relationships within regional supply chains. About 29% of respondents view other ASEAN economies primarily as competitors in similar product markets, while 24% consider them both competitors and complementary partners within regional production networks. A smaller share (10%) see ASEAN economies mainly as complementary partners. Meanwhile, 16% indicated that ASEAN economies have limited relevance to their business operations, while 21% reported that they were uncertain or had no clear view.

### Role of Other ASEAN Economies in Companies' Operations

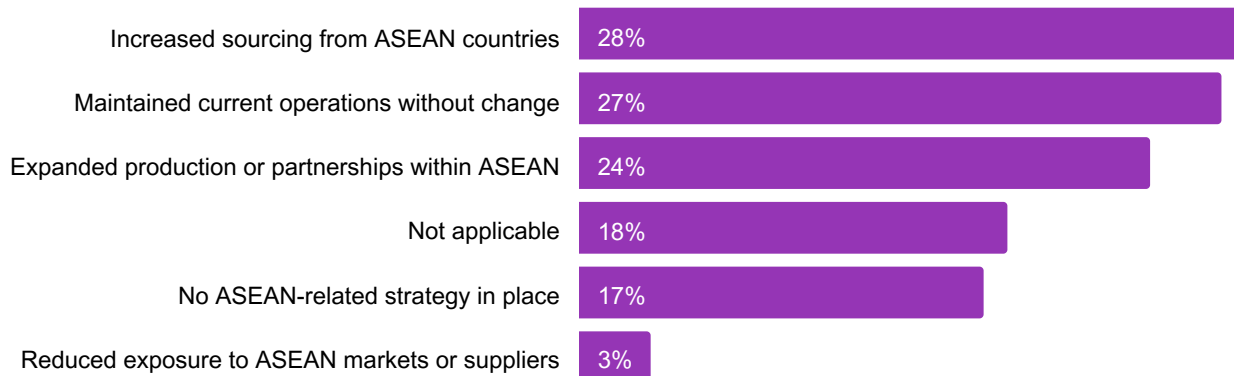


## Strategic Adjustments to ASEAN Supply Chains

Survey responses show that firms are gradually adjusting their strategies in response to evolving ASEAN supply chain dynamics. 28% reported increasing sourcing from ASEAN countries, while 24% are expanding production or partnerships within the region and 27% are maintaining their current operations without significant changes. Only 3% reported reducing exposure to ASEAN markets or suppliers, while 17% do not currently have an ASEAN-related strategy in place.

Collectively, these findings indicate that while ASEAN remains an important regional production and sourcing network, firms' engagement with the region varies across industries and supply chain structures, reflecting differing competitive positions and strategic priorities.

### Companies' Strategic Adjustments to ASEAN Supply Chain Dynamics



The FMM Business Conditions Index (FMM BCI) tracks the general state of the economy affecting business viability. The FMM BCI uses the current level of business activity as a proxy for current business conditions, compared to six months ago. Index values range from 0 to 200 points. A value above the growth-neutral threshold level of 100 points indicates an improvement or positive outlook, while that below the threshold indicates a worsening or negative outlook.

The FMM Business Conditions Survey 2H2025 was conducted from January 12, 2026 to February 27, 2026 and received 631 responses, of which 70.7% were SMEs (based on full-time employees), with 149, 103 & 83 responses from Klang Valley, Perak & Penang respectively. The top three industries for responses were: Food, Beverage & Tobacco (17.3% of respondents); Electrical & Electronics (12.4%); and Chemicals & Chemical Products (11.6%).

#### **All rights reserved**

Federation of Malaysian Manufacturing (FMM)

Wisma FMM, No 3 Persiaran Dagang, PJJU 9, Bandar Sri Damansara, 52200 Kuala Lumpur, WP Kuala Lumpur

Tel: 603-62867200 | Website: [www.fmm.org.my](http://www.fmm.org.my) | Enquiries: [Business\\_Environment@fmm.org.my](mailto:Business_Environment@fmm.org.my)