FMM Business Conditions Survey

MANUFACTURING UNDER PRESSURE IN 1H2026, CAUTIOUS RECOVERY AHEAD

Issue No. 2/2026 **Released on September 3, 2026**

KEY RESULTS:	
BUSINESS ACTIVITY – 1H2026	• Manufacturing activity moderated following the stabilisation seen in 2H2025 • Production and capacity utilisation declined, pointing to softer operating conditions • Local and export sales remained subdued, reflecting weaker demand conditions • 69% of respondents reported higher production costs, adding to pressure on profit margins • Capital investment and employment remained resilient despite more challenging business conditions
BUSINESS ACTIVITY OUTLOOK - 2H2026	• Operating conditions expected to remain subdued, with outlook turning more cautious • Production and capacity utilisation projected to weaken • Domestic and export demand expected to remain subdued • 63% expect production costs to increase, indicating continued margin pressure • Investment and employment expected to remain relatively resilient
REVENUE AND PROFIT OUTLOOK – 2H2026	• Revenue expectations are cautiously positive, with 15% anticipating growth of 1-5% and almost 15% expecting 6-10% growth • 28% expect revenue to remain unchanged, while 27% anticipate declines across the various bands • Profit expectations are more subdued, with 18% expecting growth of 1-5% and 10% anticipating 6-10% growth • 38% expect profits to decline, including 12% anticipating a fall of more than 25% • The outlook points to modest revenue growth but continued pressure on profitability
BUSINESS CONFIDENCE – 2H2026	• 32% expect their own business conditions to improve, compared with 20% anticipating deterioration • 25% expect their industry to improve, compared with 31% anticipating deterioration • 46% expect global economic conditions to deteriorate, compared with 20% expecting improvement • 39% expect Malaysian economic conditions to deteriorate, compared with 20% anticipating improvement • 35% expect technology deployment to improve, compared with 15% anticipating deterioration • 36% expect end-consumer spending to weaken, compared with 19% expecting improvement
KEY BUSINESS CHALLENGES – 2H2026	• 53% cite higher raw material and input costs as a key business challenge • 45% identify the West Asia conflict, Red Sea disruptions and higher war-risk costs as major concerns • 33% cite weak domestic and/or export demand, while 31% point to intensifying competition • 26% highlight US tariffs, trade policy changes, sanctions and export controls • 24% cite exchange-rate volatility and imported inflation

KEY RESULTS:	
KEY BUSINESS OPPORTUNITIES – 2H2026	• 46% see cost control and operational efficiency as their leading growth strategy • 29% identify product or service portfolio expansion, while 28% seek to expand sales to existing customers • 28% cite product quality, innovation and value-added capabilities, while 26% target specialised or higher-value niche products • 21% see opportunities in new domestic market segments, while 20% aim to expand exports to existing overseas markets • 17% identify automation as a growth opportunity, with 12% citing digital technologies, cloud solutions and AI
INDUSTRY 4.0 ADOPTION	• 36% have implemented Industry 4.0 technologies, down slightly from 38% in the previous survey • 60% of adopters use system integration, followed by 49% AI, 48% IoT and 46% cloud computing • 35% of adopters use cybersecurity technologies, while 41% use autonomous robots • Advanced technologies remain less widely adopted, with additive manufacturing at 14%, simulation and advanced materials at 11% each, and augmented reality at just 2%
AI USE IN BUSINESS OPERATIONS	• 62% use AI software or productivity tools in their business operations • 83% of AI users use ChatGPT, followed by 50% Gemini and 47% Copilot • 25% use Claude AI, while 20% use DeepSeek
GEOPOLITICAL RISKS AND IMPACT ON BUSINESS OPERATIONS	• 74% of affected manufacturers report raw material supply shortages or cost increases, while 72% face higher freight, logistics and shipping costs • 40% say geopolitical impacts have partially eased, but conditions have not normalised, while 32% report impacts remain at elevated levels • 29% are increasing stockholding of critical raw materials, while 25% are switching to alternative suppliers or sourcing countries • 31% say it is still too early to determine the lasting structural impact of geopolitical disruptions • 56% seek duty and tax exemptions on raw materials from alternative origins, while 40% seek industrial fuel rebates
GST REINTRODUCTION – TAX REFORM PRIORITIES	• 61% support the reintroduction of GST to replace SST • 60% cite higher production costs from embedded taxes in the supply chain, while 59% report higher unrecoverable taxes on business inputs • 69% prefer a GST rate of 5% or below with a majority 41% favouring 3% • 71% call for timely GST refunds, while 48% seek clear input tax credit rules • Manufacturers also call for simpler compliance requirements and a clear transition and implementation framework
RENEWABLE ENERGY ADOPTION	• 20% have adopted Net Energy Metering (NEM), followed by 17% for Solar ATAP and 9% for Self-Consumption (SELCo) • Adoption remains limited for newer programmes, with 3% having adopted CRESS and 3% BESS • 311 respondents cite high upfront investment costs as a key barrier to adopting renewable energy or BESS, followed by 218 citing long payback periods or uncertain returns • 68% seek greater financial incentives or grants to encourage renewable-energy adoption • 40% favour simpler application and approval processes, while 38% seek clearer policy direction and regulatory certainty
HRD CORP TRAINING GRANT CONDITIONS	• 44% report revised conditions have hindered their ability to plan and conduct employee training • 56% cite the 14-day advance approval requirement as a key challenge, while 45% are concerned that training cannot proceed while applications are pending • 45% report reduced flexibility to change training arrangements, while 36% anticipate a higher administrative workload • 32% plan to maintain their current level of training, while 31% say it is too early to assess the impact on future training plans • 13% expect to increase training expenditure and activities, while 8% plan to reduce the number of training programmes

KEY RESULTS:	
PRE-BUDGET 2027 PRIORITIES	• 46% seek direct tax or duty relief on essential raw materials, machinery and production inputs • 43% favour lower corporate income tax, particularly for SMEs and mid-tier companies • 30% call for electricity, natural gas and energy-cost relief for manufacturers • 25% seek faster tax refunds, while 25% favour double tax deductions for freight, logistics and insurance costs • 24% support accelerated capital allowances for machinery, automation, digitalisation and energy-efficiency investments

Manufacturing conditions weakened in the first half of 2026 following the stabilisation seen in the previous six months. Softer domestic and export demand weighed on business activity, production and capacity utilisation, while significantly higher production costs added to operating pressures. Despite the more challenging environment, manufacturers remained relatively resilient in maintaining investment and employment, suggesting that firms continued to adopt a cautious approach while navigating weaker demand and rising costs.

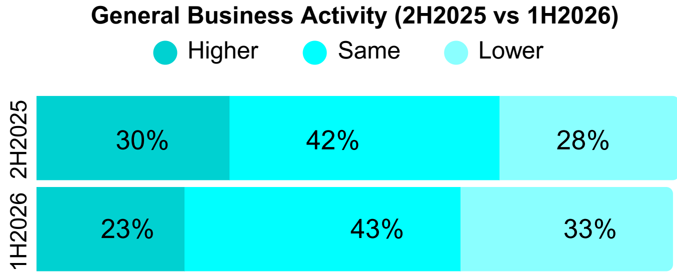
Looking ahead, manufacturers have become more cautious about the outlook for the second half of 2026, with expectations for business activity, domestic and export sales, production and capacity utilisation revised lower. Production cost pressures are expected to intensify further, while investment and employment are expected to remain relatively resilient despite slightly lower expectations. Overall, respondents appear to anticipate a more subdued operating environment in 2H2026, with the recovery likely to remain constrained by weaker demand and continued cost pressures.

Indicators	*FMM BUSINESS CONDITIONS INDEX VALUES*							
	Current (Compared to 6 months ago)				**Looking forward (Next 6 months)**			
	2H2024	**1H2025**	**2H2025**	**1H2026**	**1H2025**	**2H2025**	**1H2026**	**2H2026**
Business conditions	98	77	103	**90**	101	89	104	**93**
Local sales	88	69	94	**82**	94	83	95	**88**
Export sales	92	77	93	**85**	97	84	100	**92**
Production volume	99	83	102	**94**	109	91	106	**99**
Capacity utilisation	96	80	102	**94**	106	90	106	**98**
Capital investment	108	102	103	**106**	116	108	110	**107**
Number of employees	98	97	98	**100**	106	99	106	**104**
Cost of production	144	158	146	**163**	167	163	150	**156**

CURRENT PERFORMANCE - 1H2026

Business Conditions Remain Challenging Amid Heightened Uncertainty

Manufacturing business conditions weakened in the first half of 2026 following the stabilisation recorded in 2H2025. The general business activity index declined to 90, from 103 previously, moving below the neutral threshold of 100. About 23% of respondents reported higher business activity, while 43% recorded stable conditions and 33% experienced declines.



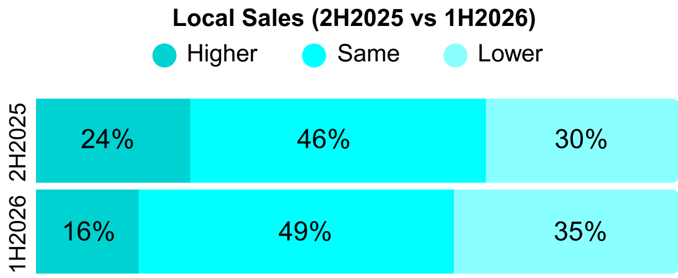
The weaker performance suggests that manufacturers faced a more challenging operating environment during the period, amid softer demand and heightened uncertainty in both domestic and global markets. This occurred despite continued expansion in the wider Malaysian economy, which grew by 5.4% in the first quarter of 2026, with the manufacturing sector expanding by 5.9%. The difference between the survey findings and overall manufacturing performance may partly reflect differences in sectoral composition, as the survey includes significant representation from Food & Beverage, Chemicals and Plastics, while aggregate manufacturing growth has been driven in part by stronger-performing subsectors such as Electrical, Electronic & Optical Products.

The deterioration was also more pronounced than anticipated. The previous survey had pointed to a more positive outlook for 1H2026, with business activity expected to strengthen further. However, these expectations were formed before the onset of the West Asian crisis and did not fully reflect the subsequent escalation in geopolitical tensions and associated economic uncertainties. The weaker actual outcome therefore reflects, in part, the emergence of challenges that were not anticipated when the earlier survey was conducted.

Domestic Demand Weakens Further

Domestic demand weakened in 1H2026, with the local sales index falling to 82 from 94 in 2H2025. Approximately 16% of respondents reported higher local sales, while 49% recorded stable sales and 35% experienced declines.

The decline indicates that domestic demand remained a significant constraint on manufacturers' performance. The weaker outcome also suggests that the anticipated improvement in domestic sales did not materialise, with actual performance falling well short of the previous expectation.

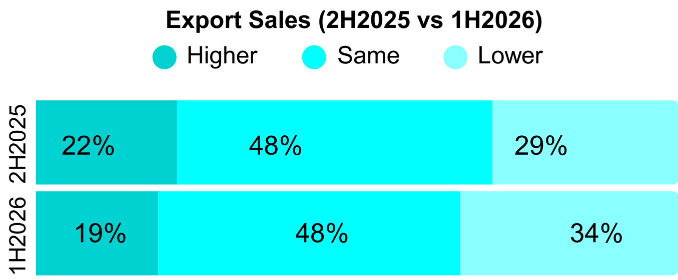


The subdued domestic demand is notable against relatively resilient overall economic activity. While household spending and domestic demand continued to support Malaysia's economic growth, the survey results suggest that manufacturers did not experience the same degree of strength in their own sales conditions. This may reflect differences across industries and the uneven transmission of broader economic growth to manufacturing firms.

Export Performance Weakens Amid Global Uncertainty

Export performance also weakened in 1H2026, with the export sales index declining to 85 from 93 in 2H2025. Around 19% of respondents reported higher export sales, while 48% recorded stable export performance and 34% experienced declines.

The weaker export performance came amid heightened uncertainty in the global trading environment. During the period, geopolitical tensions in West Asia disrupted shipping routes and increased logistics costs, while evolving trade policies added to uncertainty for exporters. FMM's surveys conducted during the period found that the prolonged West Asia crisis was affecting freight and logistics, raw material availability, orders and operating costs.

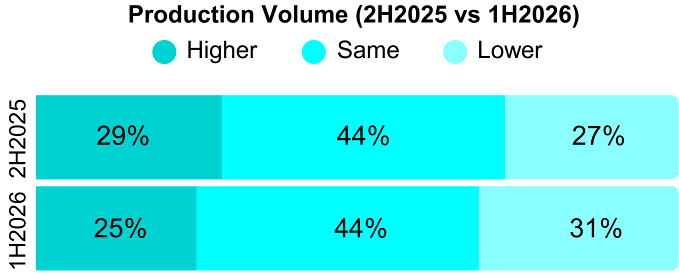


These developments may have contributed to the weaker export conditions reported by manufacturers, particularly for firms exposed to affected shipping routes and international supply chains. The actual export sales index also fell well short of the previous expectation of 100, indicating that the anticipated stabilisation in external demand did not materialise as strongly as expected.

At the same time, Malaysia's overall export performance remained resilient, with manufactured goods exports reaching a record monthly value in May 2026, supported particularly by strong E&E exports. This again points to differing conditions across manufacturing segments, with stronger-performing sectors offsetting weakness in other parts of the manufacturing base.

Production Activity Slows as Demand Softens

Production activity weakened alongside softer sales conditions. The production volume index declined to 94 in 1H2026, from 102 in the previous survey. About 25% of respondents reported higher production, while 44% maintained similar output levels and 31% recorded declines.



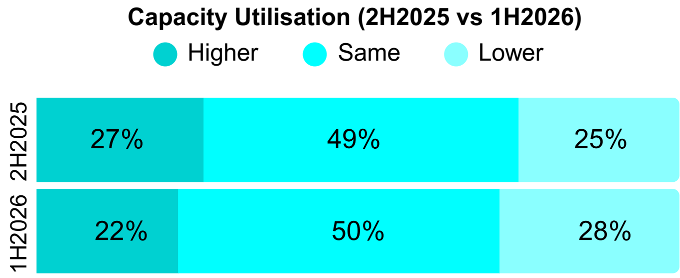
The decline suggests that manufacturers adjusted production in response to weaker demand and heightened operating uncertainty. Although a sizeable proportion of firms maintained output at existing levels, the share reporting lower production exceeded those reporting increases.

The softer survey outcome contrasts with official data showing continued growth in manufacturing output during the period. Manufacturing production increased by 6.6% year-on-year in May 2026, although performance varied considerably across subsectors, with E&E recording particularly strong growth while some industries contracted. The difference reinforces the point that conditions were uneven across the manufacturing sector.

Production performance also fell short of the previous expectation of 106, indicating that the anticipated strengthening in activity was not realised to the extent manufacturers had expected.

Capacity Utilisation Eases as Operating Conditions Moderate

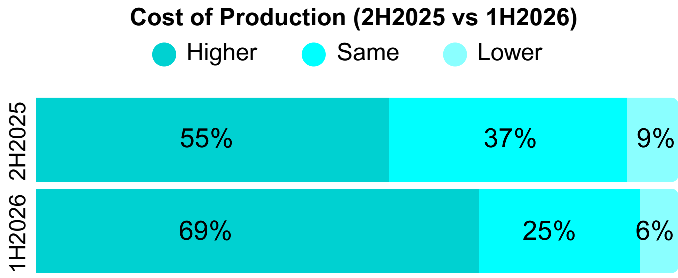
Capacity utilisation declined in line with weaker production activity. The capacity utilisation index fell to 94 in 1H2026, from 102 in 2H2025. Approximately 22% of respondents reported higher utilisation, while 50% recorded no change and 28% reported lower utilisation.



The movement below the neutral threshold indicates that manufacturers were operating with greater spare capacity during the period. The result is consistent with the weaker production and sales conditions reported by respondents and suggests that firms remained cautious in adjusting production capacity amid uncertain demand. The index also fell considerably short of the previous forecast of 106, reinforcing the evidence that operating conditions were weaker than manufacturers had anticipated.

Cost Pressures Intensify Significantly

Cost pressures emerged as one of the most significant areas of deterioration in 1H2026. The production cost index rose sharply to 163, from 146 in the prior survey. About 69% of respondents reported higher production costs, while 25% recorded stable costs and only 6% reported lower costs.



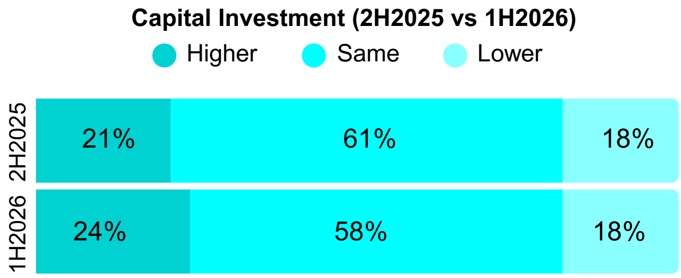
The sharp increase indicates that manufacturers faced significantly stronger cost pressures during the period. The timing coincided with major disruptions to global shipping and energy markets following the escalation of the West Asia conflict. FMM's surveys during the period found that freight and logistics, raw material shortages and higher energy and fuel costs were among the main sources of pressure facing manufacturers.

The increase in the production cost index was also considerably higher than the previous expectation of 150. This suggests that the cost pressures experienced by manufacturers were stronger than anticipated and may have further constrained margins at a time when sales and production conditions were weakening.

Capital Investment Remains Resilient

Despite weaker business conditions, capital investment remained relatively resilient. The capital investment index increased to 106 in 1H2026, from 103 in 2H2025, , indicating a modest improvement in investment activity.

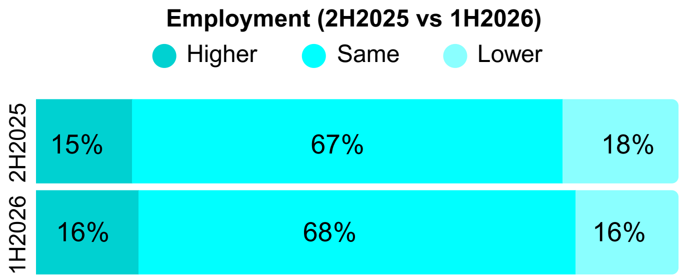
The majority of manufacturers maintained their existing investment levels, with 58% reporting no change. A further 24% reported higher investment, while 18% reported a decline. This suggests that investment activity was broadly maintained rather than showing a broad-based expansion.



The resilience of capital investment is noteworthy given the challenging operating environment. It suggests that manufacturers continue to maintain selected investments, particularly those that support productivity, efficiency and longer-term competitiveness, despite ongoing cost and demand pressures.

Employment Remains Broadly Stable

Employment conditions remained relatively stable despite weaker business activity. The employment index increased modestly to 100 in 1H2026, from 98 in the previous survey. About 16% of respondents reported higher employment, while 68% maintained their existing workforce levels and 16% recorded reductions.



The results suggest that manufacturers have largely sought to preserve their existing workforce despite softer operating conditions. The large proportion maintaining existing employment levels indicates that firms have so far been cautious about making significant workforce adjustments.

The improvement in the employment index is also notable given the challenging operating environment. However, it remains below the previous expectation of 106, suggesting that manufacturers were more restrained in expanding their workforce than anticipated.

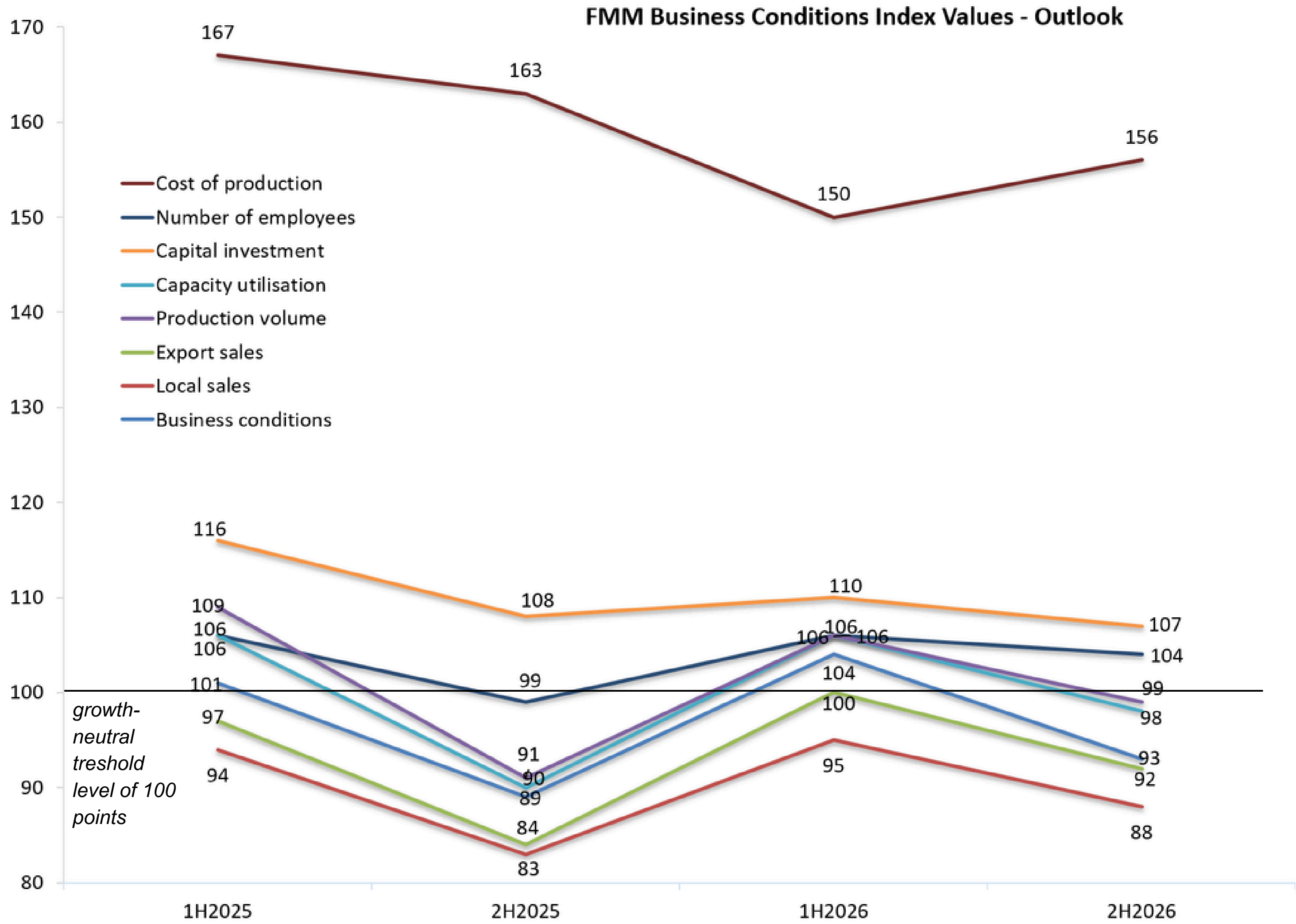
OUTLOOK FOR 2H2026

Cautious Expectations Ahead

Manufacturers' expectations for the second half of 2026 have become more cautious compared with their previous outlook for the first half of the year. The expected **business activity** index declined to 93 for 2H2026, from 104 previously, remaining below the neutral threshold of 100. This suggests that manufacturers have moderated their expectations for the pace of recovery amid continued uncertainty and challenging operating conditions.

Local sales are expected to weaken further, with the expected index declining to 88 from 95 previously projected, while the expected **export sales** index declined to 92 from 100. The downward revisions suggest that manufacturers have become more cautious about both domestic and external demand, with both indicators remaining below the neutral threshold.

The expected **production volume** index declined to 99 from the previous level of 106, while the expected **capacity utilisation** index fell to 98 from 106. These revisions point to a more subdued outlook for manufacturing activity in 2H2026, with both indicators remaining just below the neutral threshold.

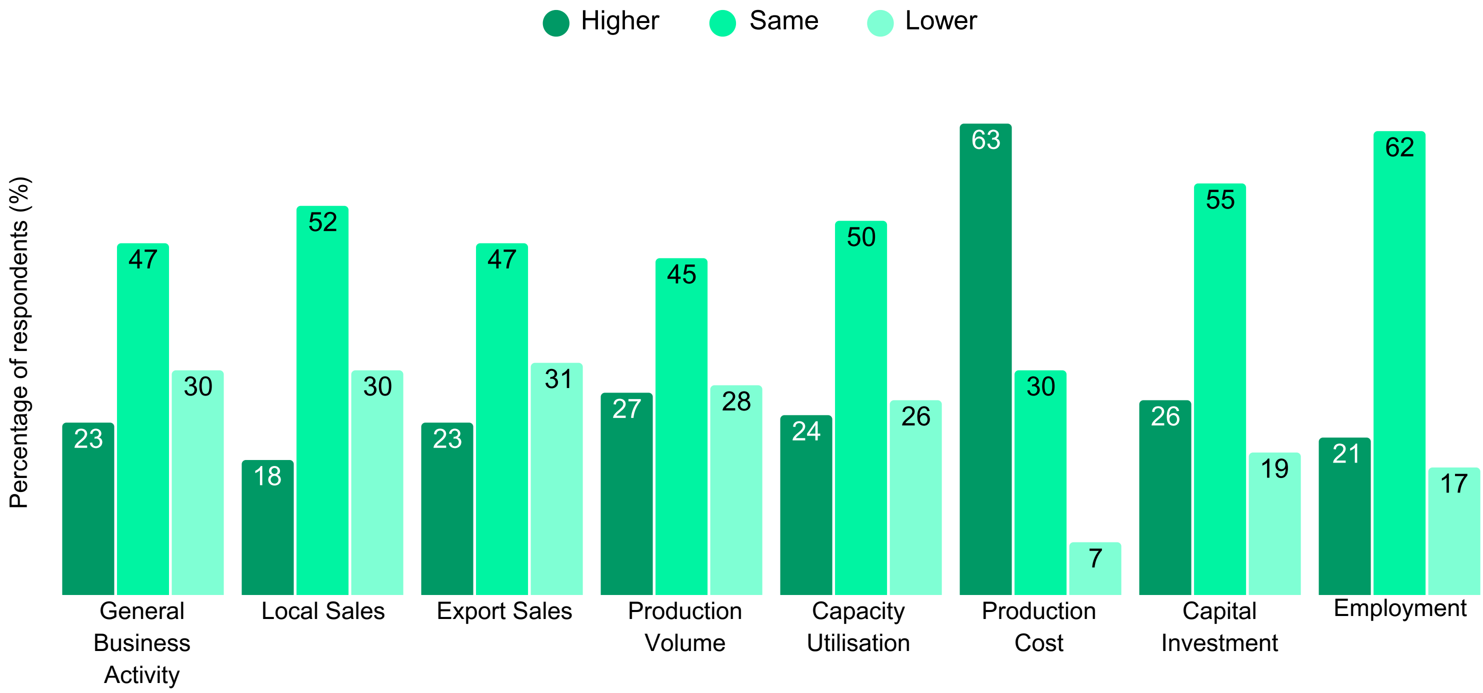


Cost pressures are expected to intensify further, with the expected **production cost** index rising to 156 from 150 previously. This indicates that manufacturers now anticipate stronger cost pressures than previously expected for 1H2026, which could continue to weigh on margins and business performance.

Capital investment is projected to remain relatively resilient, although the expected index is slightly lower at 107 compared with the previous expectation of 110. Similarly, the expected **employment** index moderated to 104 from 106 previously. While both remain above the neutral threshold, the revisions suggest a more cautious approach towards investment and hiring.

Overall, the 2H2026 outlook points to a more cautious operating environment than manufacturers had anticipated previously. Expectations for business activity, sales, production, capacity utilisation, investment and employment have all been revised downwards, while production cost pressures are expected to be higher. The findings suggest that manufacturers have become more cautious about the strength of the recovery, with demand and operating conditions expected to remain subdued and cost pressures continuing to weigh on business performance.

2H2026 Outlook Performance



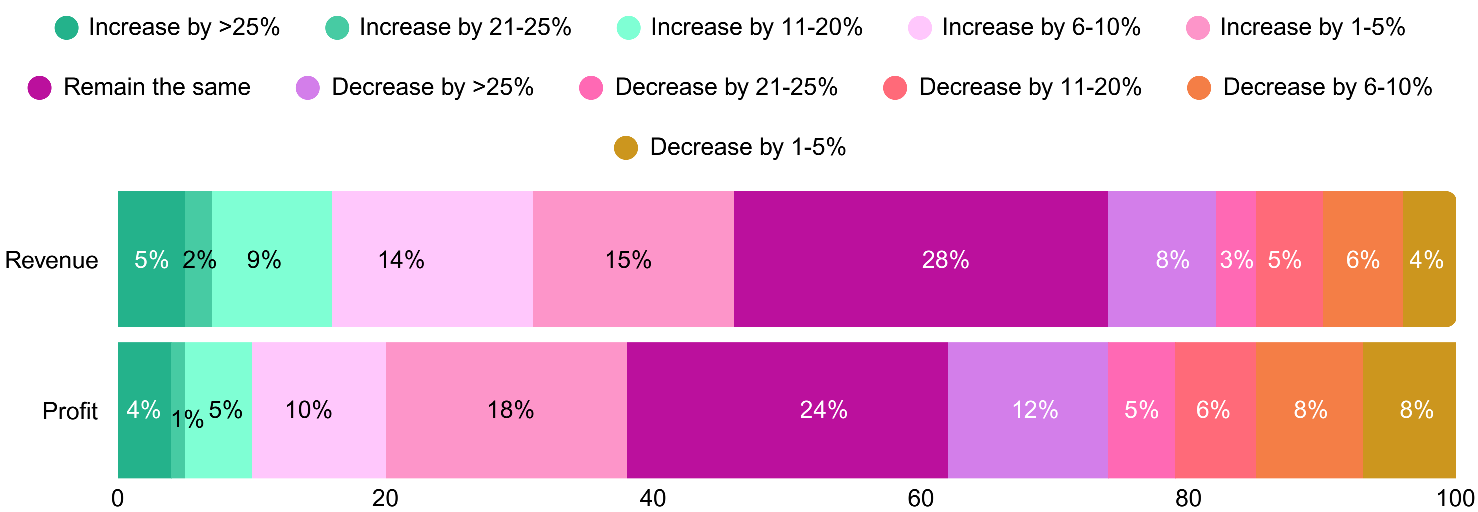
REVENUE AND PROFIT OUTLOOK - 2H2026

Revenue Growth Expected to Remain Modest

Manufacturers' revenue expectations for 2H2026 are cautiously positive, with 45% of respondents expecting revenue to increase. The largest proportions anticipate relatively modest growth of 1-5% (15%) and 6-10% (15%), while 9% expect growth of 11-20%. At the same time, 28% expect revenue to remain unchanged and 27% anticipate a decline, including 8% expecting revenue to fall by more than 25%.

The distribution points to a modest and uneven improvement in revenue performance rather than a broad-based acceleration. This is broadly consistent with the core survey, where local and export sales are expected to improve from their weaker 1H2026 levels but remain below those recorded in 2H2025.

Expectations on Revenue and Profit Growth for 2H2026



Profit Outlook More Cautious as Margin Pressures Persist

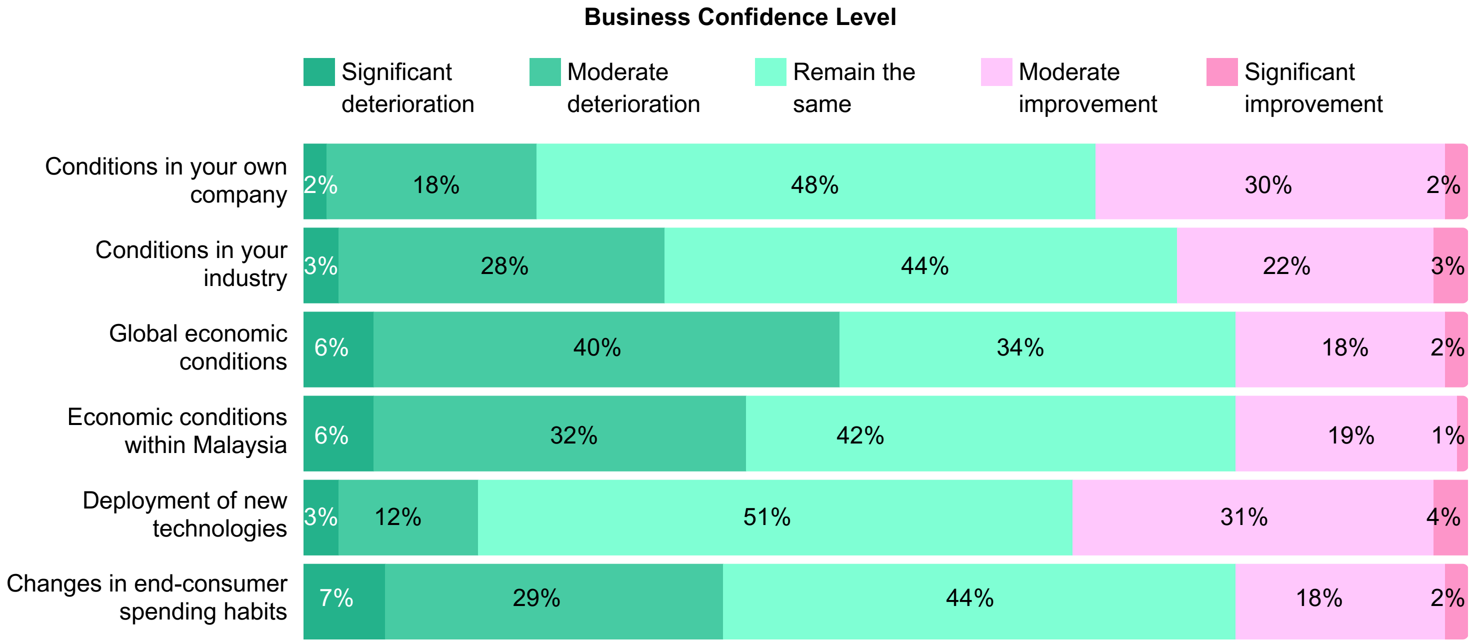
Profit expectations are more subdued, with 38% expecting profits to increase, mainly in the 1-5% range (18%), while 38% anticipate a decline and 24% expect profits to remain unchanged. The downside is particularly notable, with 12% expecting profits to fall by more than 25%, compared with 8% expecting revenue to decline by more than 25%.

The weaker profit outlook relative to revenue suggests that modest improvements in sales may not translate proportionately into stronger earnings, as manufacturers continue to face elevated operating costs and constraints on passing higher costs through to customers. This is consistent with the core survey, where the production cost index rose to 163 in 1H2026 and 63% expect production costs to increase further in 2H2026. The combination of modest revenue growth and persistent cost pressures is therefore likely to continue weighing on profit margins.

BUSINESS CONFIDENCE OUTLOOK - 2H2026 VS 1H2026

Manufacturers More Confident About Their Own Businesses Than the Broader Economy

Manufacturers' expectations for 2H2026 reveal a clear divergence between confidence in their own businesses and their assessment of the broader economic environment. Firms are relatively more positive about their own prospects, while sentiment becomes increasingly cautious as respondents look beyond their immediate business environment.



Conditions within **own companies** remain relatively positive, with 32% expecting improvement, compared with 20% anticipating deterioration and 48% expecting no change. This suggests that manufacturers remain reasonably confident in their ability to navigate the prevailing operating environment, although the largest proportion expects conditions to remain stable.

The outlook for the **manufacturing industry** is more subdued, with 25% expecting improvement compared with 31% anticipating deterioration, while 44% expect no change. This points to an uneven industry outlook, with manufacturers facing differing market and operating conditions.

Sentiment towards the **global economy** is distinctly cautious. 46% expect global economic conditions to deteriorate, compared with 20% expecting improvement and 34% anticipating no change. Concerns over the **Malaysian economy** are also evident, with 38% expecting deterioration, against 20% expecting improvement and 42% anticipating no change. The relatively negative balances suggest that manufacturers do not anticipate a broad-based strengthening in either the global or domestic economy in 2H2026.

Technology deployment remains a relative bright spot, with 35% expecting improvement, compared with 15% anticipating deterioration and 51% expecting no change. This suggests that manufacturers continue to see technology adoption as an avenue for improving productivity and competitiveness despite broader economic uncertainty.

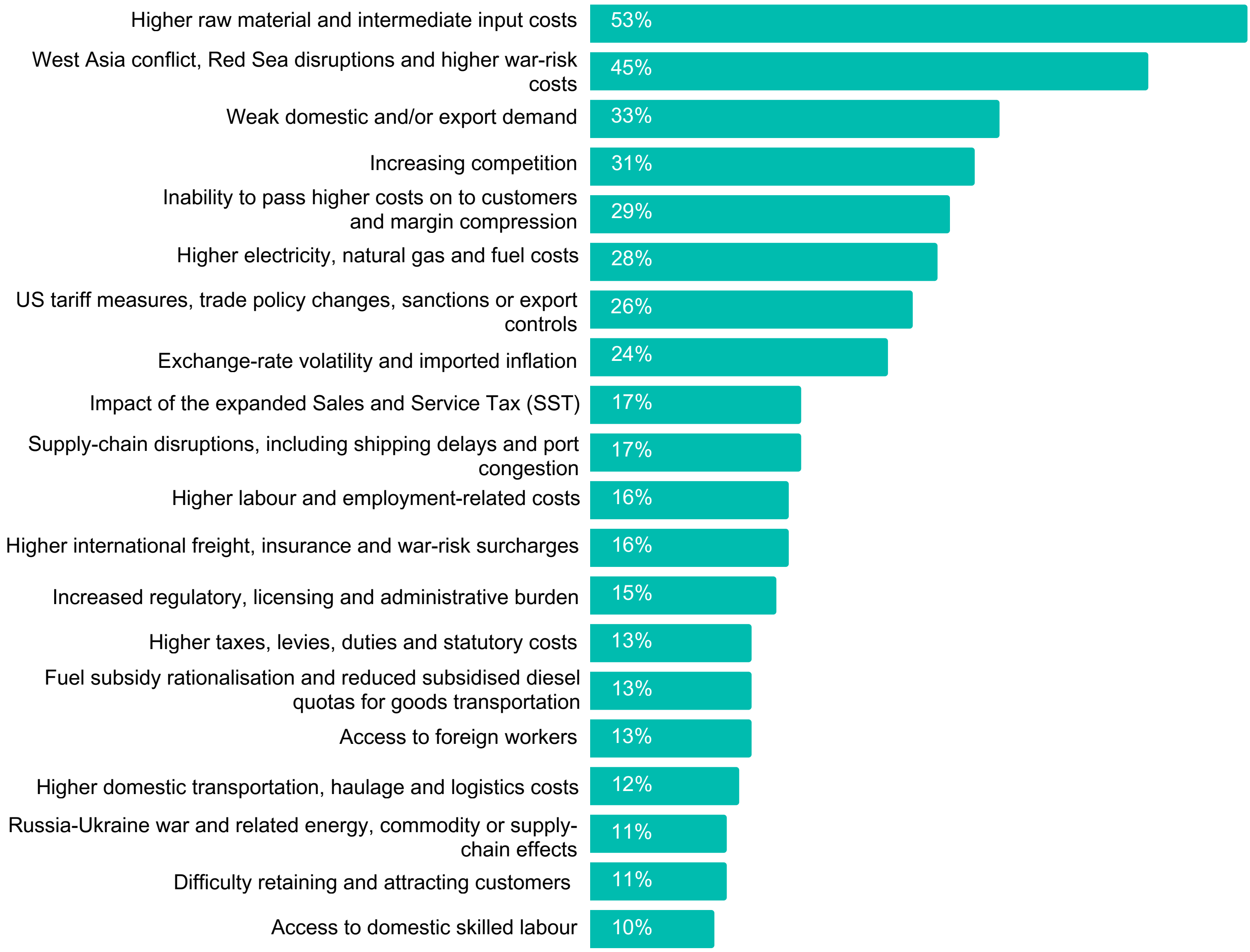
Meanwhile, **consumer spending** prospects remain subdued, with 36% expecting end-consumer spending habits to deteriorate, compared with 20% expecting improvement and 44% anticipating no change. This points to continued uncertainty over the strength of consumer demand and its contribution to domestic sales.

Overall, the findings point to a confidence gap between the micro and macro outlook: manufacturers are more positive about their own businesses than about the wider economy, while technology deployment stands out as a relative area of optimism. This is consistent with the core survey's outlook for 2H2026, which points to a partial recovery in business activity rather than a broad-based upturn.

KEY BUSINESS CHALLENGES - 2H2026

Input Costs and Geopolitical Risks Remain the Dominant Challenges

Top 20 Challenges to Business Operations and Growth



Manufacturers' key concerns for 2H2026 are dominated by higher input costs, geopolitical disruptions, weak demand, intensifying competition and difficulties in passing higher costs on to customers. The five most widely cited challenges are higher raw material and intermediate input costs (53%), the West Asia conflict, Red Sea disruptions and higher war-risk costs (45%), weak domestic and/or export demand (33%), increasing competition (31%), and difficulty passing higher costs on to customers and resulting margin compression (29%).

Higher input costs remain the most immediate concern and are consistent with the core survey, where production costs remained elevated and 63% expect production costs to increase in 2H2026. Other cost pressures include higher electricity, natural gas and fuel costs (28%), while geopolitical disruptions add to supply-chain, freight and insurance costs.

Weak demand and intensifying competition are also significant concerns. With 33% citing weak domestic and/or export demand and 31% pointing to increasing competition, manufacturers face limited pricing power, particularly when combined with difficulties in passing higher costs on to customers. This helps explain the weaker profit outlook relative to revenue expectations for 2H2026.

Geopolitical and trade-related risks remain material, with 45% citing the West Asia conflict, Red Sea disruptions and higher war-risk costs, while 26% identify US tariff measures, trade policy changes, sanctions and export controls. Exchange-rate volatility and imported inflation are cited by a further 24%. These concerns highlight the continuing uncertainty in the global operating and trading environment.

Overall, manufacturers are entering 2H2026 facing persistent cost pressures, geopolitical uncertainty and subdued demand, while competition and limited cost pass-through continue to constrain margins. The combination is likely to reinforce manufacturers' focus on cost efficiency, productivity and competitiveness.

Cost Efficiency, Product Upgrading and Customer Expansion Lead Growth Strategies

Manufacturers' growth strategies for 2H2026 are led by cost efficiency, product upgrading, customer development and market expansion. The five most widely cited opportunities are strengthening cost control and operational efficiency (46%), expanding the product or service portfolio (29%), expanding sales to existing customers and market segments (28%), enhancing product quality, innovation and value-added capabilities (28%), and developing specialised or higher-value niche products (26%).

Cost control and operational efficiency is the leading strategy, closely reflecting the survey's finding that 53% cite higher raw material and intermediate input costs as a key business challenge. Other efficiency-related opportunities include improving capacity utilisation and production flexibility (18%), automation of production and business processes (17%), and improving energy, material and resource efficiency (13%). The emphasis suggests that manufacturers are seeking to protect competitiveness and margins through productivity improvements in response to persistent cost pressures.

Beyond cost management, manufacturers are also focusing on product upgrading and customer development. Expansion of the product or service portfolio is cited by 29%, while 28% each identify expanding sales to existing customers and enhancing product quality, innovation and value-added capabilities. A further 26% see opportunities in specialised or higher-value niche products. These strategies are particularly relevant given the competitive pressures and limited ability to pass higher costs on to customers, as identified in the Challenges section.

Market expansion remains another important avenue for growth, with 21% identifying new domestic market segments, 20% seeking to expand sales in existing overseas markets and 18% targeting new export markets. This indicates that manufacturers continue to pursue new sources of demand despite subdued domestic and export conditions. Technology also features in growth strategies, with 17% identifying automation and 12% digital technologies, cloud solutions and AI, consistent with the relatively positive outlook for technology deployment.

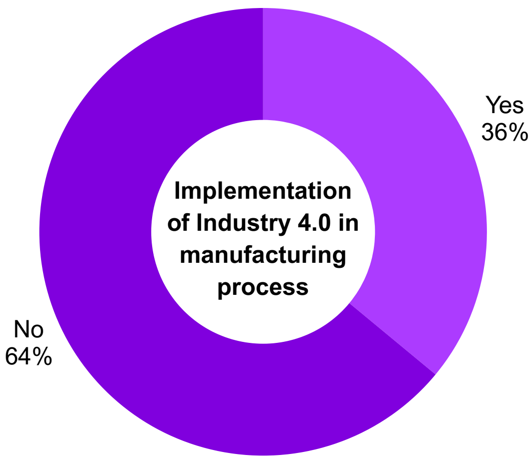
Other opportunities include supply-chain diversification (16%), workforce expansion and upskilling (11%), and localisation of inputs and stronger domestic supply chains (7%). Sustainability-related opportunities remain less prominent, with 6% citing renewable energy and energy-efficiency investments and 4% green, low-carbon or circular-economy products.

Overall, manufacturers appear to be pursuing a pragmatic growth strategy centred on efficiency, higher value addition and more resilient sources of demand. The findings suggest that firms are responding to a challenging operating environment not by broadly scaling back their ambitions, but by improving productivity, strengthening their market position and seeking new growth opportunities

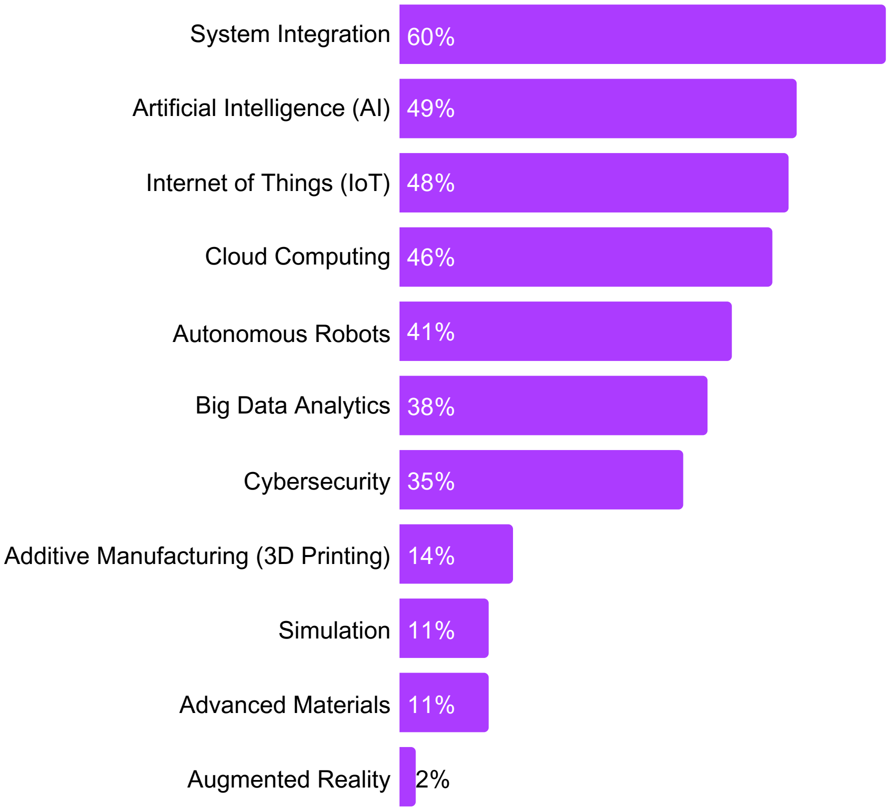
INDUSTRY 4.0 ADOPTION IN MANUFACTURING

Industry 4.0 Adoption Remains Uneven

Industry 4.0 adoption remains relatively limited among manufacturers, with 36% of respondents reporting that they have implemented Industry 4.0 technologies, while 64% have yet to do so. This represents a slight decline from 38% in the previous survey, suggesting that adoption has yet to gain sustained momentum across the manufacturing sector.



Industry 4.0 Technology / Pillar Implemented in Manufacturing Process



Among the 240 adopters, system integration is the most widely implemented technology, cited by 60%, followed by artificial intelligence (49%), Internet of Things (48%), cloud computing (46%), autonomous robots (41%) and big data analytics (38%). Cybersecurity is also adopted by 35%. More specialised technologies remain less widely used, with additive manufacturing at 14%, simulation and advanced materials at 11% each, and augmented reality at just 2%.

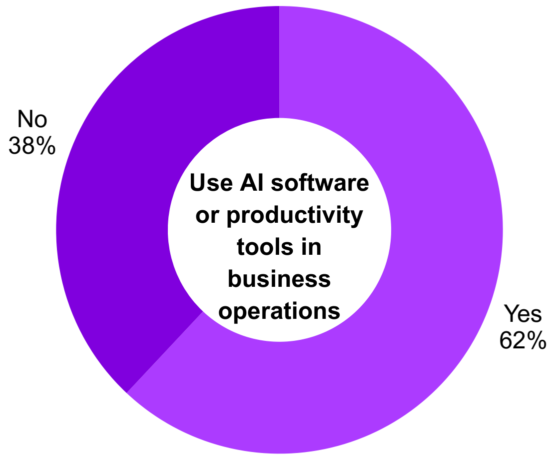
The adoption pattern suggests that manufacturers are focusing primarily on system integration, connectivity and data-enabled technologies that can support operational efficiency and productivity, while more specialised technologies remain at an earlier stage of adoption. The relatively modest overall adoption rate indicates that translating recognition of the benefits of digitalisation into broader implementation within manufacturing processes remains a challenge.

AI Adoption Extends Beyond Manufacturing Processes

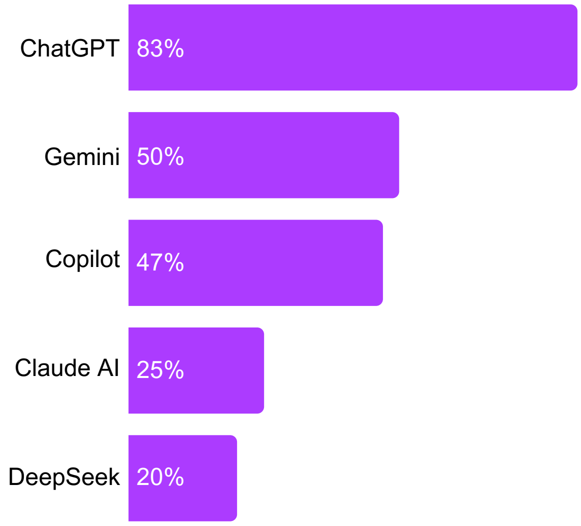
AI adoption is considerably more widespread in general business operations than Industry 4.0 adoption in manufacturing processes. 62% of respondents (416 firms) report using AI software or productivity tools for their business operations, compared with 36% that have implemented Industry 4.0 technologies.

Among AI users, ChatGPT is the most widely used tool at 83%, followed by Gemini (50%) and Copilot (47%). Claude AI is used by 25%, while DeepSeek is used by 20%. The substantial gap between general AI use and Industry 4.0 implementation suggests that manufacturers are adopting accessible AI applications faster than undertaking deeper digital transformation of production processes. AI is increasingly being used as a practical productivity tool, while wider integration of digital technologies into manufacturing operations remains a work in progress.

Overall, the findings point to incremental digitalisation, with business-oriented AI applications gaining wider acceptance while broader Industry 4.0 transformation remains relatively limited.



Top 5 AI Tools Most Widely Used in Business Operations



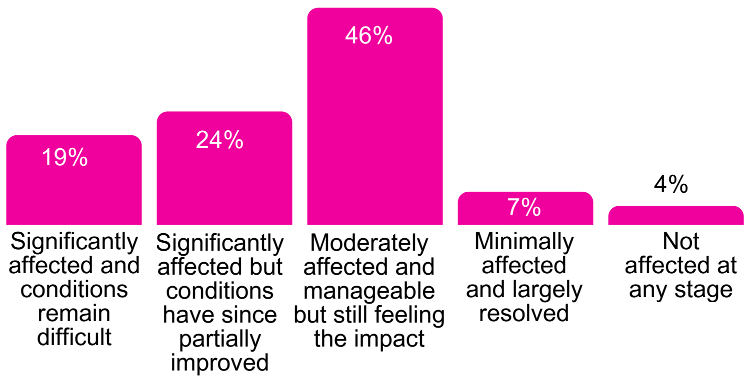
GEOPOLITICAL RISKS AND IMPACT ON BUSINESS OPERATIONS

Geopolitical Disruptions Continue to Weigh on Operations

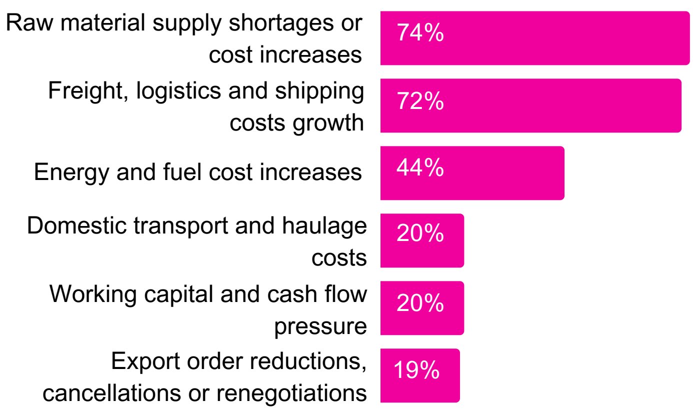
Geopolitical developments continue to have a significant impact on manufacturers' operations, with 96% of respondents reporting that they have been affected at some stage. Among those affected, the main impacts are raw material supply shortages or cost increases (74%) and higher freight, logistics and shipping costs (72%), followed by higher energy and fuel costs (44%). Working-capital and cash-flow pressures and higher domestic transport costs are each reported by 20%, while 19% have experienced export order reductions, cancellations or renegotiations.

The findings indicate that supply-chain disruption and higher logistics and input costs are the principal transmission channels through which geopolitical developments are affecting manufacturers. This is consistent with the broader survey, where higher input costs are the leading business challenge and geopolitical risks are among the key concerns for 2H2026.

Extent of Geopolitical Development on Business Operations



Business Operations Most Affected

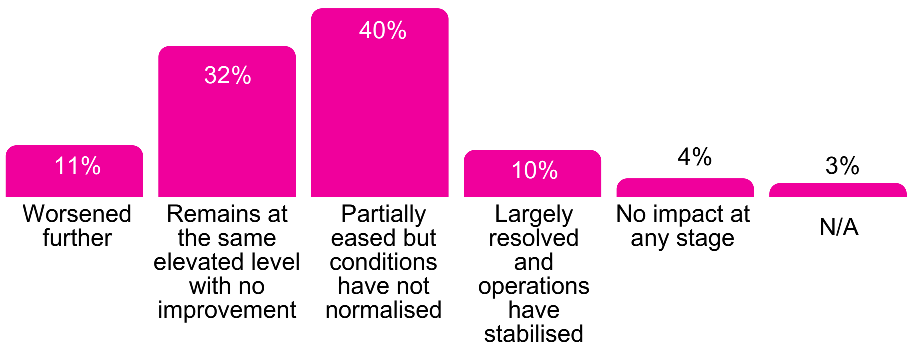


Impact Has Eased for Some, but Remains Elevated for Many

Compared with six months ago, the overall impact of geopolitical developments has eased for some manufacturers but remains elevated for many. 40% report that the impact has partially eased, although conditions have not normalised, while 32% report that the impact remains at the same elevated level with no improvement. At the same time, 11% report that the impact has worsened further, compared with 10% who say it has largely resolved and operations have stabilised.

The findings suggest that while geopolitical pressures have eased for some manufacturers, normal operating conditions have yet to be fully restored for many affected firms. Geopolitical-related cost and supply-chain pressures are therefore likely to remain a constraint even as overall business activity is expected to improve in 2H2026.

Overall Impact of Geopolitical Developments vs 6 Months Ago

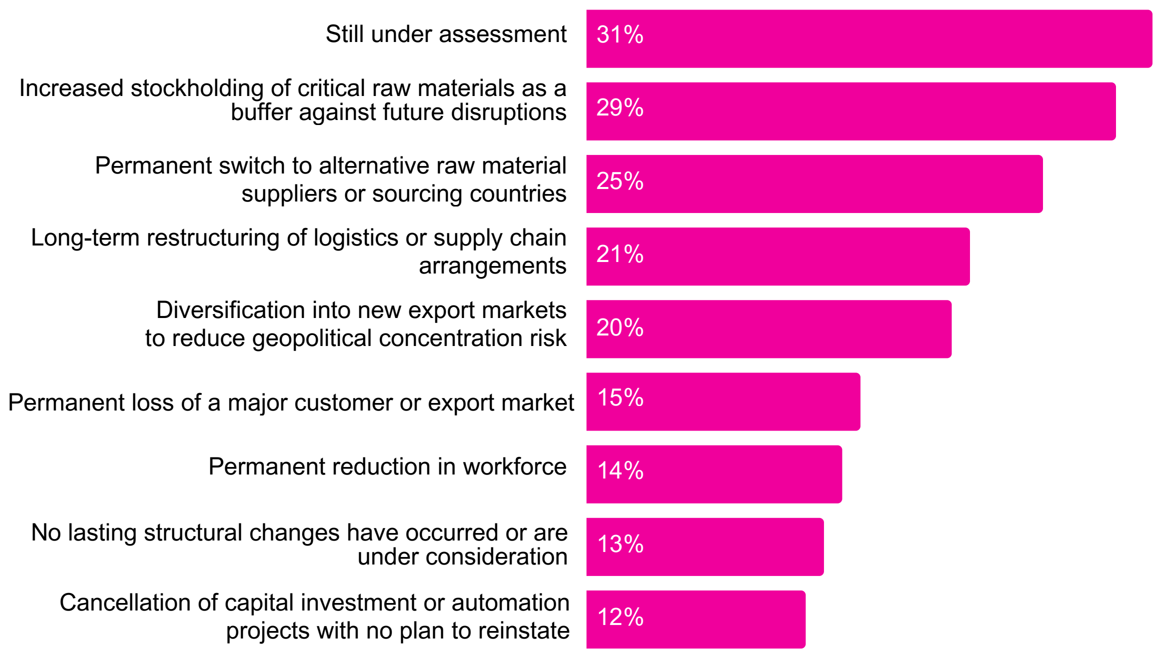


Geopolitical Disruptions Trigger Business Adjustments

Geopolitical disruptions are also prompting manufacturers to reassess their supply-chain and business strategies. 29% report increasing stockholding of critical raw materials, while 25% are switching to alternative suppliers or sourcing countries. A further 21% are restructuring logistics or supply-chain arrangements, while 20% are diversifying into new export markets.

However, the longer-term impact remains uncertain, with 31% saying it is still too early to determine the lasting effects. The findings nevertheless point towards a gradual reconfiguration of supply chains and risk-management strategies, particularly through greater inventory buffers, alternative sourcing and market diversification.

Lasting Changes to Business Due to Geopolitical Disruption

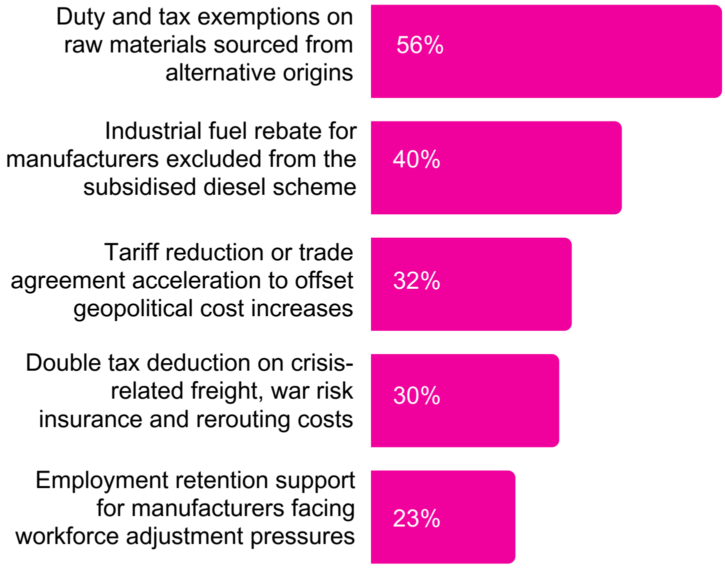


Manufacturers Seek Targeted Government Support

Manufacturers' preferred policy responses focus mainly on reducing the direct costs of geopolitical disruption. 56% seek duty and tax exemptions on raw materials sourced from alternative origins, followed by 40% seeking industrial fuel rebates for manufacturers excluded from the subsidised diesel scheme and 32% supporting tariff reductions or accelerated trade agreements to offset geopolitical cost increases. A further 30% favour double tax deductions on crisis-related freight, war-risk insurance and rerouting costs.

Overall, the responses indicate a preference for targeted fiscal and trade measures that reduce sourcing, logistics and energy costs, rather than broad-based financial assistance.

Top Five Government Measures To Help Manage Impact of Geopolitical Disruption on Business Operations



REINTRODUCTION OF GST TO REPLACE SST

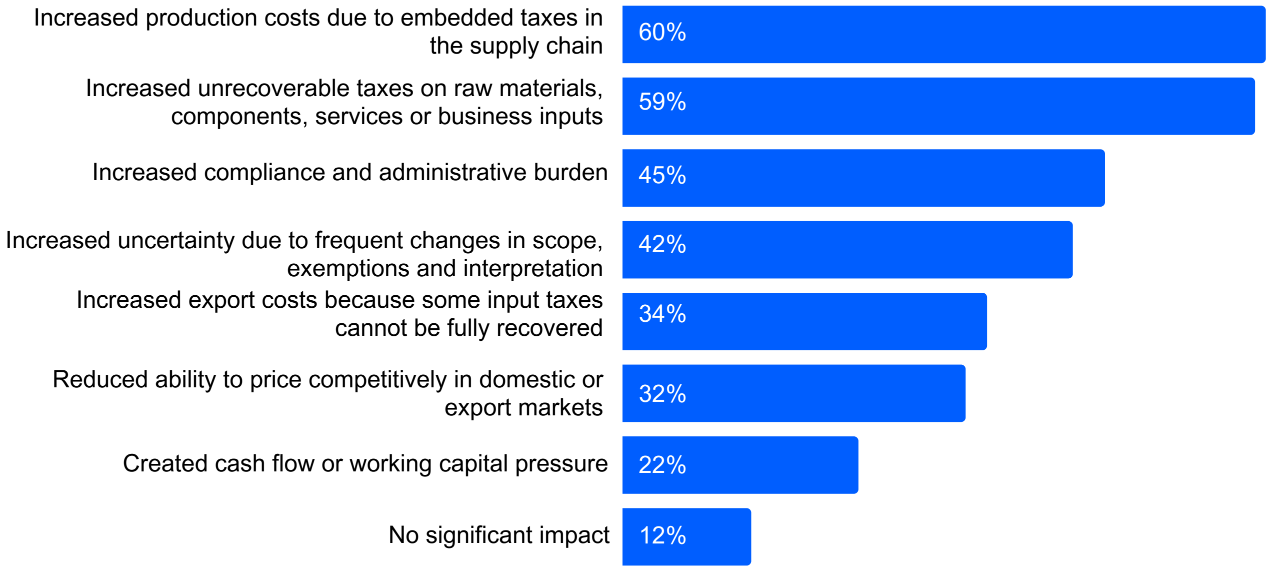
Manufacturers Highlight SST Cost and Compliance Burdens

Manufacturers' responses indicate that the current SST system is creating significant cost, compliance and competitiveness concerns. The most widely cited impacts are higher production costs arising from embedded taxes in the supply chain (60%) and unrecoverable taxes on raw materials, components, services and other business inputs (59%). This suggests that the impact of SST extends beyond the tax itself, as taxes incurred on business inputs can become embedded in production costs, particularly for manufacturers operating across complex supply chains.

Compliance and administrative burdens are another major concern, cited by 45% of respondents, while 42% report greater uncertainty arising from changes in scope, exemptions and interpretation. These findings point to concerns not only over the tax burden but also over the predictability and administrative complexity of the existing system.

The competitiveness implications are also significant. 34% report increased export costs because some input taxes cannot be fully recovered, while 32% say the current SST has reduced their ability to price competitively in domestic or export markets. A further 22% report cash-flow or working-capital pressures. Only 12% report no significant impact from the current SST system, indicating that the vast majority of manufacturers surveyed have experienced at least one adverse impact.

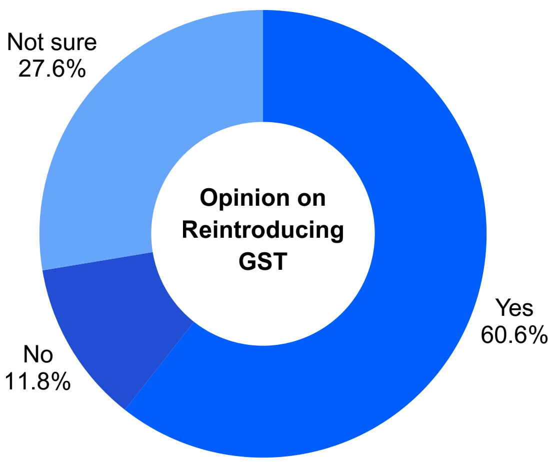
Impact of Current SST System on Business Cost and Competitiveness

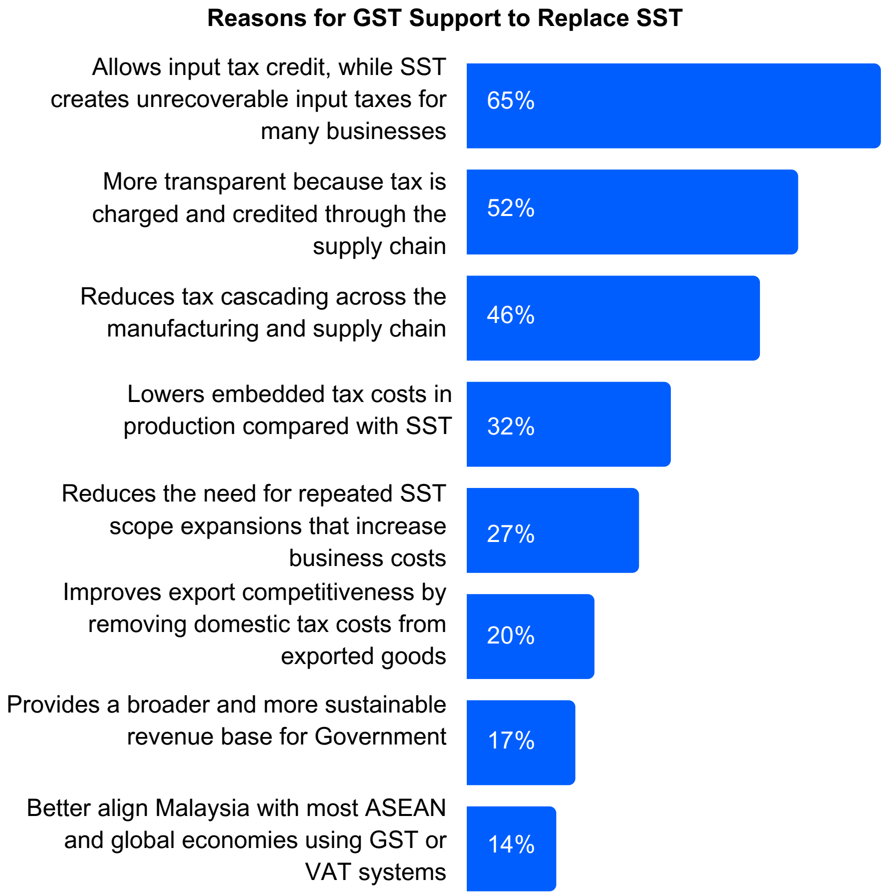


Majority Support Reintroducing GST to Replace SST

Against this backdrop, 61% of respondents support the reintroduction of GST to replace SST, indicating that a majority of manufacturers see merit in moving towards a tax system that provides greater transparency and allows taxes paid on eligible business inputs to be recovered.

The reasons cited for supporting GST point particularly to the issue of tax recoverability and transparency. 65% say that GST allows input tax credits, whereas SST creates unrecoverable input taxes for many businesses. A further 52% say that GST is more transparent than SST. These responses suggest that manufacturers' preference for GST is driven not simply by the level of taxation, but also by the design, transparency and operation of the tax system, particularly its impact on business costs and tax recovery

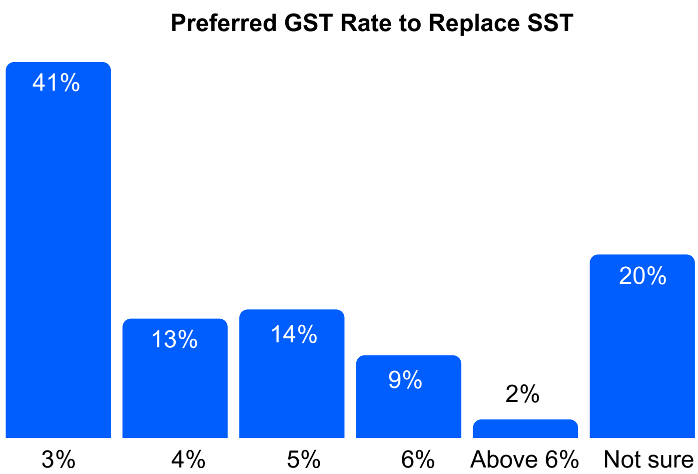




Manufacturers Favour a Moderate GST Rate

If GST were to be reintroduced to replace SST, 3% is the most preferred rate, selected by 41% of respondents. A further 13% favour 4%, while 14% consider 5% appropriate. 9% support a 6% rate, while only 2% would accept a rate above 6%.

Taken together, 68% of respondents favour a GST rate of 5% or below, while 20% remain unsure about the appropriate rate. The distribution indicates a preference for a relatively moderate rate, although a significant proportion of manufacturers have yet to form a view on the appropriate rate. The responses also suggest that manufacturers' concerns are not simply about the headline tax rate. The design and operation of the tax system, particularly the ability to recover taxes paid on business inputs, are also important considerations.

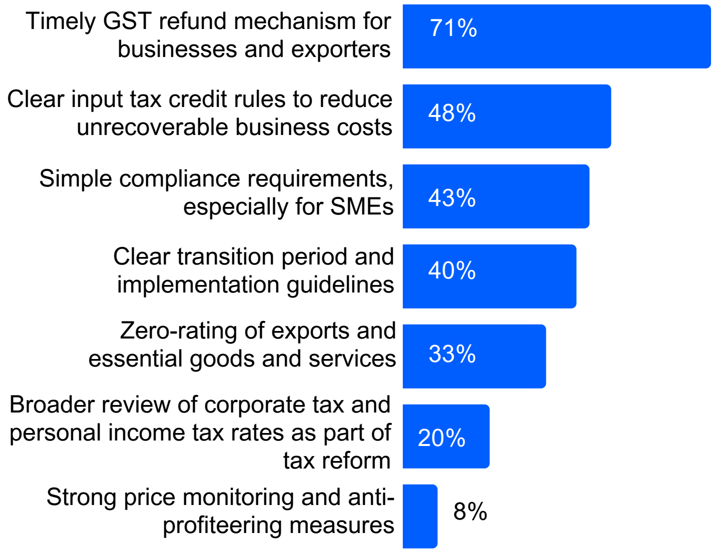


Timely Refunds and Clear Input Tax Credits Seen as Critical

Manufacturers place particularly strong emphasis on the administrative design of any replacement GST system. 71% identify a timely GST refund mechanism for businesses and exporters as the most important accompanying measure, followed by 48% calling for clear input tax credit rules to reduce unrecoverable business costs. A further 43% favour simple compliance requirements, particularly for SMEs, while 40% seek a clear transition period and implementation guidelines. 33% support zero-rating of exports and essential goods and services.

The strong emphasis on timely refunds and input tax credits is consistent with the concerns raised over the current SST system, particularly the accumulation of unrecoverable taxes in the supply chain and the resulting impact on production costs and cash flow.

Measures to Accompany Reintroduction of GST



Survey Findings Align with FMM's Latest Position on GST Features

The survey findings are particularly timely in light of FMM's latest position on indirect tax reform. In its statement issued on August 19, 2026, FMM welcomed the Government's move to study the incorporation of selected GST features into the existing SST framework, particularly measures to address tax cascading and the accumulation of unrecoverable taxes on business inputs. FMM noted that an input tax credit or offset mechanism could help prevent eligible taxes paid on business inputs from becoming embedded in production and distribution costs.

This position is closely aligned with the survey findings. 60% of respondents cite higher production costs arising from embedded taxes in the supply chain, while 59% highlight unrecoverable taxes on business inputs. The strong preference for timely GST refunds (71%) and clear input tax credit rules (48%) further underscores the importance manufacturers place on tax recoverability and cash-flow certainty.

FMM has also called for a systematic input tax credit or offset mechanism covering eligible business inputs, together with effective treatment of essential goods and exports and a reliable, time-bound refund mechanism. FMM has emphasised that a systematic mechanism would be preferable to relying on multiple category-specific exemptions and reliefs to address tax cascading.

Overall, the findings suggest that manufacturers' concerns with the current SST are centred on cost accumulation, tax recoverability, administrative complexity and competitiveness. While manufacturers show a preference for a relatively moderate GST rate if GST were to replace SST, the responses indicate that the design and administration of the tax framework are at least as important as the headline rate.

The strong emphasis on timely refunds, clear input tax credits, simple compliance and a well-managed transition suggests that manufacturers would place considerable importance on a system that minimises tax cascading, reduces embedded business costs and provides greater certainty over tax recovery. The survey findings therefore provide a strong industry perspective on the Government's current consideration of incorporating selected GST features into SST, particularly in addressing tax cascading and improving the recovery of legitimate taxes paid on business inputs.

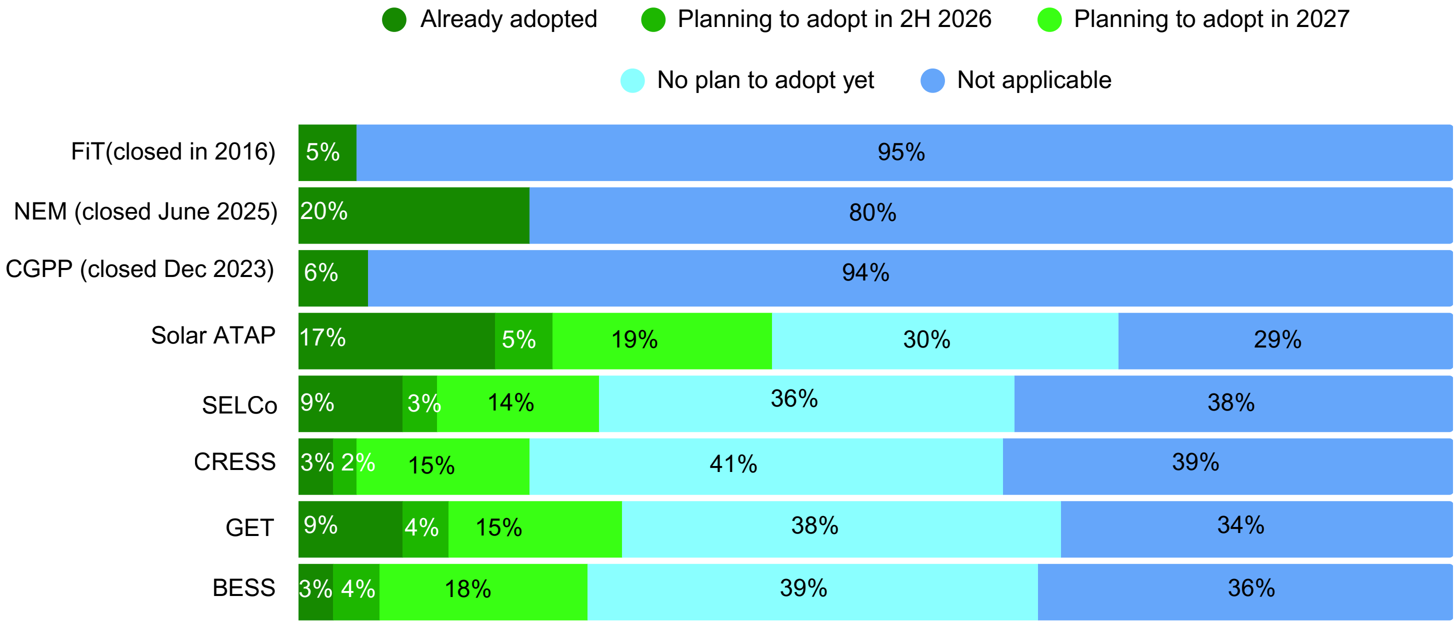
RENEWABLE ENERGY ADOPTION

Renewable Energy Adoption Remains Gradual as Investment Costs Constrain Uptake

Renewable-energy adoption among manufacturers remains gradual and varies across programmes. Net Energy Metering (NEM) has the highest reported adoption at 20%, followed by Solar ATAP (17%), while Self-Consumption (SELCo) and the Green Electricity Tariff (GET) are each at 9%. Adoption of the Corporate Green Power Programme (CGPP) stands at 6%, while Feed-in Tariff (FiT), Corporate Renewable Energy Supply Scheme (CRESS) and Battery Energy Storage Systems (BESS) are at 5%, 3% and 3%, respectively.

The adoption figures should be viewed in the context of programme availability, as FiT, NEM and CGPP are closed to new applications. There is nevertheless evidence of prospective adoption under programmes that remain available. For example, while current BESS adoption is only 3%, 4% plan to adopt it in 2H2026 and 18% in 2027. Similarly, Solar ATAP has current adoption of 17%, with a further 5% planning adoption in 2H2026 and 19% in 2027.

Renewable Energy Programmes or Technologies Currently Adopted and in the Planning

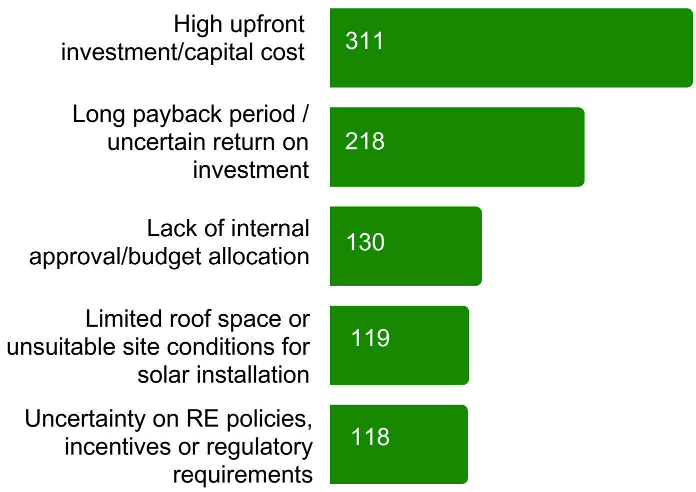


High Upfront Costs Remain the Main Barrier

For manufacturers with no plans to adopt renewable energy or BESS, high upfront investment or capital costs are the most frequently cited barrier, reported by 311 respondents, followed by long payback periods or uncertain returns on investment (218 respondents). Other notable barriers include lack of internal approval or budget allocation (130 respondents), unsuitable site conditions or limited roof space (119), and uncertainty over policies, incentives or regulatory requirements (118).

The findings suggest that adoption is constrained primarily by the commercial viability and upfront cost of investment, rather than awareness alone. The investment decision depends on the expected payback, potential energy-cost savings and certainty over the policy environment.

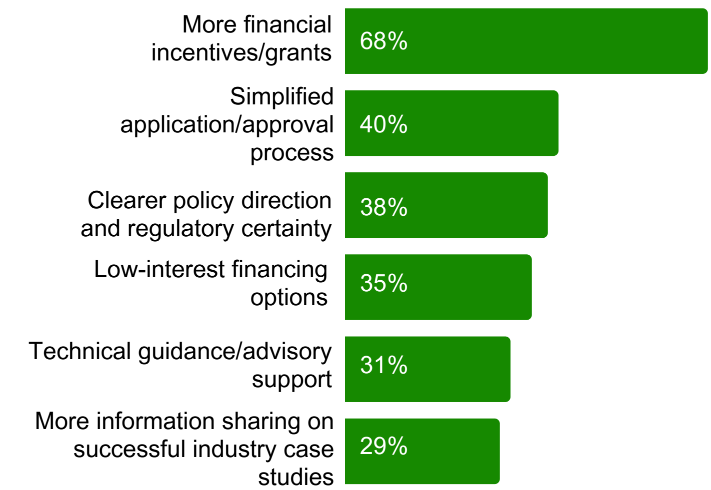
Top Barriers to RE and BESS Adoption



Financial Incentives and Simpler Processes Could Accelerate Adoption

Manufacturers' preferred measures to encourage adoption point strongly towards financial support and greater policy certainty. 68% seek more financial incentives and grants, followed by 40% favouring simplified application and approval processes and 38% seeking clearer policy direction and regulatory certainty. A further 35% seek low-interest financing, while 31% would benefit from technical guidance and advisory support.

Govt Support to Encourage RE and BESS Adoption



Overall, renewable-energy adoption remains constrained by investment costs and payback considerations, although the forward-looking responses indicate continued interest in selected technologies. The strong demand for financial incentives, affordable financing and clearer policies suggests that reducing the upfront financial burden and improving investment certainty could help accelerate adoption. Renewable energy is therefore increasingly relevant not only from a sustainability perspective but also as part of manufacturers' efforts to manage longer-term energy costs and business resilience.

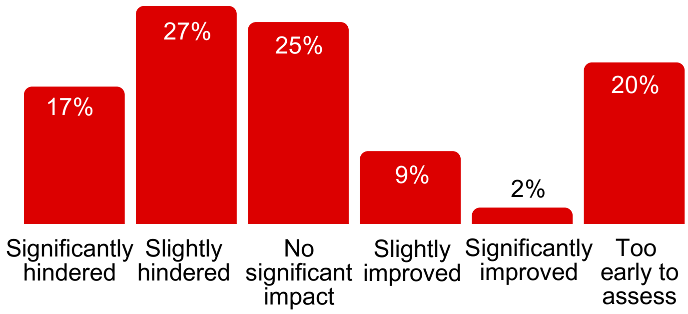
HRD CORP REVISIONS TO TRAINING GRANT CONDITIONS

Revised HRD Corp Conditions Create Training Planning and Compliance Challenges

The revised HRD Corp training grant conditions are creating challenges for manufacturers in planning and conducting employee training. Under the revised arrangements, effective June 15, 2026, companies are required to obtain grant approval at least 14 calendar days before training, while training must commence within the specified period following approval. The changes also impose tighter requirements for responding to queries, restrict modifications to approved grants and remove the appeal mechanism.

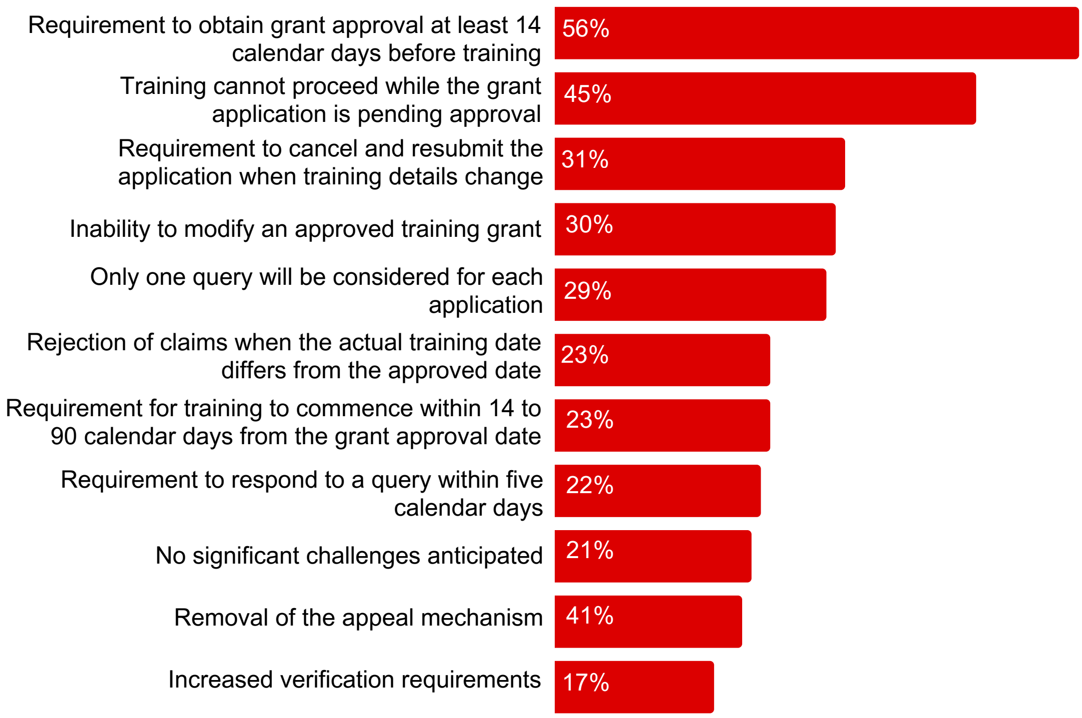
44% of respondents report that the revised conditions have hindered their ability to plan and conduct training, comprising 17% significantly and 27% slightly. In contrast, 11% report an improvement, while 25% report no significant impact and 20% say it is still too early to assess. The findings suggest that the main concern is reduced flexibility in organising training around operational requirements, rather than an immediate reduction in the overall willingness to train.

Impact of Revised Conditions on Employee Training



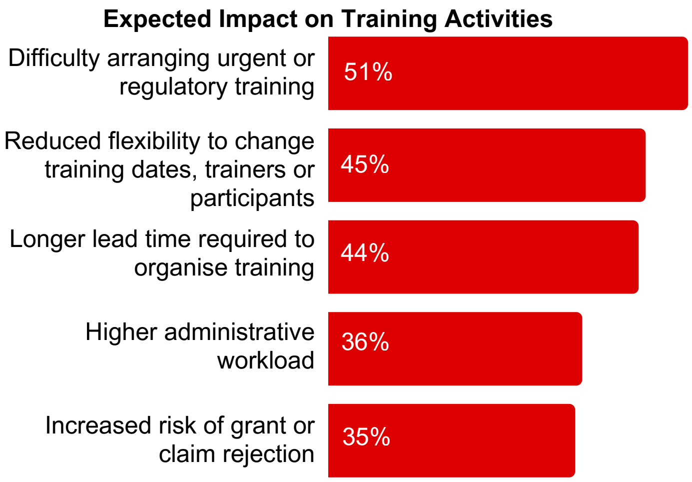
The 14-day advance approval requirement is the most widely cited challenge, reported by 56% of respondents, followed by the requirement that training cannot proceed while an application is pending approval (45%). Other concerns include having to cancel and resubmit applications when training details change (31%), inability to modify an approved grant (30%), and the restriction to one query per application (29%).

Challenges from Revised Conditions



The revised conditions could also affect training arrangements more broadly. 51% identify difficulty arranging urgent or regulatory training, while 45% report reduced flexibility to change training dates, trainers or participants. A further 36% anticipate a higher administrative workload, while 35% see an increased risk of grant or claim rejection. However, the potential impact on overall training activity appears more limited: 32% intend to maintain their current level of training, while 31% say it is too early to assess. Only 13% expect to increase training expenditure and activities, while smaller proportions anticipate reducing programmes or employees attending training.

Overall, the findings indicate that the revised conditions are adding administrative and planning constraints without yet pointing to a broad-based withdrawal from employee training. The longer-term impact remains uncertain, particularly as a sizeable proportion of manufacturers have yet to determine how their training plans will change. Ensuring that grant administration maintains accountability while allowing sufficient flexibility to accommodate manufacturers' operational requirements will therefore be important in supporting timely workforce development.

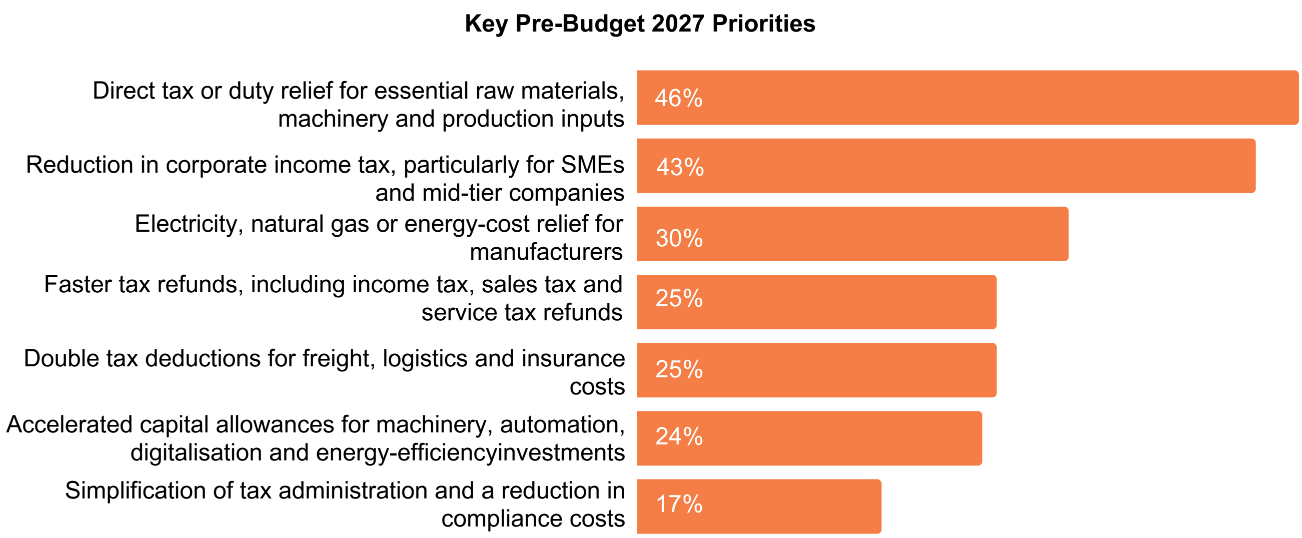


PRE-BUDGET 2027 PRIORITIES

Tax and Cost Relief Dominate Manufacturers' Pre-Budget Priorities

Manufacturers' Pre-Budget 2027 priorities are strongly focused on reducing the direct cost of doing business and strengthening competitiveness. The three most widely supported measures are direct tax or duty relief for essential raw materials, machinery and production inputs (46%), reduction in corporate income tax, particularly for SMEs and mid-tier companies (43%), and electricity, natural gas or energy-cost relief (30%). These priorities closely reflect manufacturers' immediate operating pressures, with higher input costs identified as the leading business challenge and cost control and operational efficiency as the leading business strategy for 2H2026.

Input-cost and corporate tax relief therefore top the agenda. The 46% calling for tax or duty relief on production inputs reflects continued concern over elevated input costs, while the 43% seeking lower corporate income tax indicates a broader desire to reduce the tax burden and strengthen businesses' capacity to absorb operating pressures. Energy-cost relief, cited by 30%, is also consistent with the 28% who identify higher electricity, natural gas and fuel costs as a business challenge.



Other priorities focus on cash flow, logistics and investment. Faster tax refunds and double tax deductions for freight, logistics and insurance are each supported by 25% of respondents, while 24% favour accelerated capital allowances for machinery, automation, digitalisation and energy-efficiency investments. These measures suggest that manufacturers are seeking not only immediate cost relief but also support for continued investment and productivity improvements.

The survey also points to a preference for a more predictable and less burdensome tax environment, with 17% calling for simplification of tax administration and reduced compliance costs. Other measures, including enhanced training incentives, a moratorium on new taxes and levies, stronger reinvestment incentives and export-development support, receive lower levels of support.

Overall, manufacturers' Pre-Budget 2027 priorities are centred on near-term cost and tax relief while maintaining the capacity to invest and improve productivity. The findings suggest that manufacturers would value a policy package that addresses immediate operating pressures while supporting longer-term competitiveness and investment.

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 1H2026 was conducted from July 15, 2026 to August 14, 2026 and received 670 responses, of which 71.8% were SMEs (based on full-time employees), with 172, 116 & 87 responses from Selangor & Kuala Lumpur, Perak and Johor, respectively. The top three industries for responses were: Food, Beverage & Tobacco (17.2% of respondents); Chemicals & Chemical Products (12.2%); and Plastic & Plastic Products (11%).

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