

The Ripple Effect: CPG Sustainability and the New OEM Spec Sheet





PMMI The Association for Packaging and Processing Technologies

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WHO WE ARE AND WHAT WE DO

PMMI is a global resource for the packaging and processing industry, unifying the industry across the manufacturing community. PMMI members promote business growth in a variety of industries by developing innovative manufacturing solutions to meet evolving consumer demands, today and in the future. PMMI membership represents more than 1,000 manufacturers and suppliers of equipment, components, and materials as well as providers of related equipment and services to the packaging and processing industry.

PMMI Business Drivers support the industry by delivering a variety of valuable resources, such as in-depth market research, practical best-practice tools and reports, specialized technical training, networking events, and other essential services.

PMMI connects consumer goods companies together with our members' manufacturing solutions through the premier PACK EXPO portfolio of trade shows, including PACK EXPO International, PACK EXPO Las Vegas, PACK EXPO East, PACK EXPO Southeast, EXPO PACK México, and EXPO PACK Guadalajara.



INTRODUCTION

PMMI Business Intelligence conducted research on how end-user sustainability initiatives are transforming expectations for original equipment manufacturers (OEMs). As consumer preferences shift, regulations tighten, and retailers raise the bar, end users are placing greater emphasis on sustainability and OEMs are feeling the pressure to keep pace, whether by retrofitting existing equipment or engineering entirely new solutions.

To explore these dynamics, PMMI employed a mixed-methods approach, pairing quantitative data from a structured survey with qualitative insights drawn from in-depth interviews. The research captures how sustainability priorities are rippling across both end-user companies and OEMs, while surfacing the operational friction points that are emerging along the way. For the packaging industry, sustainability is no longer a distant priority, it's actively reshaping equipment decisions right now. This report examines the gap between what CPGs require and what OEMs are currently equipped to deliver.

METHODOLOGY

ONLINE QUANTITATIVE RESEARCH

Data collection: March 10 – April 1, 2026 | 8 to 10-minute length survey

TOTAL RESPONDENTS	97
End Users (CPGs and Co-Packagers/Co-Manufacturers)	75
OEMs (OEMs and Component Suppliers):	22

VIRTUAL QUALITATIVE IN-DEPTH INTERVIEW RESEARCH

Interview: April 2 – April 16, 2026

30 to 45-minute length of interviews with End Users and OEMs

TOTAL NUMBER OF INTERVIEWS	11
End Users (CPGs and Co-Packagers/Co-Manufacturers)	4
OEMs (OEMs and Component Suppliers):	7

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SUSTAINABILITY CONTEXT AND STRATEGIC ORIENTATION

Sustainability approach and maturity
Current and future importance
Integration into design and decision-making
Supply chain implications

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2026 END USER SUSTAINABILITY INITIATIVES IMPACT ON OEMS



REUSABLE
100%
Plastic-Free

Paperboard packaging are made from 100% recycled paper, which helps reduce the rate of pollution in the atmosphere, compostable and eco-friendly

END USERS ARE AT DIFFERENT STAGES OF SUSTAINABILITY INITIATIVES

End users' approaches to sustainability span the full maturity spectrum, from minimal engagement to fully strategic integration. Notably, only 16% of end users describe their approach as 'minimal or compliance-focused', while over 82% state that they actively engaged at some level of sustainability adoption. This reveals a clear industry-wide shift toward more advanced sustainability adoption.

In contrast, OEMs paint a more fragmented picture of their customers' sustainability approaches. While 'highly integrated/strategic' and 'emerging' are tied as the most common responses at 27% each, nearly 23% of OEMs say their customers' approaches simply vary too widely to categorize. This lack of uniformity presents a real operational challenge, as OEMs must navigate a broad range of sustainability expectations and capabilities across their customer base.



"We have publicly announced the goal to eliminate all non-recyclable materials and move to materials that can be recycled, reused, or are compostable."

Engineer, CPG

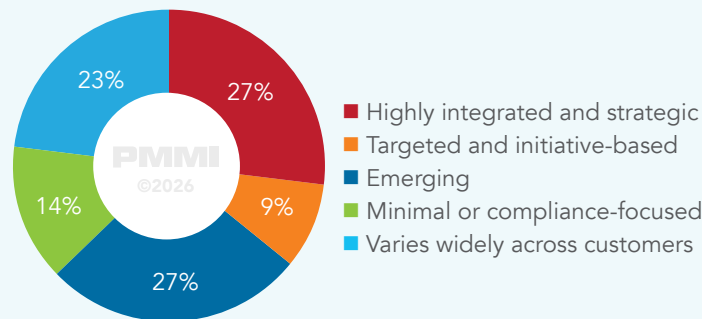


"At this point we are at, we are not proactive, not passive somewhere in between.....it's driven by our customers too."

Supply Chain QA Manager, Co-Pack

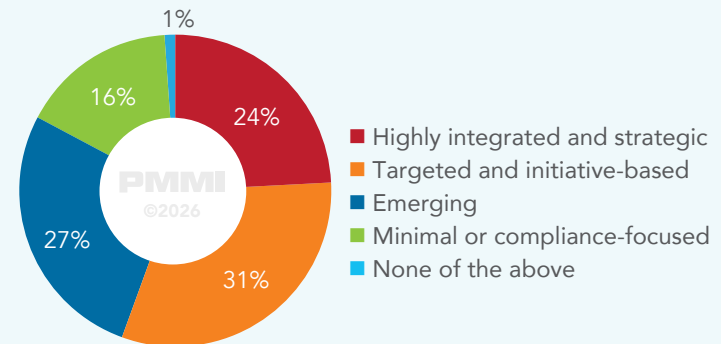
OEM PERSPECTIVE:

How would you describe the overall approach to sustainability among your CPG customers?



END USER PERSPECTIVE:

How would you describe your company's approach to sustainability?



SUSTAINABILITY'S IMPACT ON EQUIPMENT DESIGN & ITS CURRENT AND FUTURE IMPORTANCE FOR STRATEGY

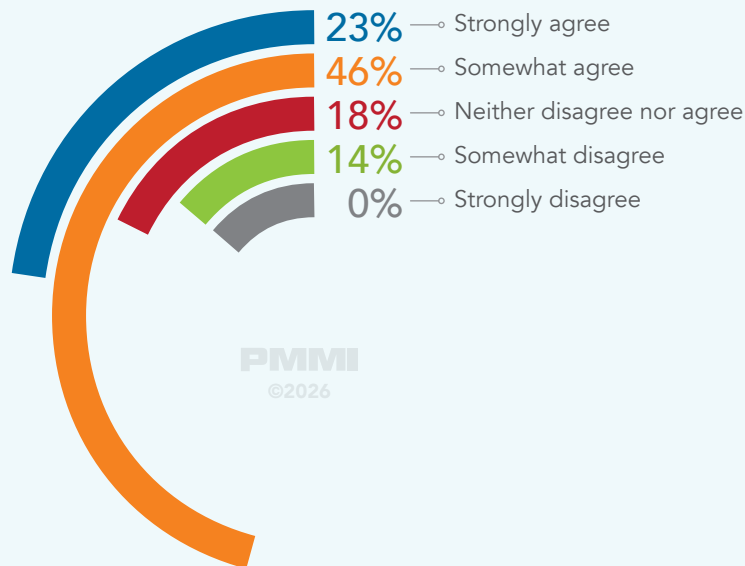
Sustainability trends are influencing not only end users but also OEMs.



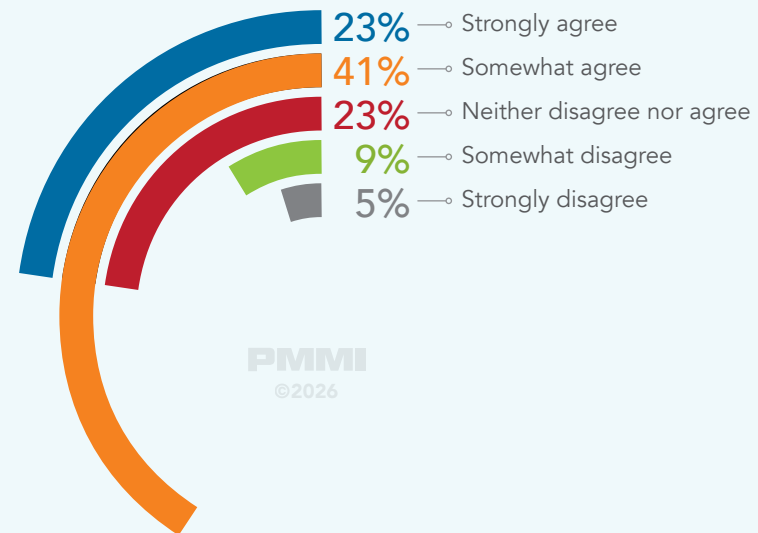
This alignment highlights the growing interdependence between end users and OEMs and underscores the need for close collaboration as both respond to evolving sustainability requirements, initiatives, and regulatory pressures.

OEM PERSPECTIVE:

To what extent do you disagree or agree that sustainability capabilities are integrated into your equipment design as a common practice?



To what extent do you disagree or agree that end-user sustainability initiatives influence your equipment design?



SUSTAINABILITY'S IMPACT ON EQUIPMENT DESIGN & ITS CURRENT AND FUTURE IMPORTANCE FOR STRATEGY

OEMs broadly recognize sustainability as a strategic priority. 73% rate it as important to their business strategy, and 87% expect sustainability-driven customer expectations to significantly shape their competitive position within three to five years. That pressure is real and traceable: consumer demand, retailer mandates, EPR legislation, and ESG requirements are all flowing upstream and landing on OEMs.

But recognition isn't enough. The question is whether OEMs are translating that awareness into the equipment capabilities, material compatibility, and supplier credentials that CPGs increasingly require.



It's more of a sales tool to say, yes, we're reducing your material cost, but you know here's the real savings behind that, not just on the blue cost but also the carbon emissions."

Sales Manager, OEM

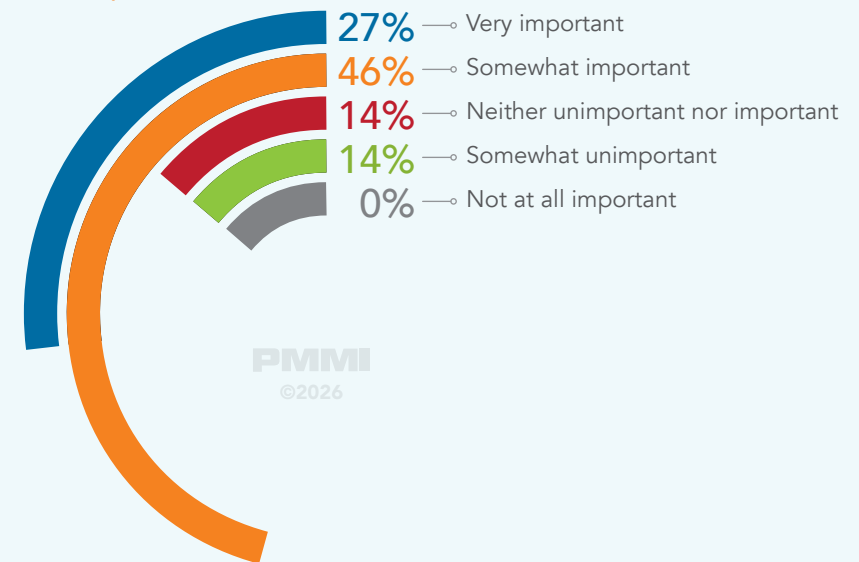


I think your larger OEMs are going to be ahead of it just because they have budget and they have large departments and mass amounts of people...Your smaller OEMs are going to have to try to keep up with the game as much as possible."

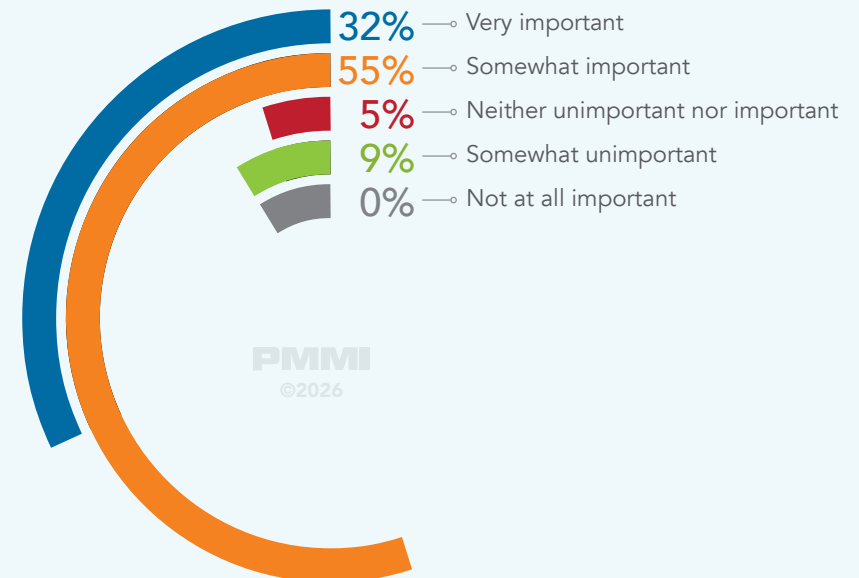
Director of Sales, OEM

OEM PERSPECTIVE:

How important is sustainability to your overall business strategy?

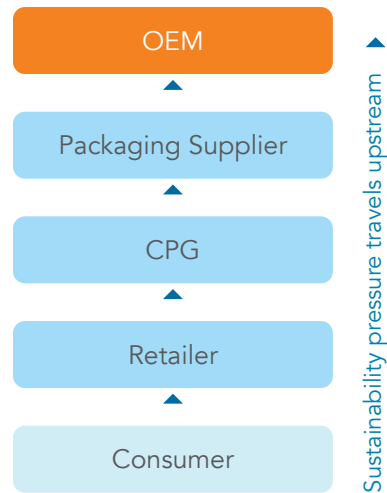


Looking ahead 3-5 years, how important will sustainability-driven customer expectations be to your competitive position?



SUSTAINABILITY IMPACTS: THE RIPPLE EFFECT

OEM logic that sustainability isn't their issue contains a critical blind spot. The consumer's preferences don't stop at the retail shelf. They flow backward through the supply chain.



By the time sustainability becomes an OEM equipment requirement, it has already traveled through years of consumer and regulatory pressure. And OEM machines sit inside CPG factories - making them part of the CPG's sustainability footprint.





Packaging

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EQUIPMENT REQUIREMENTS, ENGAGEMENT, AND EXPECTATIONS

OEM engagement and timing

Sustainability requirements and expectations

Equipment capabilities and limitations

OEM ENGAGEMENT AND TIMING

Both end users and OEMs report the highest levels of initial OEM engagement as taking place during the Line design & Equipment, as well as during Innovation/R&D. Notably, 10% of end users engage OEMs even earlier - at the corporate strategy and capital planning stages, reflecting a shift toward more upstream involvement.

This early engagement is critical. 82% of OEMs indicate that early visibility into projects is important for their equipment design planning process. When OEMs are involved earlier and have clear insight into sustainability initiatives, they are better positioned to assess feasibility, identify potential constraints, and provide informed recommendations. Leveraging their experience with sustainable materials and processes, OEMs can help optimize line performance and improve overall system efficiency, ultimately leading to stronger project outcomes.

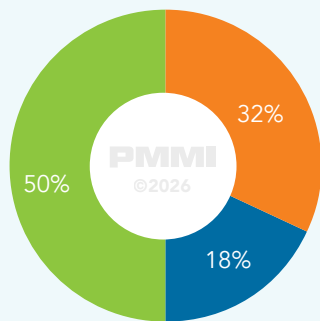


The sooner you can get us involved, should there be any sort of redesign, the better. That way we can one, be involved, but two, tell you what's going to work best with our equipment."

Regional Sales Manager, OEM

OEM PERSPECTIVE:

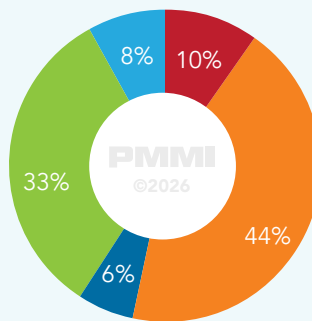
At what stage do you typically start engaging with the CPG?



- Corporate Strategy & Capital Planning
- Innovation / R&D & Feasibility
- Capital Approval
- Line Design & Equipment Specification
- Procurement, Installation & Start-Up

END USER PERSPECTIVE:

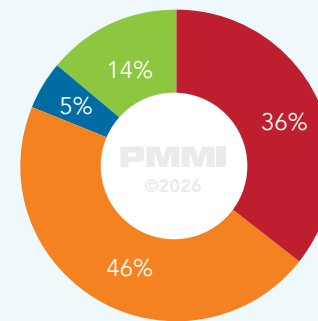
At what stage do you engage with the OEM?



- Corporate Strategy & Capital Planning
- Innovation / R&D & Feasibility
- Capital Approval
- Line Design & Equipment Specification
- Procurement, Installation & Start-Up

OEM PERSPECTIVE:

How important is early visibility into sustainability initiatives for your equipment design planning process?



- Very important
- Somewhat important
- Neither unimportant nor important
- Somewhat unimportant
- Not at all important

SUSTAINABILITY REQUIREMENTS AND EXPECTATIONS

Sustainability regulations are already influencing equipment requirements, according to end users. Two-thirds (66%) agree that regulations impact their equipment decisions, indicating that regulatory pressure is a current, rather than future, driver. As these requirements evolve, their impact is expected to extend further to OEMs, reinforcing the need for alignment across the value chain.

From the OEM perspective, reduced material usage or lightweighting is the most common customer initiative, cited by 77% of respondents. This approach allows companies to lower environmental impact through incremental changes without requiring full redesigns. Additionally, 50% of OEMs report customer focus on data and reporting metrics, waste reduction, and energy efficiency, with emissions reduction and recyclable material compatibility also playing a significant role.

Together, these findings suggest that while regulations are a key driver, companies are prioritizing practical, scalable sustainability initiatives.

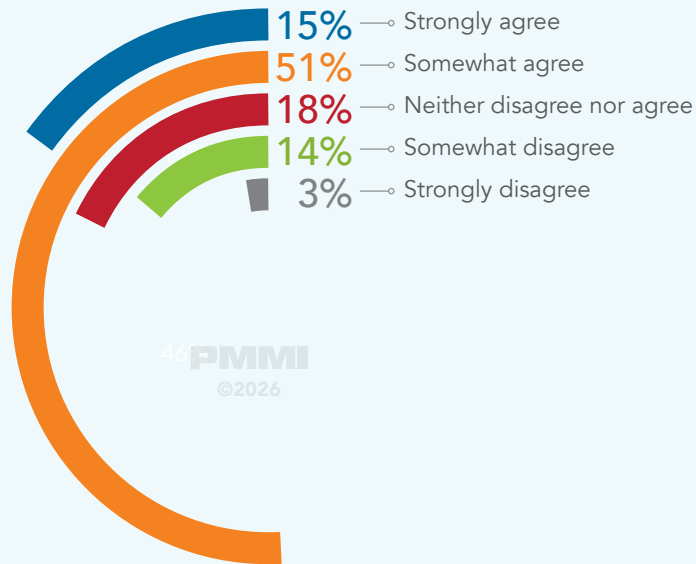


Sometimes we do go back to the suppliers who do not meet those [regulatory] standards and they will have to modify some of the processes or materials that they are providing just to meet those standards, or we will look at alternate suppliers.”

Supply Chain QA Manager, Co-Pack

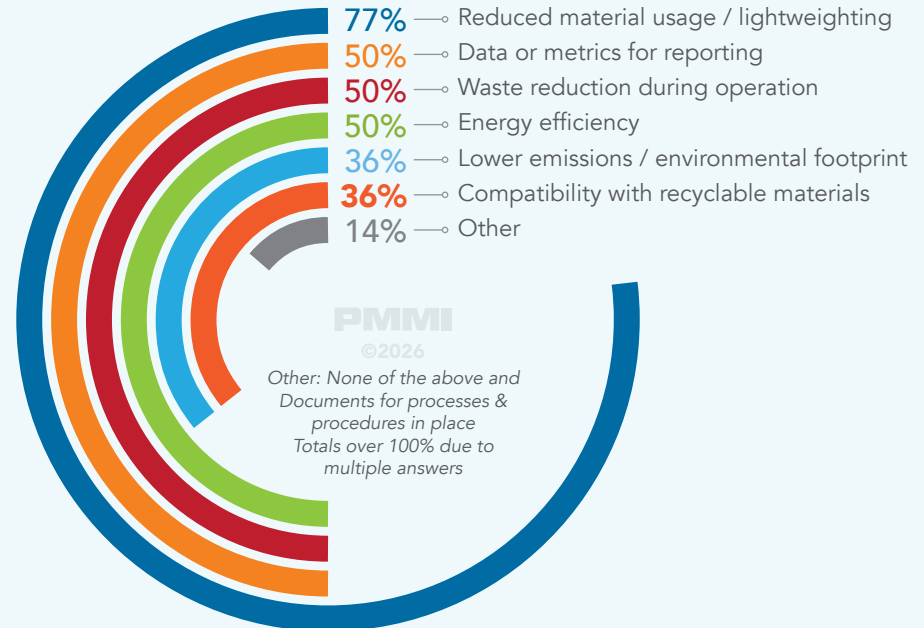
END USER PERSPECTIVE:

To what extent do you disagree or agree that sustainability regulations are influencing your equipment requirements?



OEM PERSPECTIVE:

Which of the following are most frequently included in customers sustainability initiatives? (Select all that apply)



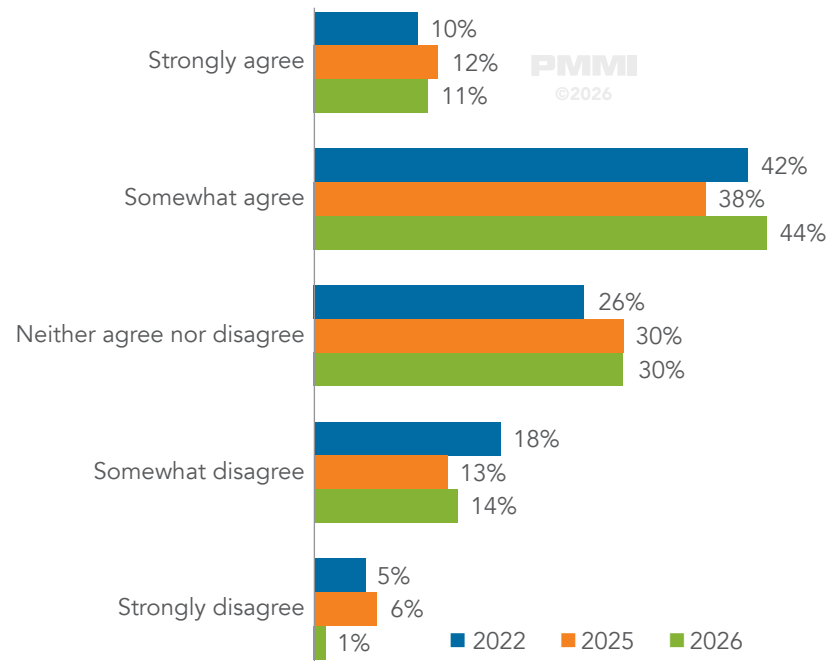
END USER PERSPECTIVE: EQUIPMENT CAPABILITIES AND LIMITATIONS

According to surveyed end users, packaging machinery limitations remain a persistent, and growing, barrier to sustainability progress.

PMMI's 2022 Compass Report found that 52% of end users cited machinery constraints as an obstacle; that figure dipped slightly to 50% in 2025 before climbing to roughly 55% in the latest data.

The trend is telling. Despite incremental improvements, equipment capabilities are not keeping pace with increasingly complex sustainability requirements. And when OEMs are engaged too late in the materials decision process, they forfeit the opportunity to shape outcomes — turning machinery into a barrier rather than a solution.

To what extent do you disagree or agree that limitations of packaging machinery are preventing you from accomplishing your sustainability goals?



PET is a much more difficult material to manage. So, it impacts certain aspects of the design of the machine and a significant impact on the maintenance of the machine.”

Engineer, CPG

Data from PMMI's 2022 and 2025 Sustainability Reports



2023 Packaging Compass



2025 The New Material World: Packaging's Path Toward Sustainability



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MATERIAL, OPERATIONAL, AND ENGINEERING CONSIDERATIONS

Material and packaging transitions
Trade-offs and performance considerations
Impact on engineering and internal teams

PMMI MATERIALS DASHBOARD: MATERIAL OR FORMAT SHIFTS

PMMI's Materials Dashboard, which is free to members, tracks which materials CPG customers are actively phasing out and what they're replacing them with. The dashboard contains 35,000+ data points and is continuously expanding.

As sustainable materials shift, so do equipment requirements. This tool gives OEMs an early signal of where their machines need to go next.

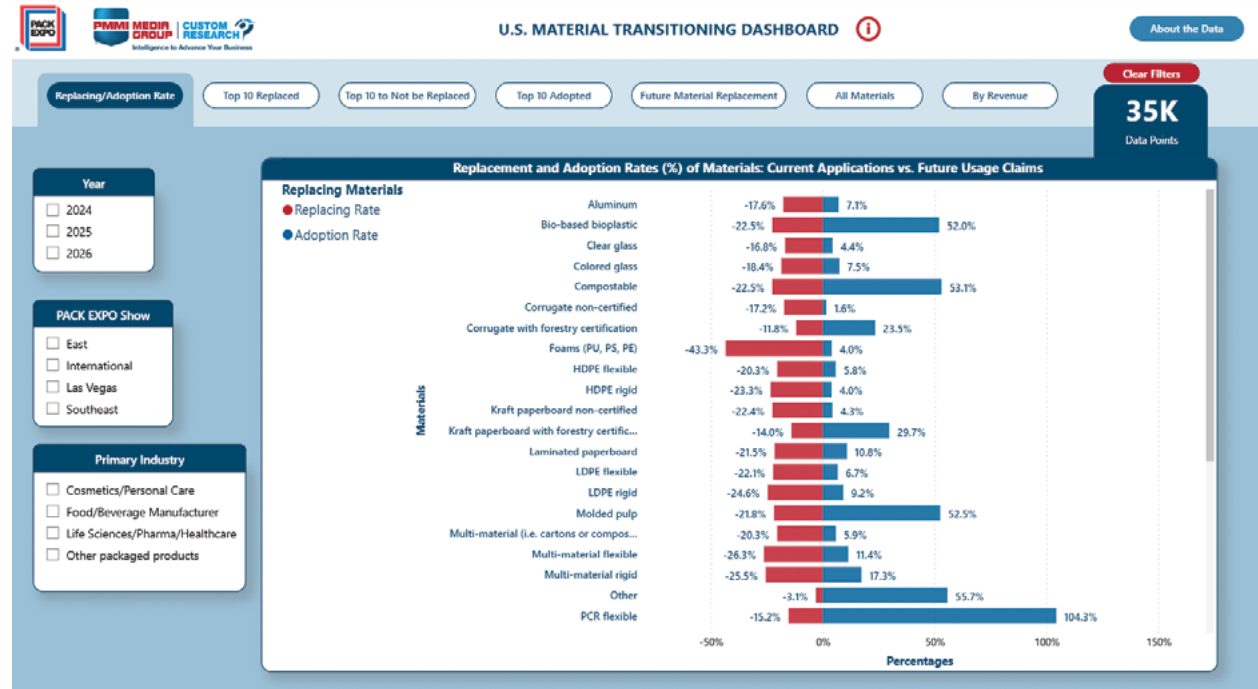
What the data is showing:

PCR flexible: +104.3% adoption

Compostable materials: +53.1% adoption

Bio-based bioplastics: +52.0% adoption

Foams (PU, PS, PE): -43.3% - the largest category for those who are planning to replace/move away from them



OEM PERSPECTIVE: CHALLENGES WITH MATERIAL OR FORMAT SHIFTS

OEMs most frequently point to lightweighting/downgauging (55%) and smaller pack sizes (46%) as the primary sustainability-driven design challenges. These shifts are followed by elimination of secondary packaging and paper/fiber-based materials (both 32%), reinforcing that structural reduction and material substitution are the dominant forces reshaping packaging design inputs.

However, when OEMs are asked to identify the single most difficult challenge for equipment performance, priorities shift.

- Increased PCR content (21%) and smaller pack sizes (21%) emerge as the most disruptive
- Second tier including lightweighting/downgauging, mono-materials, and paper/fiber-based materials (all 14%).

For OEMs, the core issue is material variability and reduced structural integrity, which directly impact machine precision, consistency, and uptime.

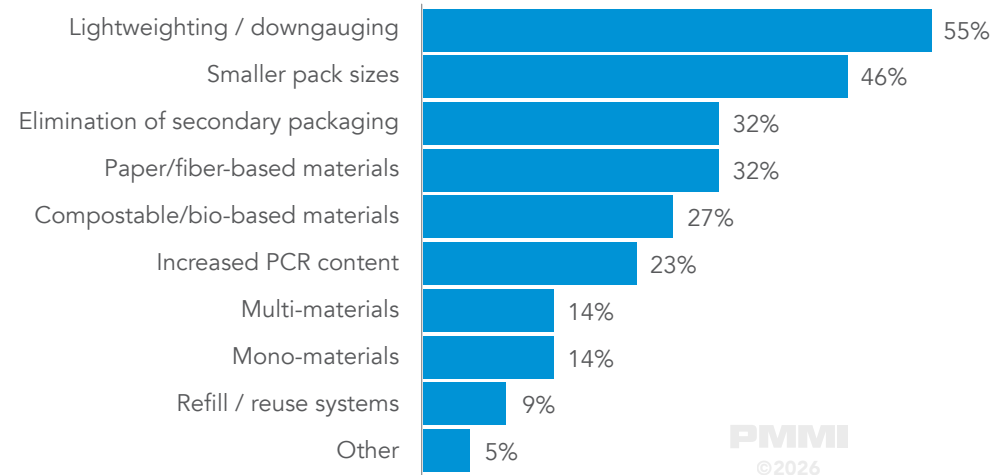


[Recycled board] it's flimsier, it's lighter, it's not as rigid. And when you're trying to erect a carton, and try to fold flaps, it can again present certain challenges throughout that process."

Regional Sales Manager, OEM

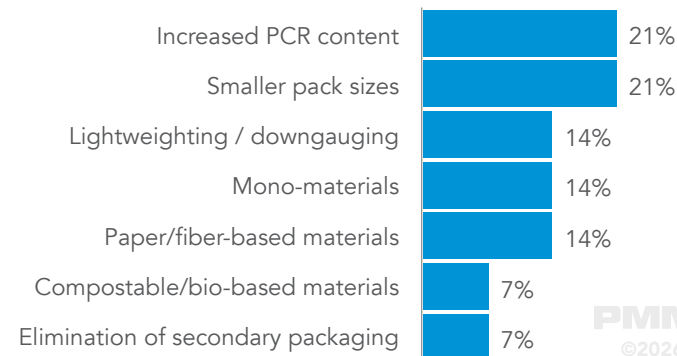
OEM PERSPECTIVE:

Which sustainable material or format shifts are creating the greatest design challenges today? (Select up to three)



PMMI ©2026

Please rank in order how challenging the sustainable material or format shifts are to your current equipment performance. Please click and drag the options, with the greatest challenge being in the number 1 position.



PMMI ©2026

END USER PERSPECTIVE: CHALLENGES WITH MATERIAL OR FORMAT SHIFTS

CPGs most frequently point to lightweighting/downgauging (43%) and increased PCR content (42%) as the primary sustainability-driven challenges. These are followed by elimination of secondary packaging (34%) and smaller pack sizes (28%), reinforcing that both material changes and format reduction are central to current sustainability efforts.

However, when CPGs are asked to identify the single most difficult challenge for operational performance, priorities shift.

- Elimination of secondary packaging (20%) emerges as the most disruptive
- Increased PCR content (18%) comes in second
- Lightweighting/downgauging (16%) follows

The implication: CPGs are navigating not just changes to materials, but fundamental shifts in packaging architecture, where sustainability initiatives can disrupt established production flows and require broader operational adaptation.

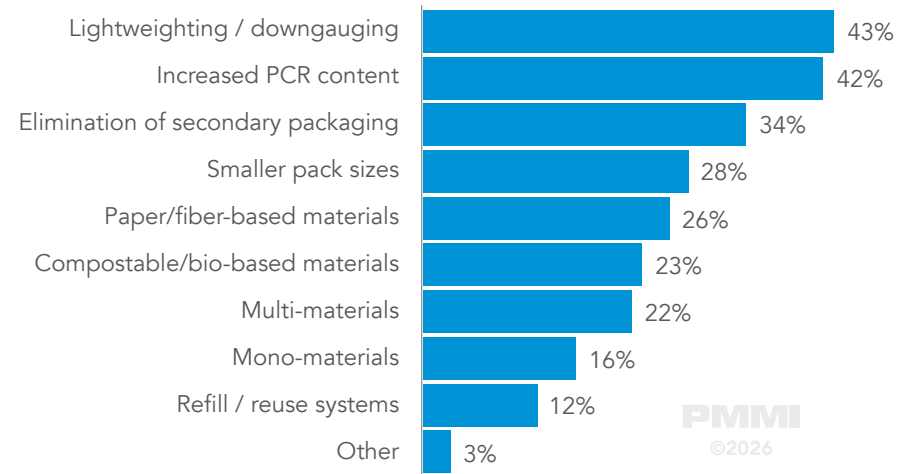


We accept that it [PET] will run differently. We accept that the OpEx cost, so the cost for maintenance will be higher. We accept that certain machines cannot be upgraded and will have to be replaced. Those are all conditions that are part of signing up to run this kind of material and so it's a known cost and it's a known operational impact."

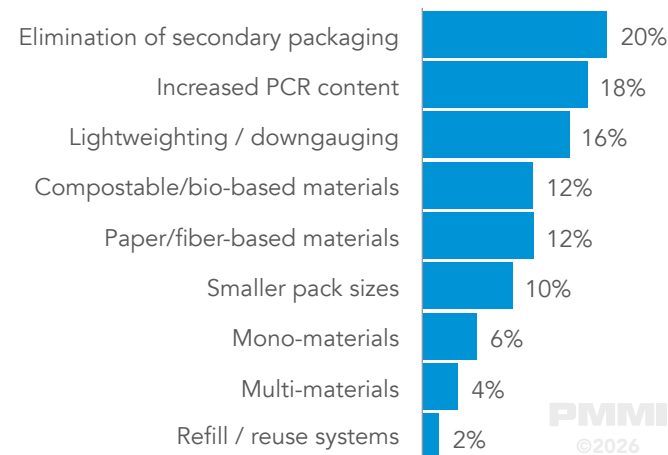
Engineer, CPG

END USER PERSPECTIVE:

Which sustainable material or packaging format shifts are creating the greatest operational or production challenges for your organization today? (Select up to three)



Please rank the material or format shifts you selected in order of how challenging they are to your current operations. Please click and drag the options, with the greatest challenge being in the number 1 position.



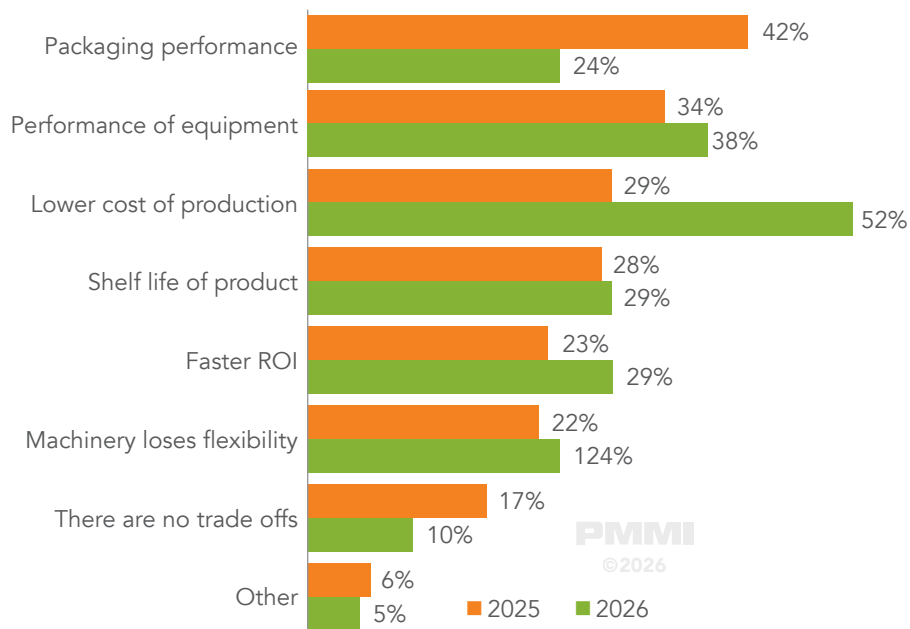
PERCEIVED TRADE-OFFS BY OEMS WITH MATERIAL OR FORMAT SHIFTS

Compared with PMMI's 2025 The New Material World report, OEM perceptions of sustainability trade-offs for customers have shifted notably.

Most significantly, lower cost of production has increased sharply, rising from 29% in 2025 to 52% in 2026, making it the leading perceived trade-off. This marks a clear shift toward cost pressures becoming the dominant concern in sustainability-driven decisions. At the same time, packaging performance has declined substantially as a perceived trade-off, dropping from 42% in 2025 to 24% in 2026, and falling from the top position to a secondary tier.

OEM PERSPECTIVE:

What trade offs do you see, if any, in the adoption of equipment that uses sustainable materials? In other words, what would your customers be giving up by using machinery designed for sustainable materials?



Other factors, including performance of equipment, faster ROI, shelf life, and loss of machinery flexibility, have remained relatively stable year over year, indicating these are persistent but not escalating concerns.

OEMs are observing a shift from performance-driven trade-offs to cost-driven ones. For CPGs, sustainability spending is no longer a matter of if — it's a matter of how much. Driven by regulation, consumer pressure, and internal commitments, CPGs are accepting the cost of sustainability as an unavoidable part of doing business.



We have projects that we're only doing because of sustainability. There's no compelling reason to change the material because the material is very functional, but because of regulations, it's driving us to make investments and to make changes."

Engineer, CPG

Data from PMMI's 2025 Sustainability Report



2025 The New Material World: Packaging's Path Toward Sustainability



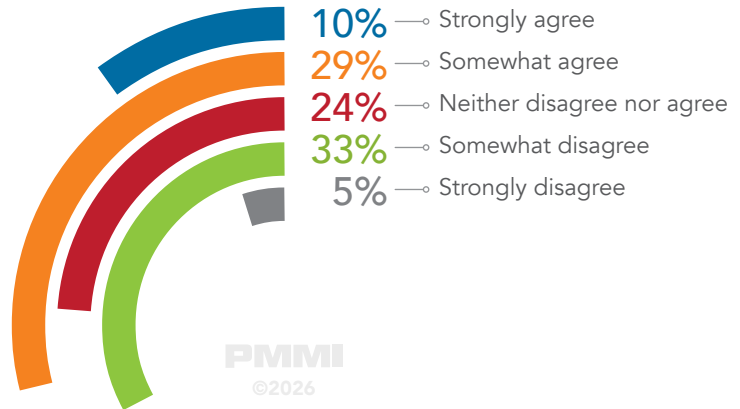
IMPACT ON ENGINEERING AND INTERNAL TEAMS

Responses are broadly split, indicating no clear consensus on whether varying customer initiatives negatively affect engineering teams. While 38% of OEMs report disagreement (suggesting limited or manageable impact), an almost equal share (39%) express agreement, signaling meaningful strain for a comparable portion of respondents.

This distribution suggests that the impact is highly context-dependent, likely varying by factors such as organizational structure, customer complexity, or internal resource flexibility, rather than being universally experienced across OEMs.

OEM PERSPECTIVE: _____

To what extent do you disagree or agree that varying customer initiatives negatively impact your engineering teams?





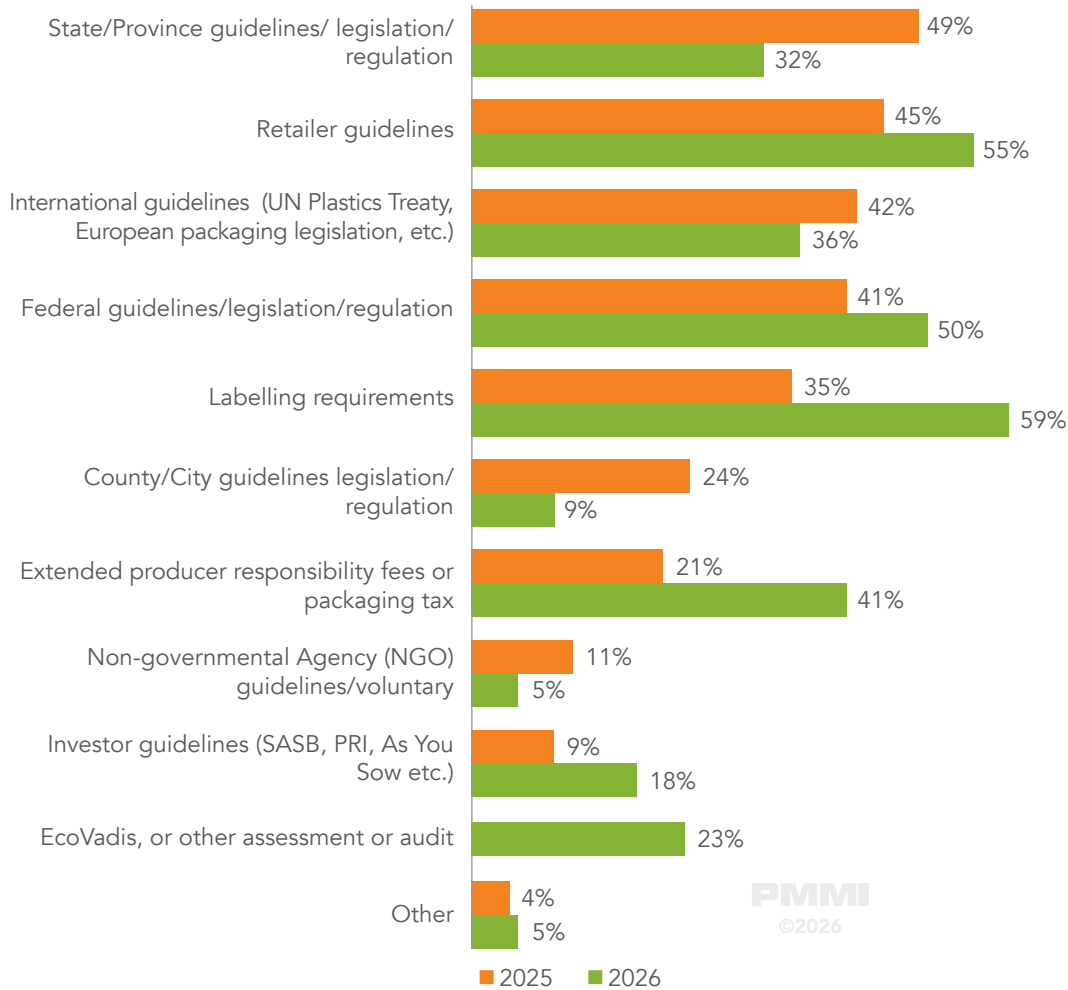
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REGULATORY ENVIRONMENT AND MARKET VARIABILITY

Regulatory landscape and monitoring
EPR challenges and influence
Global and regional differences
Looking ahead: Asia
Customer and market variability

OEM PERSPECTIVE: LEGISLATION

What guidelines, active or impending legislation if any, are you aware of your customers using?



Note: 'EcoVadis, or other assessment or audit' was added as a response option in the 2026 survey only.

Totals over 100% due to multiple answers

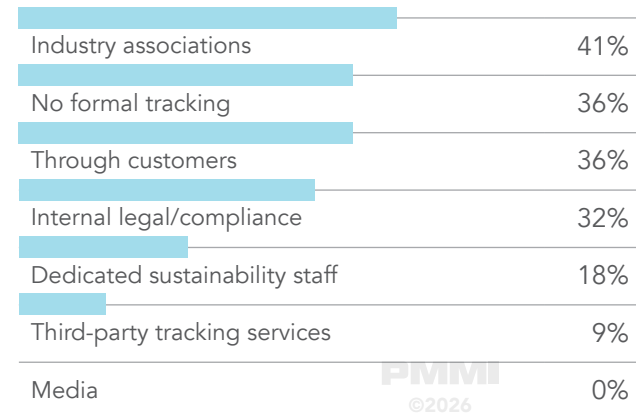
OEMs are operating in a complex and fast-moving regulatory environment, with pressure coming from multiple directions rather than a single governing body. The highest awareness is around labeling requirements (59%), retailer guidelines (55%), and federal legislation and regulations (50%), showing that downstream partners are nearly as influential as formal policy.

At the same time, approaches to monitoring legislation are inconsistent:

- OEMs most often rely on industry associations (41%), like PMMI, as a primary source of guidance
- Many depend on customers (36%) for information flow
- A notable 36% have no formal tracking system

Overall, this suggests OEMs are largely reactive rather than proactive. They are responding when standards are enforced but lacking systems to consistently monitor and anticipate regulatory change.

How does your company monitor emerging sustainability legislation? (Select all that apply)



Totals over 100% due to multiple answers

OEM PERSPECTIVE: EPR CHALLENGES AND INFLUENCE

EPR is creating both structural and operational challenges for OEMs, primarily driven by fragmentation and uncertainty. The top issue, different rules across regions/countries (55%), highlights the lack of harmonization, forcing companies to manage compliance on a market-by-market basis. This is compounded by unclear or evolving requirements (46%), reinforcing the perception of regulations as a moving target.

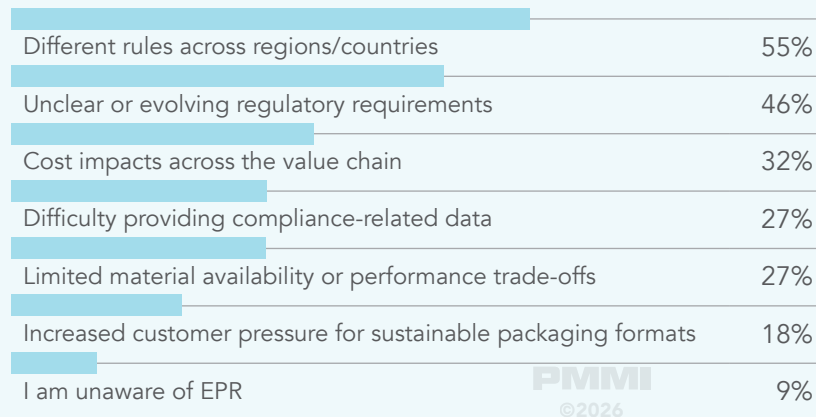
At the same time, OEMs clearly recognize the downstream impact on customers:

60% | agree that EPR is shaping customer expectations

This suggests that while EPR introduces complexity internally, it is also reshaping market demand, increasing expectations for sustainable packaging solutions and placing additional pressure on OEMs to adapt quickly despite regulatory ambiguity.

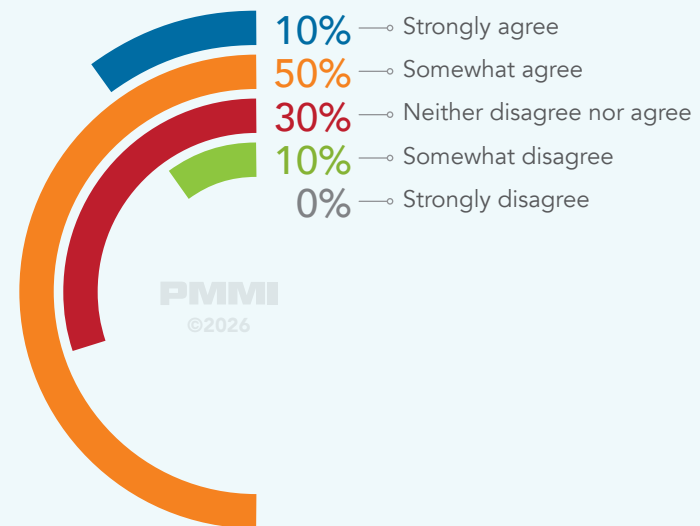
OEM PERSPECTIVE:

What challenges does EPR create for OEMs today? (Select up to 3)



Totals over 100% due to multiple answers

To what extent do you disagree or agree that Extended Producer Responsibility (EPR) regulations are impacting customer expectations for machinery?



*OEMs received this question if they did not select "I am unaware of EPR" to the previous question.

CUSTOMER AND MARKET VARIABILITY

OEMs mostly experienced somewhat to moderate difficulty tracking and responding to sustainability initiatives that vary by company. Some (18%) do not experience any, while 10% experience a significant amount of difficulty.

End Users experience difficulty managing varying regulations across markets, in fact not one respondent selected "Not at all difficult.". The majority fell into somewhat to moderately difficult (74%). Meaning, that while some do experience a lot of difficulty, most only experience moderate.



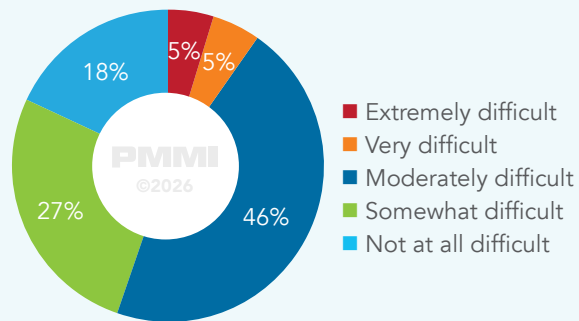
It seems like there's not one answer for everybody."

VP of Innovation, Co-pack



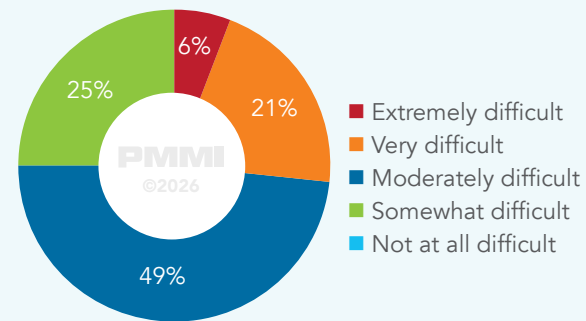
OEM PERSPECTIVE:

How difficult is it to track and respond to sustainability initiatives that vary by company?



END USER PERSPECTIVE:

How difficult is it to manage varying sustainability regulations across markets?



OEM PERSPECTIVE: GLOBAL AND REGIONAL DIFFERENCES

OEMs are operating in a global context, with the majority engaged in international markets where sustainability requirements are increasingly influential.

Regionally, the European Union stands out as the dominant driver (75%) of stringent sustainability requirements, far exceeding all other markets. This reinforces the EU's role as a de facto standard-setter, with its policies often cascading into global expectations.

Other regions play a secondary but still meaningful role:

- North America (38%) and the UK (25%) contribute to regional pressure

Survey results suggested Asia is not a highly influential region, but qualitative interviews told a different story: multiple OEMs cited Asia's stringent sustainability requirements, indicating a greater impact than the 13% quantitative figure suggests.



"The strongest laws are Southern Asia"

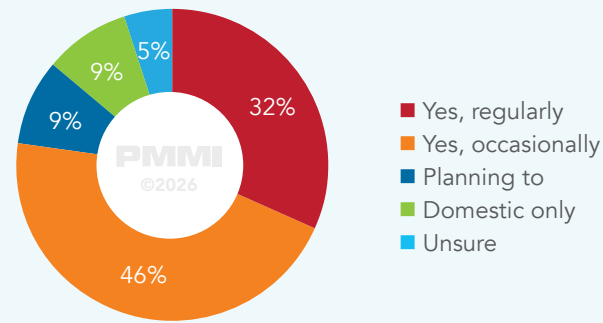
Market Manager, Component Supplier

"We've started to receive these types of requests both from end users and CPGs, primarily Europe and in Asia, is that we're now making it more of a focus for us as a company and trying to stay ahead of it as much as we possibly can."

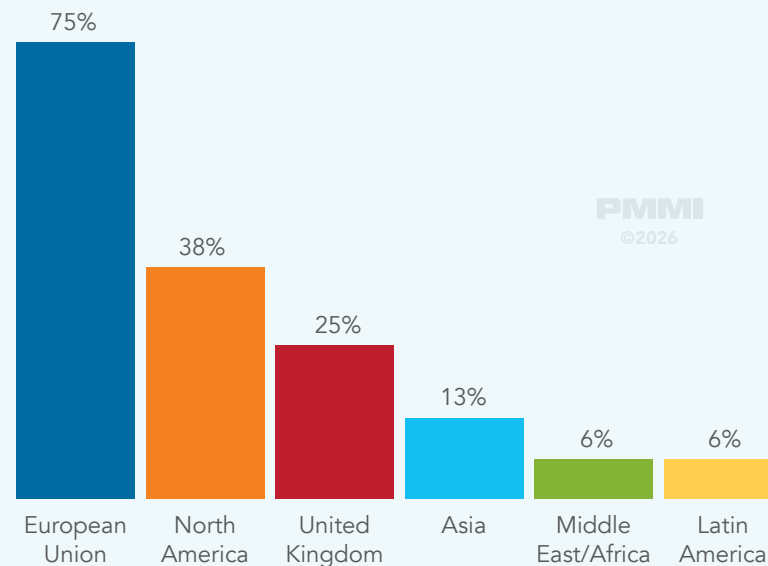
Sales Manager, OEM

OEM PERSPECTIVE:

Does your company sell equipment into international markets with sustainability requirements?



Which global regions are driving the most stringent sustainability requirements for your company? (Select all that apply)



*OEMs received this question if they selected "Yes, regularly" or "Yes, occasionally" to the previous question.

Totals over 100% due to multiple answers

END USER PERSPECTIVE: GLOBAL AND REGIONAL DIFFERENCES



Over two thirds of end users (71%) currently produce in or export to international markets, reinforcing that sustainability requirements are broadly relevant across regions. In contrast to OEMs, end users identify North America, not the European Union, as the primary driver of the most stringent sustainability regulations. North America leads at 68%, with the European Union still playing a significant but secondary role (49%).

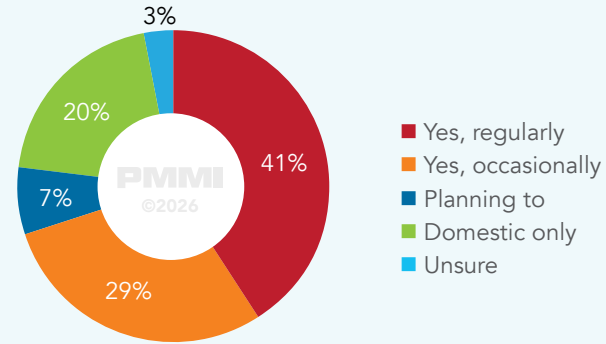
Other regions continue to contribute to regulatory pressure:

- United Kingdom (23%) and Asia (21%) are shown as significantly stringent
- Latin America (15%) and Middle East/Africa (9%) show more limited influence

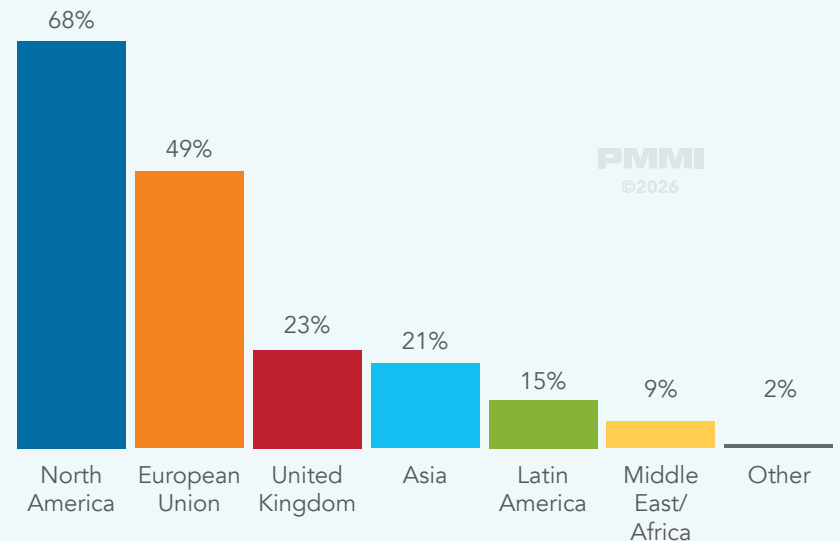
While OEMs tend to view the EU as the dominant standard-setter, end users experience regulatory pressure closer to their core operating markets, shifting perceived influence toward North America.

END USER PERSPECTIVE:

Does your company currently produce in or export to international markets with sustainability requirements?



Which global regions are driving the most stringent sustainability requirements for your company? (Select all that apply)



*End Users received this question if they selected "Yes, regularly" or "Yes, occasionally" to the previous question.

Other: Canada, Mexico

Totals over 100% due to multiple answers

LOOKING AHEAD: ASIA'S GROWING INFLUENCE ON SUSTAINABILITY REQUIREMENTS

China Sword - What It Already Changed

- China absorbed nearly half of the world's non-industrial plastic waste, 106,000,000 million tons over 25 years. When the ban hit in 2018, much of the U.S. plastics recycling system was exposed as dependent on export markets, especially a single foreign market.
- U.S. plastic landfilling increased 23.2% following National Sword – a measurable setback for U.S. plastics recycling, with documented impacts on landfilling and MRF operations

Asia Broadly – A Region Rewriting the Rules

- Japan and Korea have well-established EPR schemes for packaging and durable products - among the most advanced in the world.
- China has enacted robust national plastic reduction policies, including bans on select single-use plastics, with rapid waste-to-energy expansion in urban centers.
- India has introduced mandatory EPR guidelines for plastic packaging, with over 45,000 companies enrolled in the national EPR initiative
- Across ASEAN, regulatory direction is converging, but operational maturity and enforcement remain uneven.

Southeast Asia – A Rapidly Evolving Policy Landscape

PMMI's *Packaging Machinery in Southeast Asia* report documents this sustainability shift in the region in detail and what it means for equipment makers operating in or supplying that market.



Regulatory developments represent another key dimension shaping the regional landscape. Across Southeast Asia, there is a clear and accelerating shift toward sustainability, driven by the introduction of extended producer responsibility (EPR) frameworks, plastic reduction policies, and broader circular economy strategies. While the pace and level of enforcement vary by country, the overall direction is consistent.”

- Vietnam and the Philippines have implemented mandatory EPR systems for plastic packaging, positioning them as regional leaders in regulatory adoption.
- Indonesia and Malaysia are advancing toward stricter frameworks, with phased implementation and evolving enforcement.
- Thailand is developing a national approach through its proposed Sustainable Packaging Management Act.
- Singapore has implemented packaging data reporting requirements and is introducing a beverage container deposit-return scheme, reflecting a data-driven approach rather than full packaging EPR.

Check out the new PMMI Global Marketing report, *Southeast Asia Packaging Machinery Market*.



LOOKING AHEAD: ASIA'S GROWING INFLUENCE ON SUSTAINABILITY REQUIREMENTS

What the survey said

Asia ranked **4th out of 6th** for perceived regulatory stringency among OEMs and CPGs

Only **13%** of OEM survey respondents and 21% of End Users flagged Asia as a high-influence region for sustainability requirements

What the interviews revealed

Multiple OEMs cited Asia's sustainability requirements as actively shaping their equipment decisions, a far greater impact than the quantitative figure suggests

The survey captures **current** regulatory burden. Asia represents **forward pressure** and that pressure is already arriving through CPG customers operating in those markets

The Strategic Implication for OEMs

Packaging policies across ASEAN are accelerating, driven by rising per-capita waste generation and municipal infrastructure that cannot keep pace with plastic packaging waste

CPG and co-pack customers operating in Asian markets already face requirements stricter in some categories than North American frameworks and OEMs supplying that equipment inherit the compliance burden

China Sword already proved that Asia's policy decisions restructure U.S. sustainability infrastructure, whether U.S. industry anticipates it or not

The gap between the 13% perception and on-the-ground reality **is itself the risk**



The question every OEM should be asking their CPG customers: "In which international markets do you operate and what sustainability requirements do you face there? Are your machines built for those requirements today?"

Sources: PMMI Packaging Machinery in Southeast Asia; OECD (2025)



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DATA, REPORTING, AND ORGANIZATIONAL PREPAREDNESS

Reporting and audit expectations
Consistency and standardization
Preparedness and alignment factors

REPORTING AND AUDIT EXPECTATIONS

About 68% of OEMs report that their customers require visibility into their sustainability practices. Among end users, only 3% say OEM participation in sustainability assessments (e.g., EcoVadis) is mandatory, though 39% consider it preferred. Notably, about one-quarter are unfamiliar with EcoVadis or similar audits.

Qualitative findings reinforce this variability: some OEMs have not yet faced visibility requests, while others have already allocated dedicated staff or teams to manage audits and data reporting. However, even among those not currently affected, there is a clear expectation that such requirements will become more common. It is not a matter of if, but rather of when.



It took us probably a whole year to come up with the true path of how we were going to manage it [reporting data requests] because it became so many. It's hundreds a month."

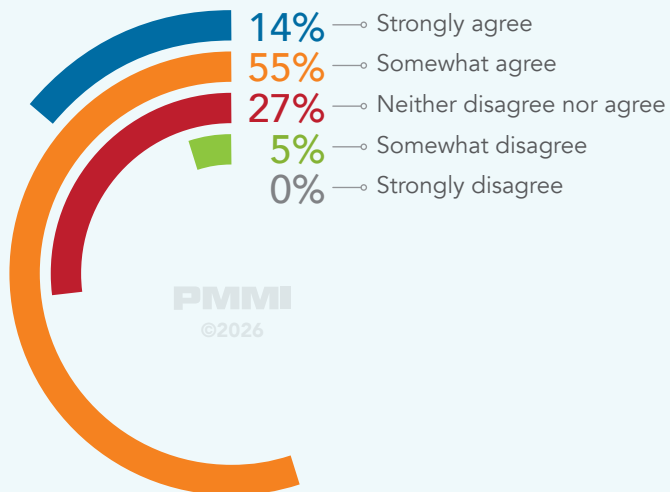
Market Manager, *Component Supplier*

I didn't have any heard of EcoVadis ten years ago and now it's something that we have somebody working full time on to continue to improve our score."

Sales Manager, *OEM*

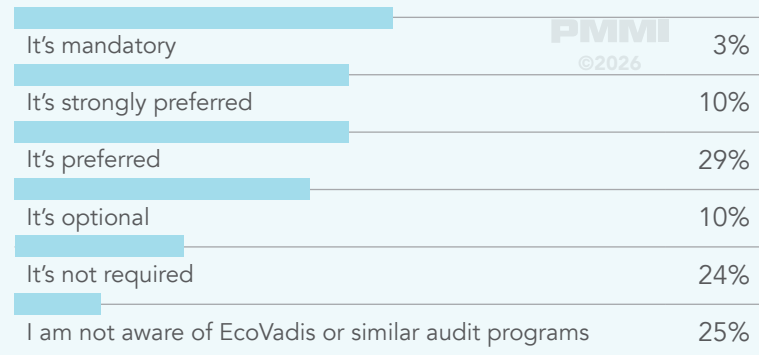
OEM PERSPECTIVE:

To what extent do you disagree or agree that your end-user customers require visibility into your sustainability practices?



END USER PERSPECTIVE:

To what extent do you require OEMs to participate in EcoVadis or other assessments or audits? (End User)



SUSTAINABILITY REQUIREMENTS AND EXPECTATIONS

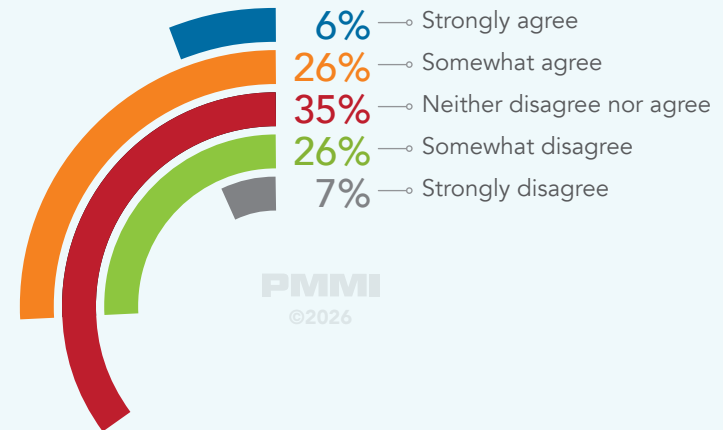


There are currently no industry-wide sustainability reporting standards, and end users are split on whether their supplier reporting requirements are consistent (32% agree vs. 33% disagree). Despite this fragmentation, 75% say standardized reporting would be important to their company.

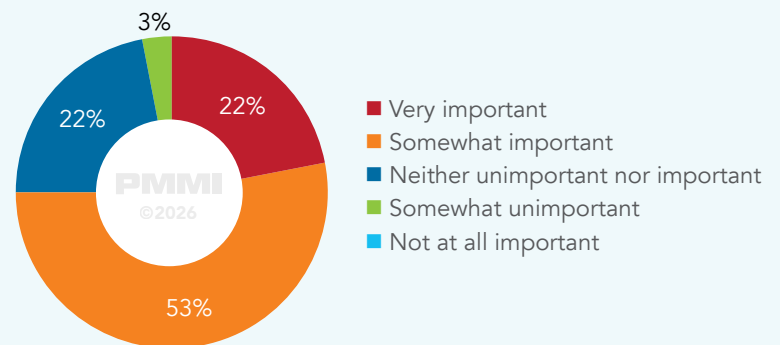
- Suppliers (OEMs, component providers, etc.) must be prepared to manage diverse and often conflicting reporting requirements.
- End users continue to navigate a fragmented landscape, relying on retailer, state, and regional requirements rather than a unified regulatory framework.

END USER PERSPECTIVE: _____

To what extent do you disagree or agree that your sustainability reporting requirements are consistent and standardized across your suppliers (e.g., OEMs, component suppliers, etc.)?



How important would industry-wide sustainability reporting standards be to your company? (End User)



PREPAREDNESS AND ALIGNMENT FACTORS

What would increase preparedness for sustainability changes across OEM-CPG relationships?

End User Key points



Standardization of regulations, KPIs, and reporting



Earlier/deeper collaboration between OEMs and CPGs



Data transparency and information



OEM proactiveness/equipment flexibility for sustainable materials



Regulatory clarity from government

OEM Key points



Standardized regulations/common goals



Early/transparent communication & dialogue



Better understanding of how changes affect operations

Similarities

Both groups want the same foundational fix, standardized regulations and better communication. That alignment is significant and gives a clear starting point for action.

Differences

OEMs want CPGs to tell them what's coming so they can plan and act. CPGs want OEMs to show up earlier, be more proactive, and build a true partnership. Essentially, OEMs are asking for clarity while CPGs are asking for collaboration, and each side is waiting for the other to move first.

A close-up photograph of an industrial machine, possibly a press or a testing rig. A horizontal metal bar is supported by a vertical post. A wooden block is placed on a table in front of the machine. The background is blurred, showing a factory setting with red lighting.

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KEY TAKEAWAYS AND IMPLICATIONS

OEM Takeaways
End User Takeaways

KEY TAKEAWAYS



Sustainability Maturity Is Uneven but Moving Fast

82% of end users fall within the “emerging” to “highly integrated/strategic” range, and CPGs say sustainability will influence equipment choices more with each passing year.



OEMs need to engage early and be active partners

50% of OEMs said they start engaging with the CPG at Line Design & Equipment Specification. Beginning involvement later in the process can cause costly late-stage modifications and missed opportunities to influence material decisions.



Lightweighting and PCR Are the #1 Engineering Pain Points

OEMs and CPGs agree lightweighting/downgauging is the dominant challenge. For CPGs, increased PCR content follows closely. Both create precision, consistency, and uptime challenges that require proactive equipment adaptation.



Over Half of CPGs Say Machinery Is Holding Back Their Sustainability Goals

55% in 2026 say equipment limitations are a barrier. The gap between CPG ambition and OEM capability is widening, not closing.



EPR Is Reshaping Customer Expectations for Equipment

60% of OEMs agree EPR is already impacting customer machinery expectations. The top challenge: different rules across regions. Regulatory fragmentation is the #1 operational burden.



Audit Requests Are Growing Unevenly

Audit, data reporting, and certification requests are increasing, although unevenly. While some suppliers and OEMs face growing pressure around EcoVadis, data reporting, and audits, some domestic-focused OEMs still report little to no activity — for now.



Europe Leads Globally; Asia Is Underestimated

The EU drives 75% of OEM international sustainability requirements, but qualitative feedback from OEMs points to Asia as an increasingly stringent regulatory region. OEMs with international exposure, or customers selling into those markets, must stay ahead of rapidly expanding sustainability regulations.



SO, WHAT DOES THIS MEAN FOR OEMS AND COMPONENT SUPPLIERS?

What **OEMs** can do differently in equipment design and support?



In Equipment Design

- Build material flexibility into new equipment from the start.
- Develop and document equipment performance with sustainable materials (PCR, lightweighted board, paper-based films, bio-based adhesives). Publish material compatibility data proactively.
- Design modular upgrade paths so existing lines can adapt to material transitions without full replacement.
- Develop onboard energy and utility monitoring as standard (not optional) features to enable CPG carbon reporting.



In Reporting & Certification

- Create a sustainability data package (energy/water/waste metrics, material certifications, restricted substance lists) that can be shared on demand.
- Designate a sustainability point-of-contact internally to manage the growing volume of audit and reporting requests.
- Register for an assessment platform, such as EcoVadis, before a customer makes it a condition of doing business. Build the score, not the scramble.



In Sales & Commercial Positioning

- Use sustainability capabilities as a commercial differentiator, not just a compliance checkbox.
- Quantify the carbon, energy, and material savings your equipment enables for the customer (carbon footprint calculators, ROI models).
- Lead with sustainability credentials in proposals for European and Asia-Pacific markets, where this is already a procurement criterion.

How to work with End Users to create easier collaboration for sustainability initiatives?

Engage Earlier at the R&D Stage, Not After

- Request to be included in sustainability strategy conversations at the Innovation/R&D and Feasibility stage.
- Offer a “material readiness review” service that CPGs can use before finalizing packaging material choices.

Provide Material Transition Support, Not Just Equipment

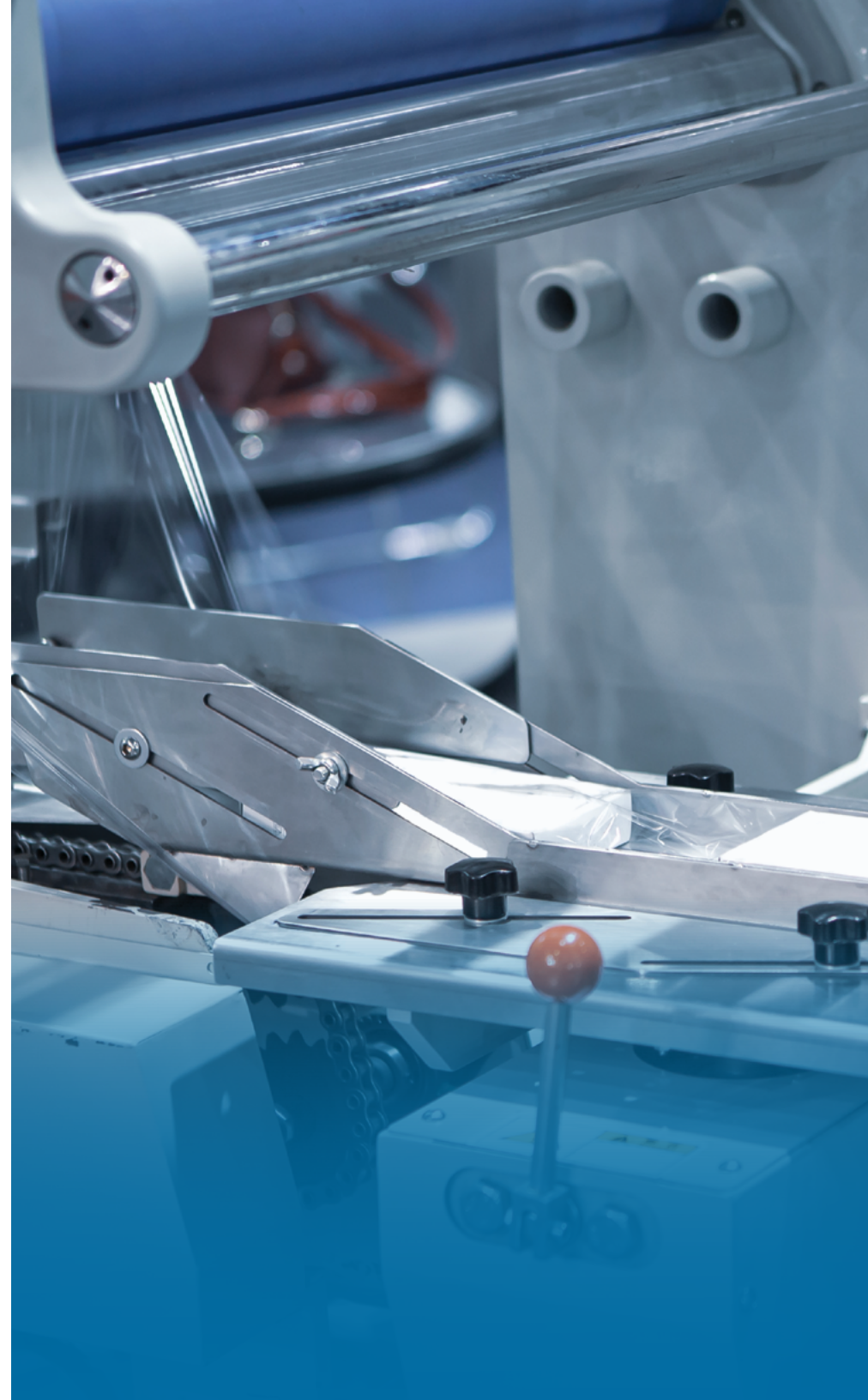
- When a CPG signals a material change, proactively offer trial runs, lab testing data, and documented performance parameters rather than waiting to troubleshoot at production.
- Share a “materials we have tested” library so CPGs can evaluate compatibility before committing to new materials.

Standardize What You Can Offer in RFP Responses

- Create a standard sustainability addendum for RFP responses: materials tested, energy consumption specs, monitoring capabilities, certifications held. This reduces the burden on both sides.

Build Long-Term Partnerships, Not Transactional Relationships

- CPGs consistently prefer OEMs who stay involved through the life of the equipment, not just delivery and installation.
 - Offer sustainability performance check-ins as part of service agreements.
-



SO, WHAT DOES THIS MEAN FOR END USERS?

What **end users** can do differently in planning and OEM engagement?



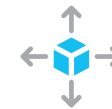
Bring OEMs in earlier

- Only 10% of end users currently engage OEMs at the corporate strategy and capital planning stage, yet 82% of OEMs say early visibility is important to their design process.
- Invite OEM partners into material and format conversations before packaging decisions are finalized, not after line specs are written.
- Earlier engagement reduces costly late-stage modifications and gives OEMs the lead time needed to validate material compatibility.



Communicate sustainability goals

- Share your company's sustainability roadmap — including material transitions, EPR obligations, and reporting targets — proactively with key equipment partners.
- Where possible, consolidate requirements across brands or business units before passing them downstream, reducing the whiplash OEMs experience from customer-by-customer variability.



Plan for operational trade-offs

- 55% of end users say machinery limitations are actively preventing sustainability goals from being met, this is up from both the 2022 and 2025 PMMI sustainability reports.
- Lightweighting, PCR content, and elimination of secondary packaging each carry real production consequences: slower line speeds, higher maintenance, and reduced OEE.
- Build these operational costs into sustainability business cases and capital approvals, rather than discovering them at start-up.

How to work with OEMs and Component Suppliers to create easier collaboration for sustainability initiatives?

Ask for a material readiness review before committing to a new format

- Before finalizing a switch to PCR content, paper-based films, or lightweighted substrates, ask your OEM partner to run a compatibility assessment against your current line.
- This gives OEMs the chance to surface feasibility constraints early and positions them to offer trial runs, lab data, or documented performance parameters rather than reacting at production.

Ask OEMs what they have already tested

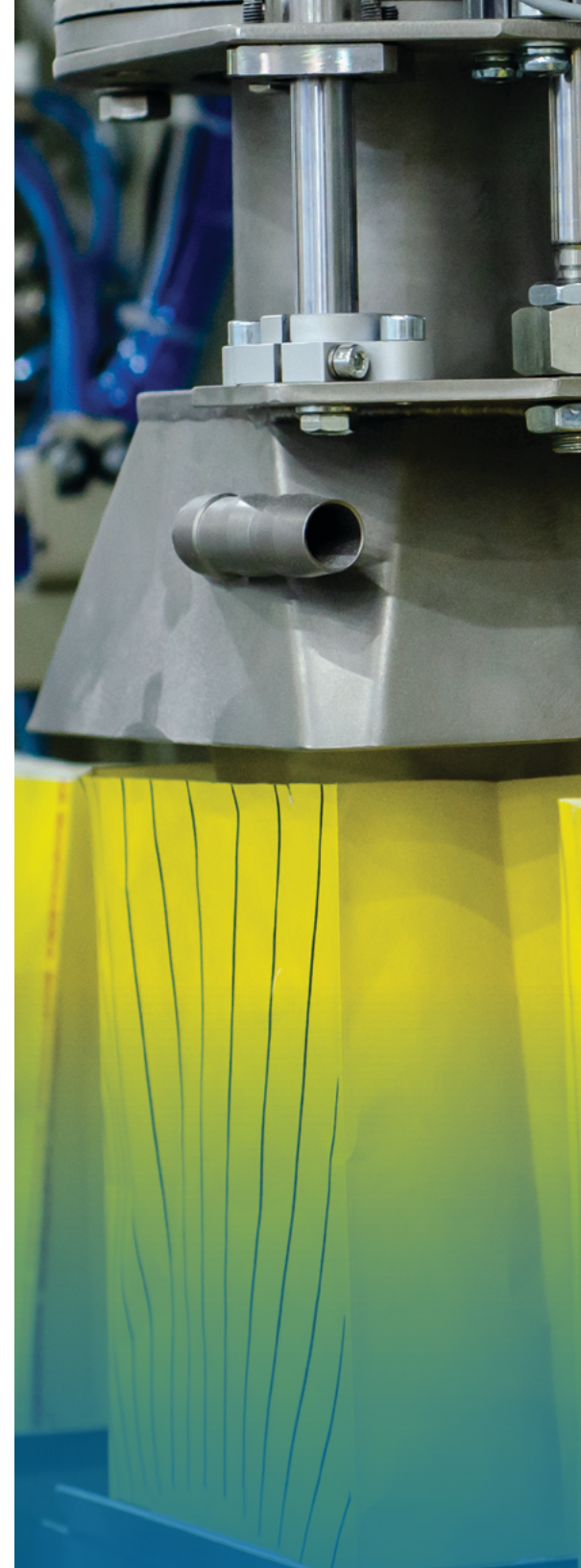
- Ask your OEM if they have a “materials tested” summary for any equipment you’re evaluating.
- Knowing what your machinery can already handle reduces the cost and timeline of material qualification and avoids duplicating testing your OEM has already completed.

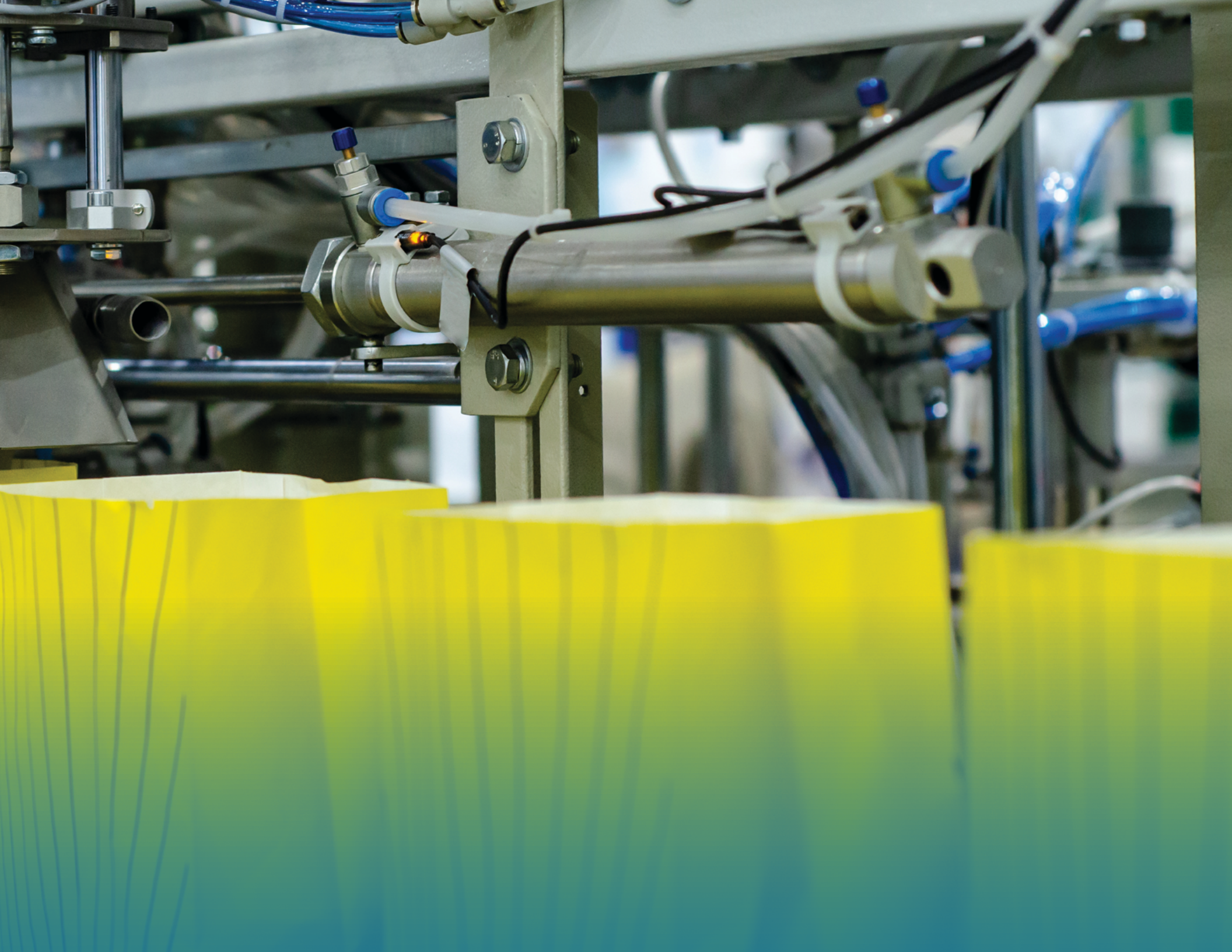
Set clear, shared sustainability expectations in RFPs and procurement processes

- Include sustainability requirements, material compatibility, energy monitoring capabilities, reporting data availability, as explicit criteria in equipment RFPs, not as afterthoughts.
- This gives OEMs the visibility they need to respond accurately and helps end users evaluate equipment against sustainability goals, not just price and throughput.
- If EcoVadis or similar audit participation is required or preferred, state it upfront. OEMs building their scores need lead time, and early notice prevents delays later.

Treat OEM relationships as long-term partnerships, not one-time transactions

- CPGs prefer OEMs who stay engaged through the life of equipment, not just installation. Reciprocate by sharing regulatory developments, material roadmaps, and operational feedback on an ongoing basis.
- Both groups agree: standardized regulations and better early communication are the top fixes. End users have the leverage to model this behavior first, by showing up earlier and sharing more, rather than waiting for OEMs to lead.





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2026 From Complexity to Capability



Processing State of the Industry 2026



Building an AI Advantage in Packaging Equipment

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